2020 Periodic Review Report

Lockport City Landfill
NYSDEC Site No. 932010

City of Lockport, New York
Department of Public Works

GHD | 285 Delaware Avenue Suite 500 Buffalo New York 14202

11137273 | Report No 7 | January 13, 2021

Table of Contents

Figure Index

Table Index

Appendix Index

1. Introduction

The Lockport City Landfill (Site) is located on Oakhurst Street in the City of Lockport, Niagara County, New York. This Site is listed on the New York State Department of Environmental Conservation (NYSDEC) Registry of Inactive Hazardous Waste Sites as Site No. 932010. The Remedial Action Design for the site included a Long-Term Monitoring Plan and Operation and Maintenance Plan that were approved by the NYSDEC in March 1994. The purpose of the Long-Term Monitoring Plan is to provide information to evaluate and monitor the long-term effectiveness of the remedial work. The Operation and Maintenance Plan includes site inspections and analytical testing to identify any potential problems at the landfill that are not being adequately addressed by routine maintenance and to document the current condition of the landfill. A site plan of the Lockport City Landfill is presented on Figure 1.

The purpose of this report is to present the findings of the annual site inspection and groundwater monitoring (year 24) conducted at the Site on October 23, 2020 and November 4, 2020, respectively.

2. Site Inspection

The following personnel attended a site inspection on October 23, 2020 of the Lockport City Landfill:

- James Elmer, Engineering, City of Lockport (City)
- Katherine Galanti, GHD Consulting Services, Inc.

NYSDEC was advised of the Site inspection; however, no representative was in attendance.

The completed Inspection Log Sheets for the October 2020 site inspection is presented in Attachment A. The following is a summary of items that were observed during the site inspection:

- **Landfill Cap** - Overall, the cap was in good condition with vegetation well established. The landfill was mowed in September 2020 prior to the annual inspection.
- **Perimeter Ditch "A"** - Vegetation is well established and no erosion had occurred as of the October 2020 site inspection.
- **Perimeter Ditch "B"** - Vegetation is well established and no erosion had occurred as of the October 2020 site inspection.
- **Drainage Swale "A"**- As discussed in previous inspection reports, there is a portion of Drainage Swale "A" berm running along the western edge of the landfill cap that had slumped down the west face of the landfill. As reported in 2008, the City of Lockport placed an additional 1 to 2 tons of stone to stabilize the berm in the area of the slump. The stone has remained in place, thus, stabilizing the bank and preventing further slumping. The City will continue to monitor the area for any further slumping.

The City has cut and cleared overgrowth vegetation leaving larger trees intact. The City will maintain trimming of trees and vegetation to the top of the slope or berm.

- **Drainage Swale "B"** - Vegetation is well established and no erosion noted during the October 2020 site inspection.
- **Perimeter Drainage Ditch "C"** - Ditch C was mowed recently. An area of ponded water was observed on either side of the access road crossing. In 2019, the City placed riprap along the northern portions of the ditch. Some regrading was completed at the northeast corner to reduce the potential for erosion.
- **Down chute -** Normal growth was present in the downchute and apron areas. The City monitors the vegetation growth and if required will cut back growth. The downchute located in the northeast corner of the Site had stone and millings placed as road base to allow for access by a drill rig and sampling crews in support of geotechnical borings for a proposed sewer forcemain in the area. In 2019, the City placed riprap stone along the path down to monitoring wells at the west downchute. Police enforcement to deter trespassers continues. At the time of the 2020 site inspection, no new ATV tracks were observed.
- **Vegetative Cover** - General cover is well established. Landfill was mowed in September 2020 prior to the 2020 inspection. Future mowing will be completed annually after mid-August.
- **Final Cover Layers (settlement, etc.)** - No standing water or settlement was observed.
- **Steep Slope Areas (west of final cover)** - Trees and grasses present on slope. Branches require periodic maintenance to cut back overhanging vegetation.
- **Landfill Gas Vents** - Gas vents were intact and in good condition.
- **Fence** - Fence and vehicle gates were in good condition during the 2020 site inspection. The access gate was closed but unlocked at the time of the site visit.
- **Monitoring Wells** - Monitoring wells MW-6D, MW-8D, MW-9S, and MW-9I were in good condition. Wells were labeled and locked. MW-3S was destroyed. The well screen and riser were broken in two and laying along the creek bank at the western edge of the Site.
- **Railroad Crossing** - Railroad crossing is accessible and in good condition.
- **Access Roadway** - The access road is in good condition.

Overall, the landfill was maintained and in good condition at the time of the 2020 inspection. No corrective actions are required.

3. Groundwater Monitoring

The Site groundwater monitoring wells were sampled on November 4, 2020, in accordance with the NYSDEC approved Long-Term Monitoring Plan and Operation and Maintenance Plan. As noted in Section 2, MW-3S located along the creek at the western edge of the Site was found to be destroyed. The well screen and riser were broken in two and were observed leaning against the creek bank. No protective casing was found.

Monitoring Well MW-6D had negligible water present, was purged to dryness, and did not recover sufficient water volume for sampling. This is consistent with historical events.

Monitoring wells MW-6D, MW-9S, and MW-9I were all purged and sampled.

Outfall L-2 was located and found to be plugged, with approximately a cubic yard of soil in front of the concrete structure. No sample was collected.

The samples were delivered to Eurofins TestAmerica, Buffalo in Amherst, New York, and analyzed for Target Compound List (TCL) VOCs by Method 8260C. Groundwater Field Sampling Logs are presented in Appendix B and the Analytical Data Report is provided in Appendix C.

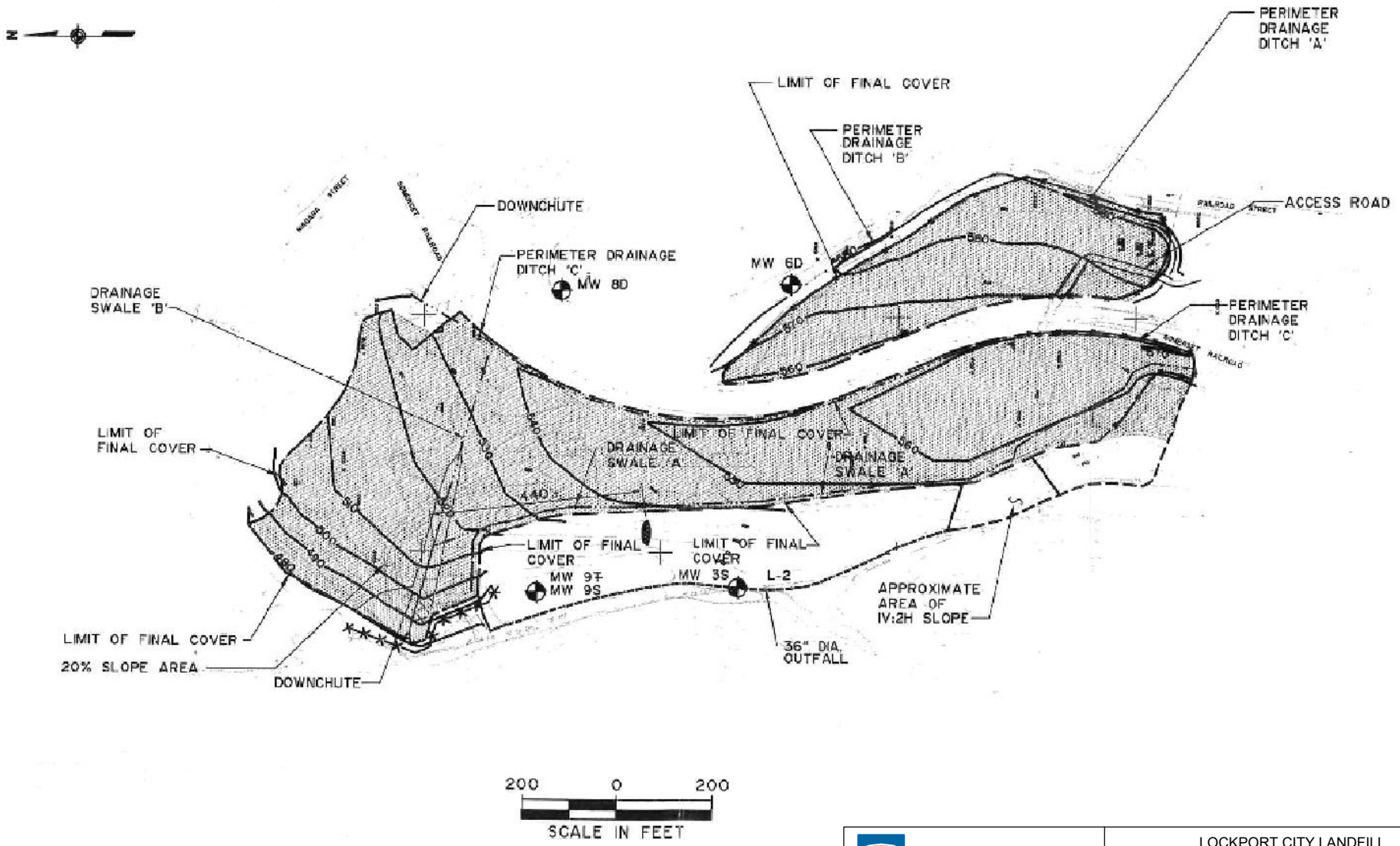
Table 1 summarizes analytical data from groundwater samples collected from the Site monitoring wells and outfall for the past 24 years (1997-2020), as well as the action levels for Monitoring Wells MW-8D, MW-9S and MW-9I, and Outfall L2. The only detections observed in 2020 were for cis-1,2-dichloroethene at MW-9I at a concentration of 2.0 µg/L, and cis-1,2-dichloroethene and vinyl chloride at MW-8D at concentrations of 100 µg/L and 13 µg/L, respectively. The detected concentrations are consistent with those observed historically and are below the reported action levels for the Site. No detections were observed at MW-9S.

Since exceedances of the action levels did not occur, contingent sampling and analysis is not required. The next sampling event will be scheduled for Fall 2021 representing year 25 of the Long-Term Monitoring Program.

4. IC/EC Certification

The engineering controls are performing as designed, and the Site is maintained in good condition. The signed IC/EC Certification is attached as Appendix D.

Figures



GHD CLIENTS PEOPLE PERFORMANCE

BUFFALO, NEW YORK

JOB No.: 11137273

LOCKPORT CITY LANDFILL
LOCPORT, NEW YORK
CITY OF LOCKPORT

FIGURE 1
SITE PLAN

Tables

Table 1
Monitoring Well 3S
Groundwater Analytical Results
Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14	Oct-15	Oct-16	Oct-17	Oct-18	Sep-19	Nov-20
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
1,1-Dichloroethane	µg/L	NS	U	U	U	U	U	U	U	U	U	1 J	U	U	3J	2J	3J	2.8 J	U	1.8	1.4	1.6	U	U	2.5	2.2	-
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
1,2-Dichloroethene (total)	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Acetone	µg/L	NS	U	U	U	U	U	U	U	U	U	U	6 J	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	1.2	1.1	U	U	U	2.0	-
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	4 J	3J	2J	4J	3.2 J	U	U	U	U	U	U	1.8	2.6	-
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
trans-1, 2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Trichloroethene	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	-
Vinyl chloride	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	1.2	1.2	-

Notes:

VOC analysis by USEPA SW-846 Method 8260C

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled

1,2-Dichloroethene (Total) is reported in years (1997-2006) as the sum of the detected concentrations of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene

MW-3S found to be destroyed at the 2020 Inspection/Sampling event.

Table 1 (Cont'd)
Monitoring Well 6D
Groundwater Analytical Results
Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14	Oct-15	Oct-16	Oct-17	Oct-18	Sep-19	Nov-20
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
1,1-Dichloroethane	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	-	-	-	-	-	-	U	U	U	-	U	-	U	-
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
1,2-Dichloroethene (total)	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
2-Butanone	µg/L	NS	U	U	U	U	U	U	U	U	U	U	1 J	-	-	-	-	-	-	U	U	U	-	U	-	U	-
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Acetone	µg/L	NS	U	U	U	U	U	U	U	U	U	2 J	16	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
m,p-Xylene	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
o-Xylene	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Toluene	µg/L	NS	U	U	U	U	U	U	U	U	U	2 J	2 J	-	-	-	-	-	-	U	U	U	-	1.6	-	2.0	-
trans-1, 2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Trichloroethene	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	-	-	-	-	-	-	U	U	U	-	U	-	U	-
Vinyl chloride	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	-	-	-	-	-	-	U	U	U	-	U	-	U	-

Notes:

VOC analysis by USEPA SW-846 Method 8260C

U = not detected above the quantitation limit

J = estimated concentration

- = not sampled

NS = no standard

During 2019 sampling event of MW-6D, sufficient volume was available for VOC sampling; however, insufficient volume for groundwater parameters

2007, 2008, 2009, 2010, 2011, 2012, 2016, 2018, 2020 : MW-6D not sampled due to dry conditions, no groundwater available

Table 1 (Cont'd)
Monitoring Well 8D
Groundwater Analytical Results
Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14	Oct-15	Oct-16	Oct-17	Oct-18	Sep-19	Nov-20
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethene (total)	µg/L	1,580	100	90	110	18	25	41	120	7	28	27 J	40	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Acetone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	32	34	26	23	24	65	26	21	22	20	9	19	23	100
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1, 2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	µg/L	260	2	4	5	2	2	2	U	U	U	U	1 J	U	U	U	U	3.2 J	U	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	162	U	U	U	U	U	7	33	6	4 J	U	U	U	U	U	U	U	11	11	2.1	U	U	U	U	U	13

Notes:

VOC analysis by USEPA SW-846 Method 8260C

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled

1,2-Dichloroethene (Total) is reported in years (1997-2006) as the sum of the detected concentrations of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene

Table 1 (Cont'd)
Monitoring Well 9S
Groundwater Analytical Results
Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14	Oct-15	Oct-16	Oct-17	Oct-18	Sep-19	Nov-20
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethene (total)	µg/L	1,580	U	U	U	U	U	U	U	U	U	U	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Acetone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	2	U	U	U	U	U	U
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1, 2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	µg/L	260	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	162	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U

Notes:

VOC analysis by USEPA SW-846 Method 8260C

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled

1,2-Dichloroethene (Total) is reported in years (1997-2006) as the sum of the detected concentrations of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene

Table 1 (Cont'd)
Monitoring Well 9I
Groundwater Analytical Results
Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14	Oct-15	Oct-16	Oct-17	Oct-18	Sep-19	Nov-20
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
1,2-Dichloroethene (total)	µg/L	42	8.4	6	6	5	4 J	4 J	4 J	4 J	3 J	3 J	2 J	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Acetone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chlorobenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	3 J	2J	U	2J	U	U	1.3	U	1.8	1.9	1.4	1.8	1.9	2.0
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1, 2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Trichloroethene	µg/L	NS	1.6	2	2	1 J	1 J	1 J	1 J	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U
Vinyl chloride	µg/L	24	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U

Notes:

VOC analysis by USEPA SW-846 Method 8260C

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled

1,2-Dichloroethene (Total) is reported in years (1997-2006) as the sum of the detected concentrations of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene

Table 1 (Cont'd)
Outfall L-2
Groundwater Analytical Results
Lockport City Landfill

Volatile Compounds	Units	Action Level	Jun-97	Nov-97	Sep-98	Sep-99	Sep-00	Sep-01	Oct-02	Dec-03	Oct-04	Oct-05	Oct-06	Oct-07	Oct-08	Oct-09	Oct-10	Oct-11	Oct-12	Oct-13	Oct-14	Oct-15	Oct-16	Oct-17	Oct-18	Sep-19	Nov-20
1,1,1-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
1,1,2,2-Tetrachloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
1,1,2-Trichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
1,1-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
1,1-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
1,2-Dichloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
1,2-Dichloroethene (total)	µg/L	280	U	2	U	U	U	U	U	U	U	U	U	-	-	-	-	-	-	-	-	-	-	-	-	-	-
1,2-Dichloropropane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
2-Butanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
2-Hexanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
4-Methyl-2-pentanone	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Acetone	µg/L	NS	U	U	U	U	U	U	U	U	U	2 J	U	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Benzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Bromodichloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Bromoform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Bromomethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Carbon disulfide	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Carbon tetrachloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Chlorobenzene	µg/L	NS	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Chloroethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Chloroform	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Chloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
cis-1,2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
cis-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Dibromochloromethane	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Ethylbenzene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
m,p-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Methylene chloride	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
o-Xylene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Styrene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Tetrachloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Toluene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
trans-1, 2-Dichloroethene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
trans-1,3-Dichloropropene	µg/L	NS	-	-	-	-	-	-	-	-	-	-	-	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Trichloroethene	µg/L	NS	U	3	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	-	U	-
Vinyl chloride	µg/L	94	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	U	-	U	-

Notes:

VOC analysis by USEPA SW-846 Method 8260C

U = not detected above the quantitation limit

J = estimated concentration

NS = no standard

- = not sampled for

Outfall plugged at time of the 2020 Inpection/Monitoring event. No sample collected

1,2-Dichloroethene (Total) is reported in years (1997-2006) as the sum of the detected concentrations of cis-1,2-Dichloroethene and trans-1,2-Dichloroethene

Appendices

Appendix A
Site Inspection Log

ANNUAL INSPECTION LOG SHEET

LOCKPORT CITY LANDFILL - POST CLOSURE
NYSDEC SITE NO. 932010

Date: 10/23/2020 Inspector: KATHERINE GALANTI

Weather: CLEAR, SUNNY, 65-70°F Signature: [signature]

Company: GHD Consulting Services, Inc.

Item Inspected	Maintenance Needed (Y/N)	Observations	Comments
Perimeter Ditch A	N	Is vegetation well established? Y/N Are there signs of erosion? Y/N Is standing water present or is water free-flowing?	DRY
Perimeter Ditch B	N	Is vegetation well established? Y/N Are there signs of erosion? Y/N Is standing water present or is water free-flowing?	DRY
Perimeter Ditch C	N	Is vegetation well established? Y/N Are there signs of erosion? Y/N Is standing water present or is water free-flowing?	STANDING WATER ALONG EITHER SIDE OF ACCESS ROAD. ELSEWHERE DRY.
Drainage Swale A	N	Is vegetation well established? Y/N Are there signs of erosion? Y/N Is stone in place? Y/N Is standing water present? Y/N	
Drainage Swale B	N	Is vegetation well established? Y/N Are there signs of erosion? Y/N Is stone in place? Y/N Is standing water present? Y/N	
Downchute & Apron	N	Is vegetation present? Y/N Is there evidence of recent ATV usage? Y/N	OLD TRACKS. NORTH CHUTE IMPROVED FOR RECENT RI4 ACCESS (SEPT. 2020
Lanfill Cap/Vegetative Cover	N	Has the landfill been mowed at least once in the last year? Y/N Are there signs of stressed vegetation? Y/N Are there signs of settlement in the cap? Y/N Are there signs of standing water on the cap? Y/N	
Steep Slope Areas (West of final cover)	N	Is vegetation well established? Y/N Are there signs of erosion since last inspection? Y/N	
Gas Vents	N	Are gas vents clear in good condition? Y/N Are gas vents clear of obstructions? Y/N	
Fence	N	Is the perimeter fence in good condition? Y/N Is the entrance gate in good condition? Y/N Was the entrance gate closed/locked upon arrival? Y/N	CLOSED, NOT LOCKED @ VISIT
Access Roadway	N	Is the access roadway in good condition? Y/N Are the potholes or standing water present? Y/N	
Railroad Vehicle Crossing	N	Is the railroad crossing in good condition? Y/N	
Monitoring Wells		Are the monitoring wells in good condition? Y/N Are the monitoring wells locked? Y/N Are the monitoring wells labeled? Y/N	MW-6D, 8D, 9I, 9S GOOD MW-3S DESTROYED
General Comments:	LANDFILL IN GOOD CONDITION. MOWED. NO RECENT INDICATIONS OF TRESPASSING. MW-3S GONE. BANK APPEARS ERODED. SCREEN WAS LEANING AGAINST BANK. OUTFALL L-2 PLUGGED (~1CY SOIL IN FRO		

Appendix B
Groundwater Field Sampling Logs

City of Lockport
Landfill
GW Sampling
November 4, 2020

Project # 11137273-400
Field File

Field Data Record Form

Meter, Turbidity (Portable) Hach 2100P and 2100Q

(QSF-421D)

Control number: NFQ8361

Date (mm/dd/yyyy): 11/04/2020

User (print name): D. Tyran

Project number: 11137273-400

Project name: City of Lockport Landfill GW Sampling

Location: Oakhurst Street Lockport NY

Additional equipment control numbers and descriptions: _____

Field procedure before use:

Do not calibrate in the field.

	Check when completed
Check kit contents;	
• Meter	✓
• STABLCAL standards (2100Q)	✓
• Low 0-10, medium 0-100, high standards (2 100P)	✓
• Extra AA batteries	✓
• Sample vials	✓
Test and record standards:	✓

Gelex (2100P)/STABLCAL (2100Q) Standard	*Meter Reading*
10	9.49
100	96.8
800	767

Note: Condensation on outside of sample bottles affects meter readings.

Filing: Field file

Signature: Dave J Tyran

This completed form is a quality record

LOCKPORT LANDFILL

DAILY LOG

11/4/2020 YSI PRO SERIES SN FO7611 CALIBRATION USING PH 4.00 AUTO CAL LOT# 20180085 EXP. 6/1/21

PH 4.00 BEFORE 3.93 AFTER 4.00

COND 4.49 BEFORE 4.40 AFTER 4.50

DO% BAR. 750.0 97.6% READING 8.76

0852 ONSITE SG/DJT WEATHER - SUNNY 51°F WINDS SSW 15-20MPH

SET UP ON MW-6D PURGE WELL - INSUFFICIENT VOLUME METHOD - VOLUMES USING 3' TEFLON BAILER. PURGE 3 VOLUMES TAKE A SET OF READINGS DURING SAMPLING

MW-6D - 2" WELL SOUNDED DEPTH - 77.41 W/L - 77.31

INSUFFICIENT VOLUME FOR READINGS OR SAMPLE

NO SAMPLE TAKEN. ADDED NEW AMERICAN LOCK

0910 SET UP ON MW-8D - PURGED WELL DRY 1 GAL

MW-8D - 2" WELL SOUNDED DEPTH - 76.90 W/L - 72.17

76.90 - 72.17 = 4.73 x .16 = 0.75 PER VOLUME

WELL DRY @ 76.37 W/L LET WELL RECOVER THEN TRY TO SAMPLE, ADDED NEW AMERICAN LOCK

TRIPBLANK - TB-11137273-110420-SG

1049 WELL RECOVERED ENOUGH FOR SAMPLE

SAMPLE ID - WG-11137273-110420-SG-003 TIME 1055

TEMP 10.2 PH 7.29 COND 1.76 TURB 24.9

W/D - CLEAR, COLORLESS FINAL W/L 74.43

1108 OFFSITE

11137273-400

Dave Tyman

DAILY LOG

11/4/2020 0955 MW-9I PURGE AND SAMPLE
MW-9I 2" WELL SOUNDED DEPTH - 20.22 W/L - 6.03
20.22 - 6.03 = 14.19 x .16 = 2.3 GAL PER VOLUME
VOLUME PURGED - 6.9 GAL
SAMPLE ID - WG-11137273-110420-SG-001 TIME
TEMP - 11.4 PH - 5.95 COND - 1.27 TURB. - 8.38
W/Q - CLEAR, COLORLESS FINAL W/L 7.62
BOTTLE SET - 3x 40ML VOC
ADDED NEW AMERICAN LOCK

11137273-400

Dave Tyson

DAILY LOG

11/4/2020 1024 MW-9S PURGE AND SAMPLE
MW-9S 2" WELL SOUNDED DEPTH - 12.60 W/L - 6.92
12.60 - 6.92 = 5.68 x .16 = 0.90 GAL PER VOLUME
VOLUME PURGED - 2.7 GAL
SAMPLE ID: WG-1113727 3-110420-SG-002 TIME 1030
TEMP - 11.5 PH - 6.69 COND - 1.39 TURB 16.9
W/Q - CLEAR, COLORLESS FINAL W/L - 7.02
BOTTLE SET 3x 40ML VOC
ADDED NEW AMERICAN LOCK

1113727 3-400

Dave Tyra

CHAIN OF CUSTODY RECORD

COC NO.: 522

Address: _____ PAGE ___ OF ___

Phone: _____ Fax: _____

Project No/ Phase/Task Code:	Laboratory Name:	Lab Location:	SSOW ID:
Project Name:	Lab Contact:		Cooler No:
Project Location:	SAMPLE TYPE	ANALYSIS REQUESTED (See Back of COC for Definitions)	Carrier:
GHD Chemistry Contact:			Airbill No:
Sampler(s):			Total # of Containers:

Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd//yy)	TIME (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)												Total Containers/sample	MS/MSD Request	COMMENTS/ SPECIAL INSTRUCTIONS:
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)																			
1		1430		WG	G	N	X											3		
2		1430		WG	G	N	X											3		
3		1430		WG	G	N	X											3		
4		1430		WG	G	N	X											3		
5		1430		WG	G	N	X											3		
6																				
7																				
8																				
9																				
10																				
11																				
12																				

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☐ 2 Week ☐ Other:

Notes/ Special Requirements:

RELINQUISHED BY	COMPANY	DATE	TIME	RECEIVED BY	COMPANY	DATE	TIME
1.	GHD	11/12/20	1430	1.			
2.				2.			
3.				3.			

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Client

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Appendix C
Analytical Data Report

eurofins | Environment Testing America

ANALYTICAL REPORT

Eurofins TestAmerica, Buffalo
10 Hazelwood Drive
Amherst, NY 14228-2298
Tel: (716)691-2600

Laboratory Job ID: 480-177678-1
Client Project/Site: 11137273, City of Lockport Landfill

For:
GHD Services Inc.
One Remington Park Drive
Cazenovia, New York 13035

Attn: Linda Waters

Denise D Heckler

Authorized for release by:
11/10/2020 3:33:45 PM

Denise Heckler, Project Manager II
(330)966-9477
Denise.Heckler@Eurofinset.com

Table of Contents

Definitions/Glossary

Client: GHD Services Inc.
Job ID: 480-177678-1
Project/Site: 11137273, City of Lockport Landfill

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
U	Indicates the analyte was analyzed for but not detected.

Glossary

Abbreviation	These commonly used abbreviations may or may not be present in this report.
¤	Listed under the "D" column to designate that the result is reported on a dry weight basis
%R	Percent Recovery
CFL	Contains Free Liquid
CFU	Colony Forming Unit
CNF	Contains No Free Liquid
DER	Duplicate Error Ratio (normalized absolute difference)
Dil Fac	Dilution Factor
DL	Detection Limit (DoD/DOE)
DL, RA, RE, IN	Indicates a Dilution, Re-analysis, Re-extraction, or additional Initial metals/anion analysis of the sample
DLC	Decision Level Concentration (Radiochemistry)
EDL	Estimated Detection Limit (Dioxin)
LOD	Limit of Detection (DoD/DOE)
LOQ	Limit of Quantitation (DoD/DOE)
MCL	EPA recommended "Maximum Contaminant Level"
MDA	Minimum Detectable Activity (Radiochemistry)
MDC	Minimum Detectable Concentration (Radiochemistry)
MDL	Method Detection Limit
ML	Minimum Level (Dioxin)
MPN	Most Probable Number
MQL	Method Quantitation Limit
NC	Not Calculated
ND	Not Detected at the reporting limit (or MDL or EDL if shown)
NEG	Negative / Absent
POS	Positive / Present
PQL	Practical Quantitation Limit
PRES	Presumptive
QC	Quality Control
RER	Relative Error Ratio (Radiochemistry)
RL	Reporting Limit or Requested Limit (Radiochemistry)
RPD	Relative Percent Difference, a measure of the relative difference between two points
TEF	Toxicity Equivalent Factor (Dioxin)
TEQ	Toxicity Equivalent Quotient (Dioxin)
TNTC	Too Numerous To Count

Case Narrative

Client: GHD Services Inc.
Project/Site: 11137273, City of Lockport Landfill

Job ID: 480-177678-1

Job ID: 480-177678-1

Laboratory: Eurofins TestAmerica, Buffalo

Narrative

Job Narrative
480-177678-1

Comments
No additional comments.

Receipt
The samples were received on 11/5/2020 11:30 AM; the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 7.6º C.

GC/MS VOA
Method 8260C: The following sample was diluted to bring the concentration of target analytes within the calibration range: WG-11137273-110420-SG-003 (480-177678-3). Elevated reporting limits (RLs) are provided.

No additional analytical or quality issues were noted, other than those described above or in the Definitions/Glossary page.

Detection Summary

Client: GHD Services Inc.
Job ID: 480-177678-1
Project/Site: 11137273, City of Lockport Landfill

Client Sample ID: WG-11137273-110420-SG-001 — Lab Sample ID: 480-177678-1

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	2.0		1.0		ug/L	1		8260C	Total/NA

Client Sample ID: WG-11137273-110420-SG-002 — Lab Sample ID: 480-177678-2

No Detections.

Client Sample ID: WG-11137273-110420-SG-003 — Lab Sample ID: 480-177678-3

Analyte	Result	Qualifier	RL		Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	100		2.0		ug/L	2		8260C	Total/NA
Vinyl chloride	13		2.0		ug/L	2		8260C	Total/NA

Client Sample ID: TB-11137273-110420-SG — Lab Sample ID: 480-177678-4

No Detections.

This Detection Summary does not include radiochemical test results.

Client: GHD Services Inc.
Project/Site: 11137273, City of Lockport Landfill

Job ID: 480-177678-1

Client Sample ID: WG-11137273-110420-SG-001
Date Collected: 11/04/20 00:00
Date Received: 11/05/20 11:30

Lab Sample ID: 480-177678-1
Matrix: Water

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			11/08/20 15:08	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			11/08/20 15:08	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			11/08/20 15:08	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			11/08/20 15:08	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			11/08/20 15:08	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			11/08/20 15:08	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			11/08/20 15:08	1
2-Butanone (MEK)	10	U	10		ug/L			11/08/20 15:08	1
2-Hexanone	5.0	U	5.0		ug/L			11/08/20 15:08	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			11/08/20 15:08	1
Acetone	10	U	10		ug/L			11/08/20 15:08	1
Benzene	1.0	U	1.0		ug/L			11/08/20 15:08	1
Bromodichloromethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
Bromoform	1.0	U	1.0		ug/L			11/08/20 15:08	1
Bromomethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
Carbon disulfide	1.0	U	1.0		ug/L			11/08/20 15:08	1
Carbon tetrachloride	1.0	U	1.0		ug/L			11/08/20 15:08	1
Chlorobenzene	1.0	U	1.0		ug/L			11/08/20 15:08	1
Dibromochloromethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
Chloroethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
Chloroform	1.0	U	1.0		ug/L			11/08/20 15:08	1
Chloromethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
cis-1,2-Dichloroethene	**2.0**		1.0		ug/L			11/08/20 15:08	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/08/20 15:08	1
Cyclohexane	1.0	U	1.0		ug/L			11/08/20 15:08	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
Ethylbenzene	1.0	U	1.0		ug/L			11/08/20 15:08	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
Isopropylbenzene	1.0	U	1.0		ug/L			11/08/20 15:08	1
Methyl acetate	2.5	U	2.5		ug/L			11/08/20 15:08	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			11/08/20 15:08	1
Methylcyclohexane	1.0	U	1.0		ug/L			11/08/20 15:08	1
Methylene Chloride	1.0	U	1.0		ug/L			11/08/20 15:08	1
Styrene	1.0	U	1.0		ug/L			11/08/20 15:08	1
Tetrachloroethene	1.0	U	1.0		ug/L			11/08/20 15:08	1
Toluene	1.0	U	1.0		ug/L			11/08/20 15:08	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			11/08/20 15:08	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/08/20 15:08	1
Trichloroethene	1.0	U	1.0		ug/L			11/08/20 15:08	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			11/08/20 15:08	1
Vinyl chloride	1.0	U	1.0		ug/L			11/08/20 15:08	1
Xylenes, Total	2.0	U	2.0		ug/L			11/08/20 15:08	1

Client Sample ID: WG-11137273-110420-SG-001
Lab Sample ID: 480-177678-1

Date Collected: 11/04/20 00:00
Matrix: Water
Date Received: 11/05/20 11:30

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*108*		*80 - 120*		*11/08/20 15:08*	*1*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*		*11/08/20 15:08*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*11/08/20 15:08*	*1*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*11/08/20 15:08*	*1*

Client Sample ID: WG-11137273-110420-SG-002
Lab Sample ID: 480-177678-2

Date Collected: 11/04/20 00:00
Matrix: Water
Date Received: 11/05/20 11:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			11/08/20 15:32	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			11/08/20 15:32	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			11/08/20 15:32	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			11/08/20 15:32	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			11/08/20 15:32	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			11/08/20 15:32	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			11/08/20 15:32	1
2-Butanone (MEK)	10	U	10		ug/L			11/08/20 15:32	1
2-Hexanone	5.0	U	5.0		ug/L			11/08/20 15:32	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			11/08/20 15:32	1
Acetone	10	U	10		ug/L			11/08/20 15:32	1
Benzene	1.0	U	1.0		ug/L			11/08/20 15:32	1
Bromodichloromethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
Bromoform	1.0	U	1.0		ug/L			11/08/20 15:32	1
Bromomethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
Carbon disulfide	1.0	U	1.0		ug/L			11/08/20 15:32	1
Carbon tetrachloride	1.0	U	1.0		ug/L			11/08/20 15:32	1
Chlorobenzene	1.0	U	1.0		ug/L			11/08/20 15:32	1
Dibromochloromethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
Chloroethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
Chloroform	1.0	U	1.0		ug/L			11/08/20 15:32	1
Chloromethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			11/08/20 15:32	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/08/20 15:32	1
Cyclohexane	1.0	U	1.0		ug/L			11/08/20 15:32	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
Ethylbenzene	1.0	U	1.0		ug/L			11/08/20 15:32	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
Isopropylbenzene	1.0	U	1.0		ug/L			11/08/20 15:32	1
Methyl acetate	2.5	U	2.5		ug/L			11/08/20 15:32	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			11/08/20 15:32	1
Methylcyclohexane	1.0	U	1.0		ug/L			11/08/20 15:32	1
Methylene Chloride	1.0	U	1.0		ug/L			11/08/20 15:32	1

Client Sample ID: WG-11137273-110420-SG-002 Lab Sample ID: 480-177678-2

Date Collected: 11/04/20 00:00 **Matrix: Water**
Date Received: 11/05/20 11:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Styrene	1.0	U	1.0		ug/L			11/08/20 15:32	1
Tetrachloroethene	1.0	U	1.0		ug/L			11/08/20 15:32	1
Toluene	1.0	U	1.0		ug/L			11/08/20 15:32	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			11/08/20 15:32	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/08/20 15:32	1
Trichloroethene	1.0	U	1.0		ug/L			11/08/20 15:32	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			11/08/20 15:32	1
Vinyl chloride	1.0	U	1.0		ug/L			11/08/20 15:32	1
Xylenes, Total	2.0	U	2.0		ug/L			11/08/20 15:32	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*110*		*80 - 120*		*11/08/20 15:32*	*1*
1,2-Dichloroethane-d4 (Surr)	*107*		*77 - 120*		*11/08/20 15:32*	*1*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*11/08/20 15:32*	*1*
Dibromofluoromethane (Surr)	*111*		*75 - 123*		*11/08/20 15:32*	*1*

Client Sample ID: WG-11137273-110420-SG-003 Lab Sample ID: 480-177678-3

Date Collected: 11/04/20 00:00 **Matrix: Water**
Date Received: 11/05/20 11:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	2.0	U	2.0		ug/L			11/08/20 15:57	2
1,1,2,2-Tetrachloroethane	2.0	U	2.0		ug/L			11/08/20 15:57	2
1,1,2-Trichloroethane	2.0	U	2.0		ug/L			11/08/20 15:57	2
1,1,2-Trichloro-1,2,2-trifluoroethane	2.0	U	2.0		ug/L			11/08/20 15:57	2
1,1-Dichloroethane	2.0	U	2.0		ug/L			11/08/20 15:57	2
1,1-Dichloroethene	2.0	U	2.0		ug/L			11/08/20 15:57	2
1,2,4-Trichlorobenzene	2.0	U	2.0		ug/L			11/08/20 15:57	2
1,2-Dibromo-3-Chloropropane	2.0	U	2.0		ug/L			11/08/20 15:57	2
1,2-Dichlorobenzene	2.0	U	2.0		ug/L			11/08/20 15:57	2
1,2-Dichloroethane	2.0	U	2.0		ug/L			11/08/20 15:57	2
1,2-Dichloropropane	2.0	U	2.0		ug/L			11/08/20 15:57	2
1,3-Dichlorobenzene	2.0	U	2.0		ug/L			11/08/20 15:57	2
1,4-Dichlorobenzene	2.0	U	2.0		ug/L			11/08/20 15:57	2
2-Butanone (MEK)	20	U	20		ug/L			11/08/20 15:57	2
2-Hexanone	10	U	10		ug/L			11/08/20 15:57	2
4-Methyl-2-pentanone (MIBK)	10	U	10		ug/L			11/08/20 15:57	2
Acetone	20	U	20		ug/L			11/08/20 15:57	2
Benzene	2.0	U	2.0		ug/L			11/08/20 15:57	2
Bromodichloromethane	2.0	U	2.0		ug/L			11/08/20 15:57	2
Bromoform	2.0	U	2.0		ug/L			11/08/20 15:57	2
Bromomethane	2.0	U	2.0		ug/L			11/08/20 15:57	2
Carbon disulfide	2.0	U	2.0		ug/L			11/08/20 15:57	2
Carbon tetrachloride	2.0	U	2.0		ug/L			11/08/20 15:57	2
Chlorobenzene	2.0	U	2.0		ug/L			11/08/20 15:57	2
Dibromochloromethane	2.0	U	2.0		ug/L			11/08/20 15:57	2
Chloroethane	2.0	U	2.0		ug/L			11/08/20 15:57	2
Chloroform	2.0	U	2.0		ug/L			11/08/20 15:57	2
Chloromethane	2.0	U	2.0		ug/L			11/08/20 15:57	2

Client Sample ID: WG-11137273-110420-SG-003 Lab Sample ID: 480-177678-3

Date Collected: 11/04/20 00:00 **Matrix: Water**
Date Received: 11/05/20 11:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
cis-1,2-Dichloroethene	**100**		2.0		ug/L			11/08/20 15:57	2
cis-1,3-Dichloropropene	2.0	U	2.0		ug/L			11/08/20 15:57	2
Cyclohexane	2.0	U	2.0		ug/L			11/08/20 15:57	2
Dichlorodifluoromethane	2.0	U	2.0		ug/L			11/08/20 15:57	2
Ethylbenzene	2.0	U	2.0		ug/L			11/08/20 15:57	2
1,2-Dibromoethane	2.0	U	2.0		ug/L			11/08/20 15:57	2
Isopropylbenzene	2.0	U	2.0		ug/L			11/08/20 15:57	2
Methyl acetate	5.0	U	5.0		ug/L			11/08/20 15:57	2
Methyl tert-butyl ether	2.0	U	2.0		ug/L			11/08/20 15:57	2
Methylcyclohexane	2.0	U	2.0		ug/L			11/08/20 15:57	2
Methylene Chloride	2.0	U	2.0		ug/L			11/08/20 15:57	2
Styrene	2.0	U	2.0		ug/L			11/08/20 15:57	2
Tetrachloroethene	2.0	U	2.0		ug/L			11/08/20 15:57	2
Toluene	2.0	U	2.0		ug/L			11/08/20 15:57	2
trans-1,2-Dichloroethene	2.0	U	2.0		ug/L			11/08/20 15:57	2
trans-1,3-Dichloropropene	2.0	U	2.0		ug/L			11/08/20 15:57	2
Trichloroethene	2.0	U	2.0		ug/L			11/08/20 15:57	2
Trichlorofluoromethane	2.0	U	2.0		ug/L			11/08/20 15:57	2
Vinyl chloride	**13**		2.0		ug/L			11/08/20 15:57	2
Xylenes, Total	4.0	U	4.0		ug/L			11/08/20 15:57	2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*109*		*80 - 120*		*11/08/20 15:57*	*2*
1,2-Dichloroethane-d4 (Surr)	*108*		*77 - 120*		*11/08/20 15:57*	*2*
4-Bromofluorobenzene (Surr)	*91*		*73 - 120*		*11/08/20 15:57*	*2*
Dibromofluoromethane (Surr)	*104*		*75 - 123*		*11/08/20 15:57*	*2*

Client Sample ID: TB-11137273-110420-SG Lab Sample ID: 480-177678-4

Date Collected: 11/04/20 00:00 **Matrix: Water**
Date Received: 11/05/20 11:30

Method: 8260C - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			11/07/20 14:47	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			11/07/20 14:47	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			11/07/20 14:47	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			11/07/20 14:47	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			11/07/20 14:47	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			11/07/20 14:47	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			11/07/20 14:47	1
2-Butanone (MEK)	10	U	10		ug/L			11/07/20 14:47	1
2-Hexanone	5.0	U	5.0		ug/L			11/07/20 14:47	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			11/07/20 14:47	1
Acetone	10	U	10		ug/L			11/07/20 14:47	1

Client: GHD Services Inc.
Job ID: 480-177678-1
Project/Site: 11137273, City of Lockport Landfill

Client Sample ID: TB-11137273-110420-SG
Lab Sample ID: 480-177678-4
Date Collected: 11/04/20 00:00
Matrix: Water
Date Received: 11/05/20 11:30

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Benzene	1.0	U	1.0		ug/L			11/07/20 14:47	1
Bromodichloromethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
Bromoform	1.0	U	1.0		ug/L			11/07/20 14:47	1
Bromomethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
Carbon disulfide	1.0	U	1.0		ug/L			11/07/20 14:47	1
Carbon tetrachloride	1.0	U	1.0		ug/L			11/07/20 14:47	1
Chlorobenzene	1.0	U	1.0		ug/L			11/07/20 14:47	1
Dibromochloromethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
Chloroethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
Chloroform	1.0	U	1.0		ug/L			11/07/20 14:47	1
Chloromethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			11/07/20 14:47	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/07/20 14:47	1
Cyclohexane	1.0	U	1.0		ug/L			11/07/20 14:47	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
Ethylbenzene	1.0	U	1.0		ug/L			11/07/20 14:47	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
Isopropylbenzene	1.0	U	1.0		ug/L			11/07/20 14:47	1
Methyl acetate	2.5	U	2.5		ug/L			11/07/20 14:47	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			11/07/20 14:47	1
Methylcyclohexane	1.0	U	1.0		ug/L			11/07/20 14:47	1
Methylene Chloride	1.0	U	1.0		ug/L			11/07/20 14:47	1
Styrene	1.0	U	1.0		ug/L			11/07/20 14:47	1
Tetrachloroethene	1.0	U	1.0		ug/L			11/07/20 14:47	1
Toluene	1.0	U	1.0		ug/L			11/07/20 14:47	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			11/07/20 14:47	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/07/20 14:47	1
Trichloroethene	1.0	U	1.0		ug/L			11/07/20 14:47	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			11/07/20 14:47	1
Vinyl chloride	1.0	U	1.0		ug/L			11/07/20 14:47	1
Xylenes, Total	2.0	U	2.0		ug/L			11/07/20 14:47	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*95*		*80 - 120*		*11/07/20 14:47*	*1*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*		*11/07/20 14:47*	*1*
4-Bromofluorobenzene (Surr)	*94*		*73 - 120*		*11/07/20 14:47*	*1*
Dibromofluoromethane (Surr)	*95*		*75 - 123*		*11/07/20 14:47*	*1*

Surrogate Summary

Client: GHD Services Inc.
Project/Site: 11137273, City of Lockport Landfill

Job ID: 480-177678-1

Method: 8260C - Volatile Organic Compounds by GC/MS

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		TOL	DCA	BFB	DBFM
Lab Sample ID	Client Sample ID	(80-120)	(77-120)	(73-120)	(75-123)
480-177678-1	WG-11137273-110420-SG-001	108	106	91	104
480-177678-2	WG-11137273-110420-SG-002	110	107	91	111
480-177678-3	WG-11137273-110420-SG-003	109	108	91	104
480-177678-4	TB-11137273-110420-SG	95	104	94	95
LCS 480-557937/5	Lab Control Sample	99	106	101	97
LCS 480-558005/5	Lab Control Sample	107	104	90	108
MB 480-557937/7	Method Blank	92	101	95	93
MB 480-558005/7	Method Blank	102	101	82	100

Surrogate Legend

TOL = Toluene-d8 (Surr)
DCA = 1,2-Dichloroethane-d4 (Surr)
BFB = 4-Bromofluorobenzene (Surr)
DBFM = Dibromofluoromethane (Surr)

Client: GHD Services Inc.
Job ID: 480-177678-1
Project/Site: 11137273, City of Lockport Landfill

Method: 8260C - Volatile Organic Compounds by GC/MS

Lab Sample ID: MB 480-557937/7
Matrix: Water
Analysis Batch: 557937

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
1,1,2-Trichloroethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
1,1-Dichloroethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
1,1-Dichloroethene	1.0	U	1.0		ug/L			11/07/20 11:23	1
1,2,4-Trichlorobenzene	1.0	U	1.0		ug/L			11/07/20 11:23	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0		ug/L			11/07/20 11:23	1
1,2-Dichlorobenzene	1.0	U	1.0		ug/L			11/07/20 11:23	1
1,2-Dichloroethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
1,2-Dichloropropane	1.0	U	1.0		ug/L			11/07/20 11:23	1
1,3-Dichlorobenzene	1.0	U	1.0		ug/L			11/07/20 11:23	1
1,4-Dichlorobenzene	1.0	U	1.0		ug/L			11/07/20 11:23	1
2-Butanone (MEK)	10	U	10		ug/L			11/07/20 11:23	1
2-Hexanone	5.0	U	5.0		ug/L			11/07/20 11:23	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0		ug/L			11/07/20 11:23	1
Acetone	10	U	10		ug/L			11/07/20 11:23	1
Benzene	1.0	U	1.0		ug/L			11/07/20 11:23	1
Bromodichloromethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
Bromoform	1.0	U	1.0		ug/L			11/07/20 11:23	1
Bromomethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
Carbon disulfide	1.0	U	1.0		ug/L			11/07/20 11:23	1
Carbon tetrachloride	1.0	U	1.0		ug/L			11/07/20 11:23	1
Chlorobenzene	1.0	U	1.0		ug/L			11/07/20 11:23	1
Dibromochloromethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
Chloroethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
Chloroform	1.0	U	1.0		ug/L			11/07/20 11:23	1
Chloromethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			11/07/20 11:23	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/07/20 11:23	1
Cyclohexane	1.0	U	1.0		ug/L			11/07/20 11:23	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
Ethylbenzene	1.0	U	1.0		ug/L			11/07/20 11:23	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
Isopropylbenzene	1.0	U	1.0		ug/L			11/07/20 11:23	1
Methyl acetate	2.5	U	2.5		ug/L			11/07/20 11:23	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			11/07/20 11:23	1
Methylcyclohexane	1.0	U	1.0		ug/L			11/07/20 11:23	1
Methylene Chloride	1.0	U	1.0		ug/L			11/07/20 11:23	1
Styrene	1.0	U	1.0		ug/L			11/07/20 11:23	1
Tetrachloroethene	1.0	U	1.0		ug/L			11/07/20 11:23	1
Toluene	1.0	U	1.0		ug/L			11/07/20 11:23	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			11/07/20 11:23	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/07/20 11:23	1
Trichloroethene	1.0	U	1.0		ug/L			11/07/20 11:23	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			11/07/20 11:23	1
Vinyl chloride	1.0	U	1.0		ug/L			11/07/20 11:23	1
Xylenes, Total	2.0	U	2.0		ug/L			11/07/20 11:23	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-557937/7
Matrix: Water
Analysis Batch: 557937

Client Sample ID: Method Blank
Prep Type: Total/NA

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
Toluene-d8 (Surr)	*92*		*80 - 120*		*11/07/20 11:23*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*11/07/20 11:23*	*1*
4-Bromofluorobenzene (Surr)	*95*		*73 - 120*		*11/07/20 11:23*	*1*
Dibromofluoromethane (Surr)	*93*		*75 - 123*		*11/07/20 11:23*	*1*

Lab Sample ID: LCS 480-557937/5
Matrix: Water
Analysis Batch: 557937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	26.0		ug/L		104	73 - 126
1,1,2,2-Tetrachloroethane	25.0	24.7		ug/L		99	76 - 120
1,1,2-Trichloroethane	25.0	25.3		ug/L		101	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	24.0		ug/L		96	61 - 148
1,1-Dichloroethane	25.0	24.6		ug/L		98	77 - 120
1,1-Dichloroethene	25.0	24.2		ug/L		97	66 - 127
1,2,4-Trichlorobenzene	25.0	27.2		ug/L		109	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	29.8		ug/L		119	56 - 134
1,2-Dichlorobenzene	25.0	25.6		ug/L		102	80 - 124
1,2-Dichloroethane	25.0	27.2		ug/L		109	75 - 120
1,2-Dichloropropane	25.0	24.4		ug/L		98	76 - 120
1,3-Dichlorobenzene	25.0	25.3		ug/L		101	77 - 120
1,4-Dichlorobenzene	25.0	24.7		ug/L		99	80 - 120
2-Butanone (MEK)	125	130		ug/L		104	57 - 140
2-Hexanone	125	138		ug/L		111	65 - 127
4-Methyl-2-pentanone (MIBK)	125	137		ug/L		110	71 - 125
Acetone	125	126		ug/L		101	56 - 142
Benzene	25.0	24.6		ug/L		98	71 - 124
Bromodichloromethane	25.0	27.1		ug/L		108	80 - 122
Bromoform	25.0	27.3		ug/L		109	61 - 132
Bromomethane	25.0	18.5		ug/L		74	55 - 144
Carbon disulfide	25.0	24.3		ug/L		97	59 - 134
Carbon tetrachloride	25.0	26.6		ug/L		106	72 - 134
Chlorobenzene	25.0	25.0		ug/L		100	80 - 120
Dibromochloromethane	25.0	27.6		ug/L		111	75 - 125
Chloroethane	25.0	20.8		ug/L		83	69 - 136
Chloroform	25.0	24.0		ug/L		96	73 - 127
Chloromethane	25.0	23.3		ug/L		93	68 - 124
cis-1,2-Dichloroethene	25.0	24.3		ug/L		97	74 - 124
cis-1,3-Dichloropropene	25.0	26.6		ug/L		106	74 - 124
Cyclohexane	25.0	24.9		ug/L		100	59 - 135
Dichlorodifluoromethane	25.0	24.3		ug/L		97	59 - 135
Ethylbenzene	25.0	24.9		ug/L		100	77 - 123
1,2-Dibromoethane	25.0	25.7		ug/L		103	77 - 120
Isopropylbenzene	25.0	26.2		ug/L		105	77 - 122
Methyl acetate	50.0	51.1		ug/L		102	74 - 133
Methyl tert-butyl ether	25.0	27.2		ug/L		109	77 - 120
Methylcyclohexane	25.0	24.5		ug/L		98	68 - 134

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-557937/5
Matrix: Water
Analysis Batch: 557937

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
Methylene Chloride	25.0	21.6		ug/L		86	75 - 124
Styrene	25.0	26.1		ug/L		104	80 - 120
Tetrachloroethene	25.0	24.3		ug/L		97	74 - 122
Toluene	25.0	25.1		ug/L		100	80 - 122
trans-1,2-Dichloroethene	25.0	24.3		ug/L		97	73 - 127
trans-1,3-Dichloropropene	25.0	27.6		ug/L		111	80 - 120
Trichloroethene	25.0	25.0		ug/L		100	74 - 123
Trichlorofluoromethane	25.0	25.2		ug/L		101	62 - 150
Vinyl chloride	25.0	22.1		ug/L		88	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*99*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*106*		*77 - 120*
4-Bromofluorobenzene (Surr)	*101*		*73 - 120*
Dibromofluoromethane (Surr)	*97*		*75 - 123*

Lab Sample ID: MB 480-558005/7
Matrix: Water
Analysis Batch: 558005

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	1.0	U	1.0	ug/L			11/08/20 13:54	1
1,1,2,2-Tetrachloroethane	1.0	U	1.0	ug/L			11/08/20 13:54	1
1,1,2-Trichloroethane	1.0	U	1.0	ug/L			11/08/20 13:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	1.0	U	1.0	ug/L			11/08/20 13:54	1
1,1-Dichloroethane	1.0	U	1.0	ug/L			11/08/20 13:54	1
1,1-Dichloroethene	1.0	U	1.0	ug/L			11/08/20 13:54	1
1,2,4-Trichlorobenzene	1.0	U	1.0	ug/L			11/08/20 13:54	1
1,2-Dibromo-3-Chloropropane	1.0	U	1.0	ug/L			11/08/20 13:54	1
1,2-Dichlorobenzene	1.0	U	1.0	ug/L			11/08/20 13:54	1
1,2-Dichloroethane	1.0	U	1.0	ug/L			11/08/20 13:54	1
1,2-Dichloropropane	1.0	U	1.0	ug/L			11/08/20 13:54	1
1,3-Dichlorobenzene	1.0	U	1.0	ug/L			11/08/20 13:54	1
1,4-Dichlorobenzene	1.0	U	1.0	ug/L			11/08/20 13:54	1
2-Butanone (MEK)	10	U	10	ug/L			11/08/20 13:54	1
2-Hexanone	5.0	U	5.0	ug/L			11/08/20 13:54	1
4-Methyl-2-pentanone (MIBK)	5.0	U	5.0	ug/L			11/08/20 13:54	1
Acetone	10	U	10	ug/L			11/08/20 13:54	1
Benzene	1.0	U	1.0	ug/L			11/08/20 13:54	1
Bromodichloromethane	1.0	U	1.0	ug/L			11/08/20 13:54	1
Bromoform	1.0	U	1.0	ug/L			11/08/20 13:54	1
Bromomethane	1.0	U	1.0	ug/L			11/08/20 13:54	1
Carbon disulfide	1.0	U	1.0	ug/L			11/08/20 13:54	1
Carbon tetrachloride	1.0	U	1.0	ug/L			11/08/20 13:54	1
Chlorobenzene	1.0	U	1.0	ug/L			11/08/20 13:54	1
Dibromochloromethane	1.0	U	1.0	ug/L			11/08/20 13:54	1
Chloroethane	1.0	U	1.0	ug/L			11/08/20 13:54	1
Chloroform	1.0	U	1.0	ug/L			11/08/20 13:54	1

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: MB 480-558005/7
Matrix: Water
Analysis Batch: 558005

Client Sample ID: Method Blank
Prep Type: Total/NA

Analyte	MB Result	MB Qualifier	RL		Unit	D	Prepared	Analyzed	Dil Fac
Chloromethane	1.0	U	1.0		ug/L			11/08/20 13:54	1
cis-1,2-Dichloroethene	1.0	U	1.0		ug/L			11/08/20 13:54	1
cis-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/08/20 13:54	1
Cyclohexane	1.0	U	1.0		ug/L			11/08/20 13:54	1
Dichlorodifluoromethane	1.0	U	1.0		ug/L			11/08/20 13:54	1
Ethylbenzene	1.0	U	1.0		ug/L			11/08/20 13:54	1
1,2-Dibromoethane	1.0	U	1.0		ug/L			11/08/20 13:54	1
Isopropylbenzene	1.0	U	1.0		ug/L			11/08/20 13:54	1
Methyl acetate	2.5	U	2.5		ug/L			11/08/20 13:54	1
Methyl tert-butyl ether	1.0	U	1.0		ug/L			11/08/20 13:54	1
Methylcyclohexane	1.0	U	1.0		ug/L			11/08/20 13:54	1
Methylene Chloride	1.0	U	1.0		ug/L			11/08/20 13:54	1
Styrene	1.0	U	1.0		ug/L			11/08/20 13:54	1
Tetrachloroethene	1.0	U	1.0		ug/L			11/08/20 13:54	1
Toluene	1.0	U	1.0		ug/L			11/08/20 13:54	1
trans-1,2-Dichloroethene	1.0	U	1.0		ug/L			11/08/20 13:54	1
trans-1,3-Dichloropropene	1.0	U	1.0		ug/L			11/08/20 13:54	1
Trichloroethene	1.0	U	1.0		ug/L			11/08/20 13:54	1
Trichlorofluoromethane	1.0	U	1.0		ug/L			11/08/20 13:54	1
Vinyl chloride	1.0	U	1.0		ug/L			11/08/20 13:54	1
Xylenes, Total	2.0	U	2.0		ug/L			11/08/20 13:54	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
Toluene-d8 (Surr)	*102*		*80 - 120*		*11/08/20 13:54*	*1*
1,2-Dichloroethane-d4 (Surr)	*101*		*77 - 120*		*11/08/20 13:54*	*1*
4-Bromofluorobenzene (Surr)	*82*		*73 - 120*		*11/08/20 13:54*	*1*
Dibromofluoromethane (Surr)	*100*		*75 - 123*		*11/08/20 13:54*	*1*

Lab Sample ID: LCS 480-558005/5
Matrix: Water
Analysis Batch: 558005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
1,1,1-Trichloroethane	25.0	27.6		ug/L		110	73 - 126
1,1,2,2-Tetrachloroethane	25.0	23.9		ug/L		96	76 - 120
1,1,2-Trichloroethane	25.0	25.1		ug/L		100	76 - 122
1,1,2-Trichloro-1,2,2-trifluoroethane	25.0	25.9		ug/L		103	61 - 148
1,1-Dichloroethane	25.0	25.6		ug/L		103	77 - 120
1,1-Dichloroethene	25.0	26.4		ug/L		106	66 - 127
1,2,4-Trichlorobenzene	25.0	25.3		ug/L		101	79 - 122
1,2-Dibromo-3-Chloropropane	25.0	27.6		ug/L		111	56 - 134
1,2-Dichlorobenzene	25.0	24.6		ug/L		98	80 - 124
1,2-Dichloroethane	25.0	26.3		ug/L		105	75 - 120
1,2-Dichloropropane	25.0	26.0		ug/L		104	76 - 120
1,3-Dichlorobenzene	25.0	23.6		ug/L		95	77 - 120
1,4-Dichlorobenzene	25.0	23.0		ug/L		92	80 - 120
2-Butanone (MEK)	125	126		ug/L		101	57 - 140
2-Hexanone	125	124		ug/L		99	65 - 127

Method: 8260C - Volatile Organic Compounds by GC/MS (Continued)

Lab Sample ID: LCS 480-558005/5
Matrix: Water
Analysis Batch: 558005

Client Sample ID: Lab Control Sample
Prep Type: Total/NA

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec. Limits
4-Methyl-2-pentanone (MIBK)	125	138		ug/L		110	71 - 125
Acetone	125	146		ug/L		117	56 - 142
Benzene	25.0	25.4		ug/L		102	71 - 124
Bromodichloromethane	25.0	27.3		ug/L		109	80 - 122
Bromoform	25.0	25.0		ug/L		100	61 - 132
Bromomethane	25.0	25.2		ug/L		101	55 - 144
Carbon disulfide	25.0	25.8		ug/L		103	59 - 134
Carbon tetrachloride	25.0	29.2		ug/L		117	72 - 134
Chlorobenzene	25.0	23.1		ug/L		93	80 - 120
Dibromochloromethane	25.0	28.4		ug/L		114	75 - 125
Chloroethane	25.0	25.6		ug/L		102	69 - 136
Chloroform	25.0	25.6		ug/L		103	73 - 127
Chloromethane	25.0	25.4		ug/L		102	68 - 124
cis-1,2-Dichloroethene	25.0	26.0		ug/L		104	74 - 124
cis-1,3-Dichloropropene	25.0	26.1		ug/L		104	74 - 124
Cyclohexane	25.0	26.1		ug/L		104	59 - 135
Dichlorodifluoromethane	25.0	23.2		ug/L		93	59 - 135
Ethylbenzene	25.0	23.7		ug/L		95	77 - 123
1,2-Dibromoethane	25.0	24.0		ug/L		96	77 - 120
Isopropylbenzene	25.0	26.3		ug/L		105	77 - 122
Methyl acetate	50.0	50.6		ug/L		101	74 - 133
Methyl tert-butyl ether	25.0	26.7		ug/L		107	77 - 120
Methylcyclohexane	25.0	25.6		ug/L		102	68 - 134
Methylene Chloride	25.0	28.2		ug/L		113	75 - 124
Styrene	25.0	22.8		ug/L		91	80 - 120
Tetrachloroethene	25.0	25.3		ug/L		101	74 - 122
Toluene	25.0	25.3		ug/L		101	80 - 122
trans-1,2-Dichloroethene	25.0	26.1		ug/L		105	73 - 127
trans-1,3-Dichloropropene	25.0	25.3		ug/L		101	80 - 120
Trichloroethene	25.0	25.6		ug/L		102	74 - 123
Trichlorofluoromethane	25.0	25.7		ug/L		103	62 - 150
Vinyl chloride	25.0	25.3		ug/L		101	65 - 133

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
Toluene-d8 (Surr)	*107*		*80 - 120*
1,2-Dichloroethane-d4 (Surr)	*104*		*77 - 120*
4-Bromofluorobenzene (Surr)	*90*		*73 - 120*
Dibromofluoromethane (Surr)	*108*		*75 - 123*

QC Association Summary

Client: GHD Services Inc.
Job ID: 480-177678-1
Project/Site: 11137273, City of Lockport Landfill

GC/MS VOA

Analysis Batch: 557937

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-177678-4	TB-11137273-110420-SG	Total/NA	Water	8260C	
MB 480-557937/7	Method Blank	Total/NA	Water	8260C	
LCS 480-557937/5	Lab Control Sample	Total/NA	Water	8260C	

Analysis Batch: 558005

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
480-177678-1	WG-11137273-110420-SG-001	Total/NA	Water	8260C	
480-177678-2	WG-11137273-110420-SG-002	Total/NA	Water	8260C	
480-177678-3	WG-11137273-110420-SG-003	Total/NA	Water	8260C	
MB 480-558005/7	Method Blank	Total/NA	Water	8260C	
LCS 480-558005/5	Lab Control Sample	Total/NA	Water	8260C	

Lab Chronicle

Client: GHD Services Inc.
Job ID: 480-177678-1
Project/Site: 11137273, City of Lockport Landfill

Client Sample ID: WG-11137273-110420-SG-001
Lab Sample ID: 480-177678-1
Date Collected: 11/04/20 00:00
Matrix: Water
Date Received: 11/05/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	558005	11/08/20 15:08	RJF	TAL BUF

Client Sample ID: WG-11137273-110420-SG-002
Lab Sample ID: 480-177678-2
Date Collected: 11/04/20 00:00
Matrix: Water
Date Received: 11/05/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	558005	11/08/20 15:32	RJF	TAL BUF

Client Sample ID: WG-11137273-110420-SG-003
Lab Sample ID: 480-177678-3
Date Collected: 11/04/20 00:00
Matrix: Water
Date Received: 11/05/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		2	558005	11/08/20 15:57	RJF	TAL BUF

Client Sample ID: TB-11137273-110420-SG
Lab Sample ID: 480-177678-4
Date Collected: 11/04/20 00:00
Matrix: Water
Date Received: 11/05/20 11:30

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	8260C		1	557937	11/07/20 14:47	OMI	TAL BUF

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 480-177678-1
Project/Site: 11137273, City of Lockport Landfill

Laboratory: Eurofins TestAmerica, Buffalo

The accreditations/certifications listed below are applicable to this report.

Authority	Program	Identification Number	Expiration Date
New York	NELAP	10026	04-01-21

Method Summary

Client: GHD Services Inc.
Job ID: 480-177678-1
Project/Site: 11137273, City of Lockport Landfill

Method	Method Description	Protocol	Laboratory
8260C	Volatile Organic Compounds by GC/MS	SW846	TAL BUF
5030C	Purge and Trap	SW846	TAL BUF

Protocol References:

SW846 = "Test Methods For Evaluating Solid Waste, Physical/Chemical Methods", Third Edition, November 1986 And Its Updates.

Laboratory References:

TAL BUF = Eurofins TestAmerica, Buffalo, 10 Hazelwood Drive, Amherst, NY 14228-2298, TEL (716)691-2600

Sample Summary

Client: GHD Services Inc.
Job ID: 480-177678-1
Project/Site: 11137273, City of Lockport Landfill

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
480-177678-1	WG-11137273-110420-SG-001	Water	11/04/20 00:00	11/05/20 11:30	
480-177678-2	WG-11137273-110420-SG-002	Water	11/04/20 00:00	11/05/20 11:30	
480-177678-3	WG-11137273-110420-SG-003	Water	11/04/20 00:00	11/05/20 11:30	
480-177678-4	TB-11137273-110420-SG	Water	11/04/20 00:00	11/05/20 11:30	

GHD

CHAIN OF CUSTODY RECORD

COC NO.: 53214

Address: 2055 NIAGARA FALLS BLVD

PAGE 1 OF 1

Phone:

Fax:

Project No/ Phase/Task Code:	Laboratory Name:	Lab Location:	SSOW ID:
11137273 - 400	TEST AMERICA AMHERST	AMHERST, NY	
Project Name: LOCKPORT LANDFILL SAMPLING	Lab Contact: DENISE HECKLER		Cooler No:
Project Location: 175 OAKHURST ST. LOCKPORT NY			Carrier: HAND DELIVERED
GHD Chemistry Contact: KATHY WILLY			Airbill No:
Sampler(s): D TYRAN, S GARDNER			Total # of Containers: 12

ANALYSIS REQUESTED (See Back of COC for Definitions)

Item	SAMPLE IDENTIFICATION (Containers for each sample may be combined on one line)	DATE (mm/dd/yy)	TIME (hh:mm)	Matrix Code (see back of COC)	Grab (G) or Comp (C)	Filtered (Y/N)	8260C VOC	Total Containers/sample	MS/MSD Request	COMMENTS/ SPECIAL INSTRUCTIONS:
	PRESERVATION - (SEE BACK OF COC FOR ABBREVIATIONS)									
1	WG-11137273-110420-SG-001	11/4/20		WG	G	N	X	3		
2	WG-11137273-110420-SG-002	11/4/20		WG	G	N	X	3		
3	WG-11137273-110420-SG-003	11/4/20		WG	G	N	X	3		
4	~~WG-11137273-110420-SG-004~~	~~11/4/20~~		~~WG~~	~~G~~	~~N~~	~~X~~	~~3~~		SG 11/4/2020
5	TB-11137273-110420-SG	11/4/20		WG	G	N	X	3		DST
6										
7										
8										
9										
10										
11										
12										

480-177678 Chain of Custody

TAT Required in business days (use separate COCs for different TATs):

☐ 1 Day ☐ 2 Days ☐ 3 Days ☐ 1 Week ☒ 2 Week ☐ Other:

Notes/ Special Requirements: Temp 7.6 #1 ICE

	RELINQUISHED BY	COMPANY	DATE	TIME		RECEIVED BY	COMPANY	DATE	TIME
1.	Dave Tyran	GHD	11/4/20	1104	1.	[signature]	TA	11/04/20	1130
2.					2.				
3.					3.				

THE CHAIN OF CUSTODY IS A LEGAL DOCUMENT – ALL FIELDS MUST BE COMPLETED ACCURATELY

Distribution: WHITE – Fully Executed Copy (CRA) YELLOW – Receiving Laboratory Copy PINK – Shipper GOLDENROD – Sampling Crew

GHD Form: COC-10B (20110804)

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 480-177678-1

Login Number: 177678
List Number: 1
Creator: Wallace, Cameron

List Source: Eurofins TestAmerica, Buffalo

Question	Answer	Comment
Radioactivity either was not measured or, if measured, is at or below background	True	
The cooler's custody seal, if present, is intact.	True	
The cooler or samples do not appear to have been compromised or tampered with.	True	
Samples were received on ice.	True	
Cooler Temperature is acceptable.	True	
Cooler Temperature is recorded.	True	
COC is present.	True	
COC is filled out in ink and legible.	True	
COC is filled out with all pertinent information.	True	
Is the Field Sampler's name present on COC?	True	
There are no discrepancies between the sample IDs on the containers and the COC.	True	
Samples are received within Holding Time (Excluding tests with immediate HTs)..	True	
Sample containers have legible labels.	True	
Containers are not broken or leaking.	True	
Sample collection date/times are provided.	True	
Appropriate sample containers are used.	True	
Sample bottles are completely filled.	True	
Sample Preservation Verified	True	
There is sufficient vol. for all requested analyses, incl. any requested MS/MSDs	True	
VOA sample vials do not have headspace or bubble is <6mm (1/4") in diameter.	True	
If necessary, staff have been informed of any short hold time or quick TAT needs	True	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Sampling Company provided.	True	GHD
Samples received within 48 hours of sampling.	True	
Samples requiring field filtration have been filtered in the field.	True	
Chlorine Residual checked.	N/A	

Appendix D
IC/EC Certification

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. 932010

Site Name Lockport City Landfill

Site Address: Oakhurst Road Zip Code: 14094
City/Town: Lockport
County: Niagara
Site Acreage: 23.400

Reporting Period: January 15, 2020 to January 15, 2021

	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? Closed Landfill	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

SITE NO. 932010 **Box 3**

Description of Institutional Controls

Parcel	Owner	Institutional Control
108.00-1-14	City of Lockport	Monitoring Plan O&M Plan Landuse Restriction Building Use Restriction

Record of Decision (ROD), December 1992. The remedial components of the ROD have been implemented and are maintained for the protection of human health and the environment.

Declaration of Covenants and Restrictions, Niagara County, February 3, 2010. Deed restrictions have been implemented to prevent activities that could cause potential exposure of waste material and compromise the integrity of the cap.

Operation and Maintenance Plan, Contingency Plan, March 1994. Regular inspections of the cap are performed. Repairs are done if needed to maintain the integrity of the cap.

Long Term Monitoring Program, March 1994.
The monitoring program is in place and used to evaluate the effectiveness of the remedial program.

108.15-1-1	City of Lockport	Monitoring Plan O&M Plan Landuse Restriction

Record of Decision (ROD), December 1992.
The remedial components of the ROD have been implemented and are maintained for the protection of human health and the environment.

Declaration of Covenants and Restrictions, Niagara County, February 3, 2010.
Deed restrictions have been implemented to prevent activities that could cause potential exposure of waste material and compromise the integrity of the cap.

Operation and Maintenance Plan, Contingency Plan, March 1994.
Regular inspections and repair of the landfill cap are conducted to insure that the integrity of the cap is maintained.

Long Term Monitoring Program, March 1994.
The monitoring program is in place and used to evaluate the effectiveness of the remedial program.

Box 4

Description of Engineering Controls

Parcel	Engineering Control
108.00-1-14	Cover System Fencing/Access Control Monitoring Wells

Landfill Cap:

A Part 360 type clay cap was constructed over the landfill to eliminate direct contact as well as greatly reduce the amount of leachate being generated.

Excavation of steep embankment:

The waste material along the steep embankment (western bounday of the landfill) was excavated from

Parcel	Engineering Control
the embankment and placed under the landfill cap.	
108.15-1-1	Monitoring Wells Cover System Fencing/Access Control

Landfill Cap:

A Part 360 type clay cap has been installed over the landfill to eliminate direct contact as well as greatly reduce the amount of leachate being generated.

Excavation of steep embankment:

The waste material along the steep embankment (western bounday of the landfill) has been excavated from the embankment and placed under the landfill cap.

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. 932010

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 James Elmer (print name) at City of Lockport, 1 Locks Plaza, Lockport, NY 14094, (print business address)

am certifying as Owner (Owner or Remedial Party)

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

James C Elmer — 1/8/2021

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 David Britton (print name) at GHD, 285 Delaware Ave., Suite 500, Buffalo, NY 14202 (print business address),

am certifying as a Qualified Environmental Professional for the City of Lockport as Owner (Owner or Remedial Party)

David Britton

Signature of Qualified Environmental Professional, for the Owner or Remedial Party, Rendering Certification	Stamp (Required for PE)	Date
		01/12/2021