2023 Annual Monitoring Report

New Richmond Closed Landfill
1935 115th Street
New Richmond, Wisconsin

Michael Best & Friedrich LLP

January 30, 2024

→ The Power of Commitment

Project name		New Richmond Landfill					
Document title		2023 Annual Monitoring Report | New Richmond Closed Landfill					
Project number		048038					
File name		048038-RPT-33-2023 AMR					
Status Code	Revision	Author	Reviewer		Approved for issue		
			Name	Signature	Name	Signature	Date
[Status code]		Ben Douvier	Ryan Aamot		Nick Coady		1-30-2024
[Status code]							
[Status code]							
[Status code]							
[Status code]							

GHD Services Inc.

900 Long Lake Road, Suite 200

St. Paul, Minnesota 55112, United States

T +1 651 639 0913 | **F** +1 651 639 0923 | **E** info-northamerica@ghd.com | **ghd.com**

Contents

Figure Index

Figure Index (cont'd)

Table Index

Appendices

1. Introduction

GHD Services Inc. (GHD) has prepared this Annual Monitoring Report (Report) for the New Richmond Landfill (WDNR License #2492) in New Richmond, Wisconsin, on behalf of the New Richmond Landfill Settling Potential Responsible Parties (PRPs). This Report presents the results of the Soil Vapor Extraction (SVE)/Landfill Gas (LFG) extraction system and groundwater monitoring activities associated with Operable Unit 1 (OU1) – source remedy and Operable Unit 2 Aquifer Restoration (OU2 AR), respectively at the Site from January 2023 through December 2023 as required by the Operation, Maintenance, and Monitoring Plan.

1.1 History

The New Richmond Landfill (Site) is located at 1935 115th Street, at the southeast corner of the intersection of 115th Street and 195th Avenue, approximately two miles northwest of the City of New Richmond (Figure 1.1). The property for the landfill was purchased by the City of New Richmond from St. Croix County in November 1975 and licensed on October 1, 1976. The landfill was constructed, operated, and closed by the City in accordance with the Wisconsin Department of Natural Resources (WDNR) regulations. The landfill ceased collection of waste by August 1, 1982. Approximately 163,000 cubic yards (CY) of waste were disposed of at the Site in an area approximately 7.6 acres in size.

During groundwater monitoring of Site monitoring wells in 1999, several volatile organic compounds (VOCs) were detected at concentrations exceeding State of Wisconsin ch. NR 140 Enforcement Standards. Residential well monitoring was conducted at residences down gradient of the Site in 2000, revealing chlorinated VOCs at concentrations exceeding enforcement standards. Activated carbon systems were subsequently installed at eleven residences.

A Remedial Investigation (RI) was performed between August 2003 and April 2006 by Short Elliott Hendrickson, Inc. (SEH) that included excavation of test pits, collection of surface water and sediment samples, installation of 21 monitoring wells, collection of groundwater samples from new and existing monitoring wells, installation of 15 landfill gas probes and the completion of a landfill gas extraction pilot test.

SEH completed a Feasibility Study (FS) in October 2006 outlining the remediation alternatives. Final approval of the FS Report and the Final Remedy Plan was provided by the WDNR in a letter dated September 7, 2007. The selected remedy for OU1 was OU1-C which included upgrading the landfill cover to be in compliance with the landfill closure plan, installing and operating a soil vapor extraction (SVE) system below the waste, and installing and operating a landfill gas extraction (LFG) system within the waste.

The selected remedy for OU2 had two components, aquifer restoration and water supply. The selected aquifer restoration remedy is OU2-ARB which involves monitored natural attenuation (MNA). The water supply portion of the remedy was addressed separately. The current groundwater monitoring well and residential well locations are shown on the Site Plan (Figure 1.2).

The SVE/LFG system installation and cap upgrade was completed in 2008. The primary purpose of the SVE/LFG system is to reduce the VOCs present in the landfill and the vadose zone below the landfill, thereby reducing the VOCs available to migrate to the groundwater. The SVE/LFG monitoring locations are shown on Figure 1.3.

1.2 Site Geology

The Site is underlain with glacial deposits consisting of sand and gravel with admixtures of silt and clay of the St. Croix moraine. Alluvial deposits consisting of sand and gravel occur in the Apple River Valley west of the Site.

The upper most bedrock underlying the site is the Prairie du Chien group (OPDC) of dolomites and sandy dolomites. The OPDC consists of from youngest to oldest, the Shakopee Formation, New Richmond sandstone and Oneota

Formation. The Shakopee Formation is characterized by dolomite with karst features and is composed of two members, the Willow River Member, and the New Richmond Member. The Willow River Member overlies the New Richmond Member and consists of gray to brown, medium grained, thin bedded dolomite. The New Richmond Member is a thin (6.5 to 16.5 feet thick) brown to gray, fine grained, dolomitic sandstone and siltstone. Sand and some clay infillings are common in the karst features found in the Shakopee Formation. The unit is not saturated at the Site.

The New Richmond sandstone occurs between the Shakopee and Oneota Formation. The New Richmond sandstone is approximately 20 feet thick in the New Richmond area.

The Oneota Formation forms the basal part of the OPDC and consists of gray thick bedded, crystalline dolomite with chert and oolite beds. The dolomite is generally massive and contains vertical and horizontal fractures.

The thickness of the OPDC at the Site ranges from approximately 50 to 55 feet, and is much thinner than what is reported in the City of New Richmond municipal wells (217 feet thick). The top of the OPDC is an erosional surface, attributing to the variable thickness in the area.

The Jordan sandstone underlies the OPDC and is the primary bedrock aquifer in this area of St. Croix County. The Jordan Formation is a weak to moderately cemented, tan to whitish colored, fine to coarse grained sandstone, with some thin beds of dolomite and shale laminae approximately 90 feet in thickness.

The depth to groundwater at the Site ranges from approximately 100 to 150 ft bgs. The water table is located near the contact of the OPDC Jordan aquifer. The groundwater flows in a northwesterly direction toward the Apple River.

1.3 Objectives

The objectives of the OU1 source remedy monitoring program, which focuses on the landfill cap and the SVE/LFG system, is to ensure ongoing protection of human health and the environment by monitoring potential migration pathways. The OU1 remedy is intended to prohibit infiltration into the landfill, reduce leachate generation, prevent off Site migration of combustible landfill gases and reduce the VOC mass within the waste, and reduce the VOC mass within the soil below the waste and above the water table in order to minimize VOCs leaching into the groundwater.

The scope of the OU1 source remedy monitoring program includes:

– Monitoring combustible gas percentage, oxygen percentage, well vacuum, flow rate and total VOC concentration as measured by a flame ionization detector (FID) or photoionization detector (PID) at SVE wells.
– Monitoring combustible gas percentage, oxygen percentage, temperature, well vacuum, flow rate and total VOC concentration as measured by a FID or PID at LFG wells.
– Monitoring combustible gas percentage, oxygen percentage, temperature, system pressure, flow rate and total VOC concentration as measured by a FID or PID at the blower discharge.
– VOC monitoring by collecting summa canisters for laboratory analysis by EPA method TO-15 at select SVE wells and the blower discharge.
– Monitoring combustible gas percentage, oxygen percentage, and well vacuum at gas probes.

The objective of the OU2-AR, aquifer restoration, is to determine the effectiveness and protectiveness of the selected remedy for groundwater, MNA.

The scope of OU2-AR program includes:

– Monitoring flow direction and hydraulic gradient through the measurement and assessment of groundwater levels.
– Monitoring the natural attenuation of the plume through collection and chemical analysis of groundwater samples from monitoring wells.
– Monitoring long term improvement in groundwater quality through the collection and chemical analysis of groundwater samples from monitoring wells.
– Monitoring compliance with groundwater cleanup standards for the Site. The groundwater cleanup standards are State of Wisconsin ch. NR 140 Enforcement Standards.

– Monitoring potential impact on residential wells through collection and chemical analysis of water samples from targeted residential wells.

The OU1 and OU2 monitoring are conducted in accordance with the Operation, Maintenance and Monitoring (OM&M) Plan (April 2008) and subsequent revisions.

2. Groundwater Monitoring

Groundwater monitoring, including water level measurements and water sampling, was conducted in October 2023 according to the procedures in the Operation, Maintenance, and Monitoring Plan and associated revisions in 2013 and 2023. Groundwater monitoring was conducted using the monitoring well network of 19 wells and two residential wells.

On September 29, 2023, the WDNR approved Groundwater Monitoring Plan modifications recommended in the Request for Operating and Monitoring Plan Amendment (GHD, April 2023) letter. The approved modifications are summarized below:

– Remove MW4, MW5, MW6, MW8, MW8A, MW11A, MW12, MW12A, MW13, MW13A, MW14, MW14A, MW15, and MW15A from the Groundwater Monitoring Plan. The wells listed above will be plugged and abandoned using materials and methods as prescribed in NR 812.26, Wis. Adm. Code.
– Remove 1070 192nd Ave from the residential well sampling list.

The current Groundwater Monitoring Plan is summarized on Table 2.2 and detailed below:

– Perform groundwater sampling and fluid level monitoring on MW1, MW2R, MW9, MW10, MW10A, MW16, MW16A, MW17, MW17A, MW18, MW19, and MW19A on an annual basis.
– Perform fluid level monitoring only on MW1A, MW1B, MW2A, MW2B, MW3, MW9A, MW10B, and Apple River on an annual basis.
– Collect residential well samples from 2055 County Road C and 2056 County Road C on an annual basis.

2.1 Water Level Monitoring

Table 2.1 presents the groundwater elevation data collected from October 2023 sampling round. Water table contours based on the October 2023 measurements are presented on Figure 2.1. Water table contours from the 2023 measurements are similar to the historical water table contours. Historical groundwater elevations are presented in Appendix A.

Figure 2.1 shows that groundwater flows northwesterly toward the Apple River, consistent with historical groundwater elevation measurements collected since 2003. As the groundwater flows towards the Apple River, it encounters a geologic change as it goes from the OPDC at the landfill to unconsolidated alluvial sediments. The geologic change does not affect the groundwater flow pattern and only slightly diminishes the horizontal hydraulic gradient.

2.2 Groundwater Sampling

Samples from two residential wells were collected in October 2023 according to the Operation, Maintenance, and Monitoring Plan.

The annual round of groundwater sampling was conducted in October 2023. Groundwater samples were analyzed for VOCs by EPA method 8260. A monitoring well sampling summary is presented in Table 2.2.

Groundwater sampling and analysis was conducted according to the Quality Assurance Project Plan (QAPP). All samples were shipped to Eurofins Laboratories in University Park, Illinois for analysis. Copies of data quality validation memoranda and Laboratory Reports are included in Appendix B.

3. Results/Evaluation

The objectives of groundwater sampling at the New Richmond Landfill are to monitor for natural attenuation in the contaminant plume and the long-term improvement in groundwater quality. Samples from all events were analyzed for VOCs to monitor the long-term improvement in the aquifer.

Table 3.1 presents laboratory results for VOCs that have exceeded a Wisconsin Preventative Action Limit (PAL) from the sampling event discussed in this report. None of the results listed in Table 3.1 exceed the WDNR enforcement standards. Appendix C presents the historical VOC results for monitoring wells for all detected parameters since monitoring began in 1999. Appendix D presents the historical residential well sampling detected results.

3.1 Monitoring Well Results and Evaluation

The primary VOCs found in the groundwater, based on concentration, are 1,1,1 trichloroethane (1,1,1 TCA) and its degradation product 1,1 dichloroethane (1,1 DCA); however, neither of these VOCs exceeded the Wisconsin Enforcement Standards (ES) of 200 µg/L and 850 µg/L, respectively. The highest concentrations of 1,1,1 TCA was found at MW-18 with a concentration of 7.8 µg/L and the highest concentrations of 1,1 DCA was found at MW-16 with a concentration of 8.2 µg/L. Figure 3.1 presents the 1,1,1 TCA concentrations at each well for the October 2023 sampling event.

None of the wells sampled had an exceedance of the ES. Table 3.2 presents the laboratory results for 1,1,1 TCA, tetrachloroethene, and detected VOCs for the wells sampled.

Since the SVE system started up in September 2008, there have been thirty-one groundwater monitoring events. The SVE system has removed approximately 1,392 pounds of VOCs from the vadose zone through the end of 2023. The laboratory results for the monitoring well closest to the landfill (MW 2R), shows that the VOCs removed by the SVE system have caused reduced concentrations in the groundwater. For instance, at MW 2R, the concentrations of 1,1,1 TCA and 1,1 dichloroethene (1,1 DCE) are significantly lower since the system started up. At wells farther from the landfill, the VOC concentrations have also started to decline since the SVE system began operation. Figures 3.2 through 3.7 show the 1,1 DCE, 1,1,1 TCA, and tetrachloroethene concentrations at the wells located inside of the groundwater plume. Figures 3.2, 3.3, 3.4, 3.5, 3.6, and 3.7 show downward trends in the sample results from the wells farther from the landfill.

The first detection of VOCs at 2055 County Road C (old Thommes well) (approximately 7,000 feet down gradient) was in 2004. Thommes was provided with a new water supply well in 2009 and the old well was converted to a monitoring well. Starting in 2014, the old residential well on Thommes property was renamed MW 18. Figure 3.7 shows the sample results for 1,1,1 TCA and 1,1 DCE in MW 18 from October 2007 to October 2023.

As shown on Figure 3.7, the chemical concentrations in MW 18 had been increasing since sampling started in 2007. The highest concentration of 1,1,1 TCA was recorded in May of 2015. Since then, the concentration of 1,1,1 TCA is significantly less. MW 18 is the farthest well from the landfill and is located on the down gradient edge of the groundwater plume. Since MW 18 is the farthest well from the SVE system and given the slow rate of groundwater movement, it has taken several years to show any improvement.

3.2 Residential Well Results

GHD collected samples in October 2023 from 2055 County Road C and 2056 County Road C. 2055 County Road C had no landfill related VOC detections while the 2056 County Road C sample had a concentration of acetone at 5.8 J µg/L and a concentration of toluene at 4.4 µg/L. The ES for acetone is 9,000 µg/L and the ES for toluene is 800 µg/L.

The results from the October 2023 residential sampling round were submitted to the WDNR on January 9, 2024. The residential wells located at 2055 County Road C and at 2056 County Road C will continue to be sampled annually.

4. Landfill Gas and Soil Vapor Extraction System Operation, Maintenance and Monitoring

The following sections detail the OM&M performed for the Site LFG and SVE system during 2023 (January 1 through December 31, 2023).

On October 21, 2015, the WDNR conditionally approved the SVE/LFG modifications recommended in the 2014 Annual Monitoring Report. The approved modifications are summarized below:

– Operate only select SVE wells (SVE-4, SVE-6, SVE-7, SVE-12, SVE-13, and SVE-14) (at reduced flow rates) which are monitored on a monthly basis. All other SVE wells will be monitored semi-annually (April and October) and will be included in the operational schedule of the system if concentrations become elevated. Extraction from LFG wells will be modified to focus extraction in the vicinity of the GP-2 nest (LFG-4, LFG-6, and LFG-8). Gas probes were monitored monthly for a minimum of 3 months to verify that landfill gas migration was being controlled, and returned to quarterly thereafter, with the possibility for monthly monitoring of select probes.
– Change operation of the LFG/SVE system from continuous (24-hours per day) to operation during off-peak hours (5:00 p.m. to 9:00 a.m.).

On September 29, 2023, the WDNR approved the SVE/LFG modifications recommended in the Request for Operating and Monitoring Plan Amendment (GHD, April 2023) letter. The approved modifications are summarized below:

– Change landfill gas wells and select SVE wells (4, 6, 7, 12, 13, and 14) monitoring from a monthly basis to a quarterly basis. All other SVE wells will continue to be monitored semi-annually (April and October) and will be included in the operational schedule of the system if concentrations become elevated.
– Change the method of measuring VOCs from a flame ionization detector (FID) to a photoionization detector (PID) with a 11.7 eV lamp. Chemicals of primary concern include 1,1-dichloroethane, 1,1-dichloroethene, 1,1,1-trichloroethane, and tetrachloroethene. Ionization potentials for these compounds are 11.12 eV, 9.66 eV, 11.00 eV, and 9.32 eV, respectively, which allows for all to be monitored using a 11.7 eV PID. Using a PID has the additional advantage of being unable to measure methane due to its ionization potential of 12.98 eV. This will allow measurement of VOCs at well locations unbiased by methane (landfill gas). An FID will detect methane, which results in high biased VOC measurements when landfill gas is present. Additionally, landfill gas (methane) levels are already measured via use of a landfill gas monitor.

4.1 LFG/SVE System Operational Summary

Routine inspections of the LFG/SVE system were performed monthly through September 2023 and quarterly thereafter in accordance with the OM&M Plan for the Site. Table 4.1 provides select field monitoring data for the system during 2023. Field monitoring data presented includes combustible gas percentage, oxygen percentage, pressure, temperature, flow rate, and concentration of VOCs as measured using a FID or PID. Select field monitoring data for the system discharge since system start up is presented in Appendix E.1. Figure 1.3 displays a Site plan showing the location of the blower building and the individual SVE wells, LFG wells, and gas probes.

During 2023, it was noted that the LFG/SVE system continued to achieve the desired results, including removal of VOCs in the sub landfill soils via the SVE system, and control of landfill gas migration via the LFG system. Details of the system operation will be discussed in the sections below.

During 2023 the LFG/SVE system experienced nine (9) unscheduled shutdowns. Details of the shutdowns are provided in Appendix F. The LFG/SVE system was operational for 3,615 out of 5,840 hours (62 percent) during 2023 (based on the part-time system operation).

4.2 SVE System Well Field Measurements

SVE well measurements at the Site were taken using a Landtec GEM-500 gas extraction monitor and a Photovac Micro-FID or a RKI GX-6000 PID with 11.7 eV lamp. Measurements recorded at each well included combustible gas percentage, oxygen percentage, header pressure, flow rate, and VOC concentrations. Flow rate adjustments were made at the SVE wells throughout the reporting period to maintain system target flow rates.

Monitoring of select SVE wells (SVE-4, SVE-6, SVE-7, SVE-12, SVE-13, and SVE-14) was completed monthly through September and quarterly thereafter during the reporting period. Semi-annual monitoring of all Site SVE wells was completed in October. Table 4.1 provides select field monitoring data for the SVE wells during 2023. SVE well data collected since system start-up is presented in Appendix E.2. Additionally, Figure 4.1 presents a Site plan with the maximum VOC concentration by FID/PID and flow rate range observed for the individual SVE wells while they were operating during 2023.

Combustible gas was only detected one time (SVE-11: 0.7% in December) in any of the semi-annual monitored SVE wells (SVE-1, SVE-2, SVE-3, SVE-5, SVE-8, SVE-9, SVE-10, SVE-11, SVE-15, SVE-16, SVE-17, SVE-18, SVE-19). Combustible gas was only detected two times (SVE-7: 0.7% in December and SVE-14: 1.0% in December) in any of the monthly monitored SVE wells.

A flow rate was unable to be obtained at each of the monthly monitored SVE wells during at least one of the monitoring events. Each, however, produced measurable flow at least one time during the reporting period.

GHD will continue to perform necessary repairs and maintenance work to ensure adequate capture of VOCs throughout the extraction system, including maintenance or cleaning of well components. Routine cleaning and maintenance of SVE well components are scheduled for the spring of 2024.

4.3 LFG System Well Field Measurements

LFG well measurements at the Site were taken using a Landtec GEM-500 gas extraction monitor and a Photovac Micro-FID or a RKI GX-6000 PID with 11.7 eV lamp. Measurements recorded at each well included combustible gas percentage, oxygen percentage, header pressure, temperature, flow rate, and VOC concentrations. Flow rate adjustments were made at the LFG wells as necessary throughout the 2023 reporting period to maintain system design flow rates.

Monitoring of the LFG wells was completed monthly during the reporting period. Table 4.1 provides select field monitoring data for the LFG wells during 2023. LFG well data collected since system start-up is presented in Appendix E.3. Additionally, Figure 4.1 presents a Site plan with the maximum VOC concentration by FID/PID and flow rate range observed for the individual LFG wells during 2023.

During 2023, the LFG system was noted to be operating as designed and controlling landfill gas. Combustible gas was detected in at least one LFG well during each monitoring event in 2023. Well LFG-8 had the highest concentration of combustible gas (13.4%) detected in 2023 during the February 2023 monitoring event. The month of January 2023 had the most LFG wells (4) with combustible gas detected in LFG-1, LFG-3, LFG-5, and LFG-8. The months of March, and June 2023 had the least LFG wells (1) with combustible gas detected (only LFG-8).

4.4 Gas Probe Measurements

Monitoring of Site gas probes occurred quarterly during the reporting period. Measurements recorded during gas probe monitoring include combustible gas percentage, oxygen percentage, and pressure. Gas probes were purged before final measurements were taken.

Combustible gas was not detected in any gas probe during the 2023 monitoring events. All seventeen (17) gas probes were noted to be under vacuum influence from the landfill at least once during 2023, verifying that soil gas is being drawn towards the landfill by the LFG/SVE system. Table 4.1 provides select field monitoring data for the gas probes during 2023. Gas probe data collected since system start-up is presented in Appendix E.4.

4.5 Condensate Management

Condensate generation at the Site has generally been observed to occur when the gas temperature drops below approximately 50-degrees Fahrenheit. During times of condensate generation, condensate is pumped from the blower building knock-out vessel to condensate storage tanks within the blower building. As the tanks near capacity, condensate is pumped from the tanks and transported to the City of New Richmond wastewater treatment facility (WWTF) by Mondors, Inc.

Condensate removal was performed three times during 2023 with approximately 2,000 gallons of condensate disposed of at the City of New Richmond WWTF. A graph showing the volume of condensate disposed each month over the past two years is presented in Figure 4.2.

4.6 VOC (TO-15) Monitoring

On January 7, 2014, during a meeting with Patrick Collins of the WDNR, GHD proposed reducing the monitoring frequency of VOCs (by EPA method TO-15) at select SVE wells from semi-annual to annual. The request was approved. VOC monitoring at the LFG/SVE system blower continued to be performed on a semiannually basis.

4.6.1 Blower Discharge Monitoring

Semi-annual monitoring of the blower discharge was performed in March, June, and December 2023. The discharge samples were collected via summa canister and shipped to Eurofins Laboratories for analysis by EPA method TO-15. Results of the TO-15 sample analyses from system startup through the December 2023 sampling event are included in Table 4.2. As seen in Table 4.2, the concentration of VOCs detected in the blower discharge has decreased significantly since system startup in September 2008. Figure 4.3 displays concentrations over time for several chlorinated solvents 1,1,1-TCA, 1,1-DCA, 1,1-DCE, cis-1,2-dichloroethene, chloroethane, tetrachloroethene, trichloroethene (TCE), and vinyl chloride (VC),) since system startup. As shown on Figure 4.3, VOCs held steady throughout 2023, and were in the same range as the previous three years of results.

Blower discharge mass loading calculations were performed for 2023 using the December 21, 2023 sample results and maximum flow rate recorded during 2023. Blower mass loading calculations are presented in Table 4.3 for the December 21, 2023 monitoring event. As can be seen in Table 4.3, the blower discharge continues to remain well under WDNR emission thresholds (WDNR NR 445.07), hence, no off-gas treatment is required.

In addition, the total VOC mass removal since system startup is displayed in Table 4.4. Approximately 1,392 pounds of VOCs have been removed from the landfill and the underlying soil. Of the total VOCs removed, approximately 341 pounds have been in the form of 1,1,1-TCA, approximately 279 pounds have been in the form of 1,1-DCA, approximately 40.9 pounds have been in the form of 1,1-DCE, and approximately 53.2 pounds have been in the form of tetrachloroethene as shown on Tables 4.5, 4.6, 4.7, and 4.8 respectively. Figure 4.4 presents the cumulative totals of Total VOCs, 1,1,-TCA, 1,1-DCA 1,1-DCE, and tetrachloroethene removed since system startup.

Since system startup the total concentration of VOCs has decreased from approximately 200,000 µg/m^3 in September 2008 to approximately 1,409 µg/m^3 in December 2023.

4.6.2 Select SVE Well Monitoring

Annual monitoring of select SVE wells was performed on December 21, 2023. During the December 2023 monitoring round SVE wells SVE-4, SVE-6, SVE-7, SVE-12 and SVE-14 were monitored in order to further evaluate the distribution of VOCs in the soils underlying the landfill. The samples were collected via summa canister and shipped to Eurofins Laboratories for analysis by EPA method TO-15. Results of the TO-15 sample analyses from system startup through the December 2023 sampling event are included in Table 4.2. As shown in Table 4.2, the VOC levels at the individual SVE wells have shown significant reductions since system start-up and are at very low levels at the majority of the wells.

Figures 4.5 through 4.16 display 1,1,1-TCA concentrations since system start-up for wells SVE-2, SVE-3, SVE-4, SVE-5, SVE-6, SVE-7, SVE-8, SVE-10, SVE-12, SVE-14, SVE-15, and SVE-16, respectively. As shown on Figures 4.5 through 4.16, 1,1,1-TCA concentrations at individual SVE wells are very low in comparison to pre-start-up levels, and concentrations have generally continued to decrease. Based on the graphical results, continued operation of the system yields a much lower percentage of VOCs in the extracted vapors as time goes on.

4.7 Additional O&M Activities Conducted and Upcoming O&M Activities

A summary of additional operation and maintenance activities conducted and miscellaneous observations made at the Site are as follows:

– Pumped accumulated water out of well field vaults
– Replaced condensate peristaltic pump tubing
– Performed quarterly system maintenance including greasing the motor and blower bearings
– Coordinated replacement of failed transformer for the system

Upcoming O&M activities are as follows:

– Routine cleaning of SVE well pitot tubes.

5. Conclusions

Based on the 2023 sampling activities, the following conclusions are made:

– The groundwater flows northwesterly towards the Apple River, consistent with historical findings.
– 1,1,1-Trichloroethane and 1,1-dichloroethane are the primary groundwater contaminants based on highest concentration. These VOCs do not exceed the Wisconsin ch. NR 140 ESs but are highlighted because they illustrate the VOC plume.
– 1,1-Dichloroethene has not exceeded the Wisconsin ch. NR 140 ES (7 µg/L) at any of the wells since 2012.
– Tetrachloroethene has not exceeded the Wisconsin ch. NR 140 ES (5 µg/L) in any of the wells since 2016.
– VOC concentrations at most monitoring wells are declining as a result of the SVE remedy and natural attenuation. VOC concentrations in MW-18 are fluctuating.
– Landfill associated VOCs were not detected in either of the two residential wells sampled.
– The SVE/LFG system continues to remove VOCs from the landfill and underlying soils.
– During gas probe monitoring in 2023 there were no detections of methane at site perimeter gas probes.
– During gas probe monitoring in 2023 all gas probes were found to be under vacuum during at least one monitoring event.

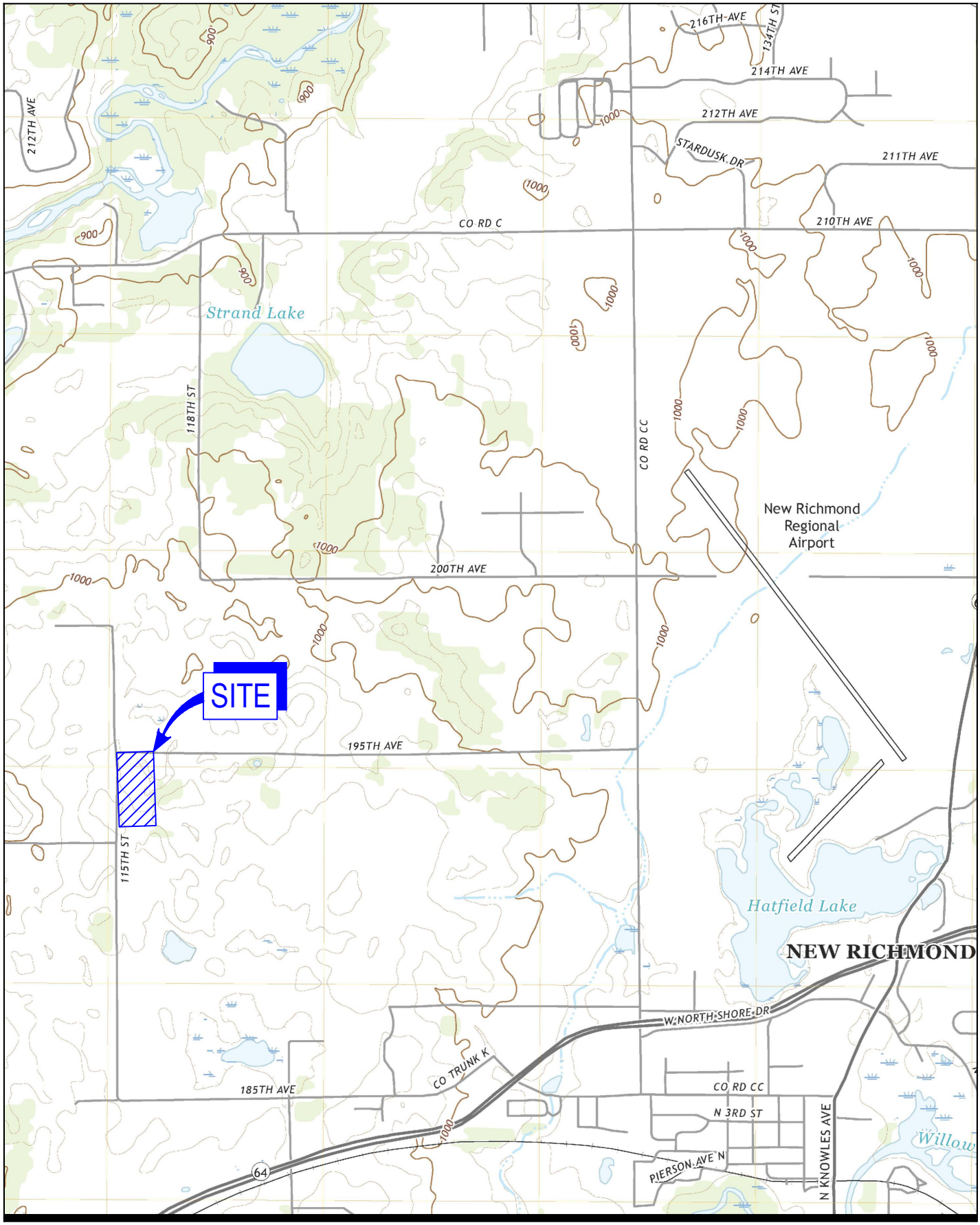
6. Recommendations

Based on the conclusions stated above, GHD recommends the following:

– Continue with annual sampling of 2055 County Road C and 2056 County Road C.
– Continue with annual sampling of the Site monitoring wells.

- Continue reduced operation of the LFG/SVE system as approved by the WDNR on October 21, 2015. This includes operation during off-peak hours (5:00 p.m. to 9:00 a.m.) and operating only select SVE wells (SVE-4, SVE-6, SVE-7, SVE-12, SVE-13, and SVE-14). Also continue focused extraction from LFG wells in the vicinity of the GP-2 nest (LFG-4, LFG-6, and LFG-8).
- Continue semi-annual monitoring (April and October) of all SVE wells and “turn on” these wells on an as needed basis as discussed in the 2014 Annual Monitoring Report (CRA, May 2015) and approved by the WDNR on October 21, 2015.

Figures



0 1000 2000 ft

1" = 2000 ft

N

GHD

NEW RICHMOND LANDFILL (#2492)
NEW RICHMOND, WISCONSIN

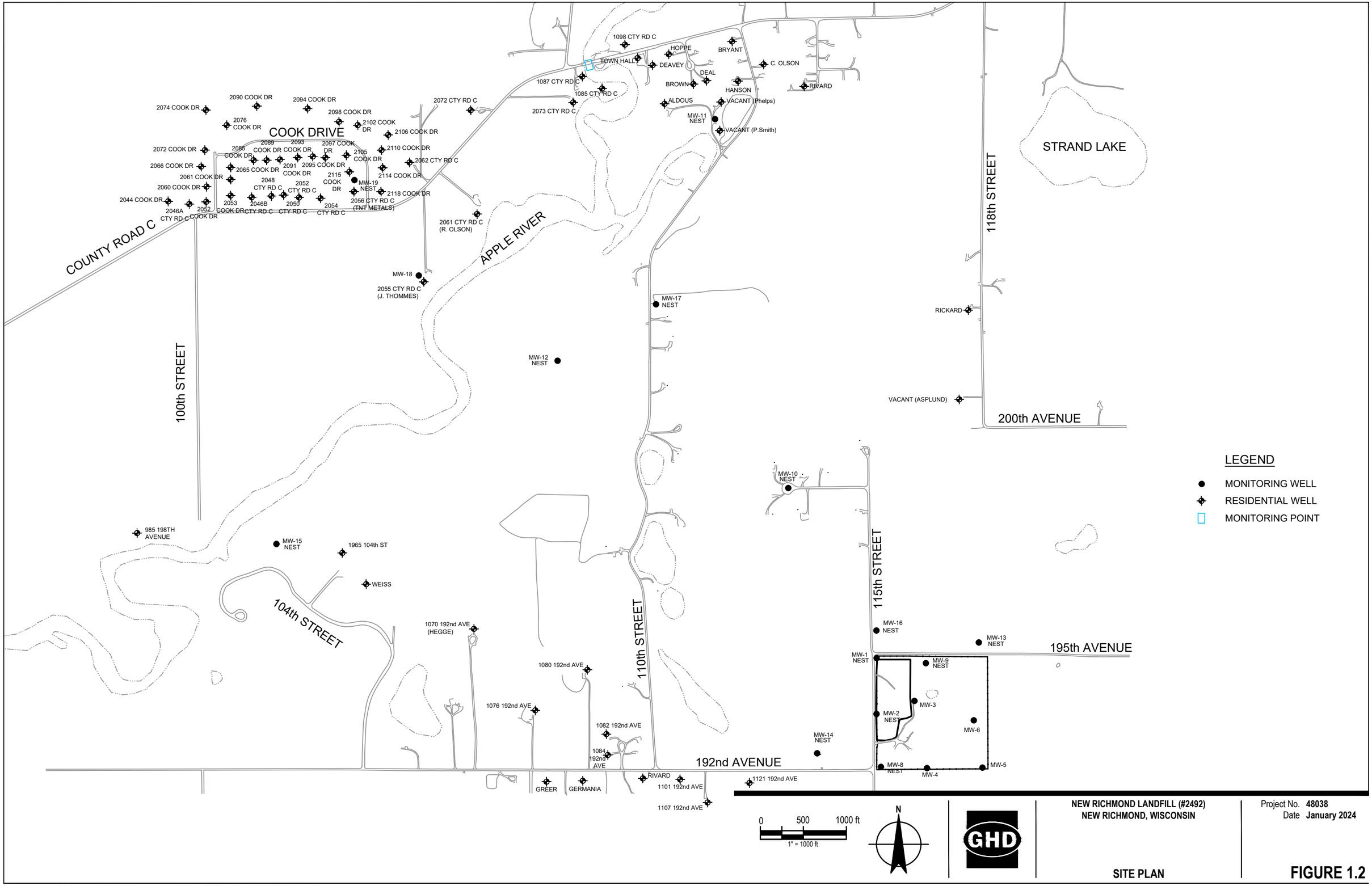
Project No. **48038**
Date **January 2024**

SITE LOCATION

FIGURE 1.1

Filename: \\ghdnet\ghd\US\St Paul\Projects\563\048038\Digital_Design\ACAD 2017\Figures\RPT033\048038-GHD-00-00-RPT-EN-D101_WA-033.dwg
Plot Date: 16 January 2024 8:30 AM

Data Source: USGS QUADRANGLE MAP; NEW RICHMOND NORTH, WI, 2018.



NEW RICHMOND LANDFILL (#2492)
NEW RICHMOND, WISCONSIN

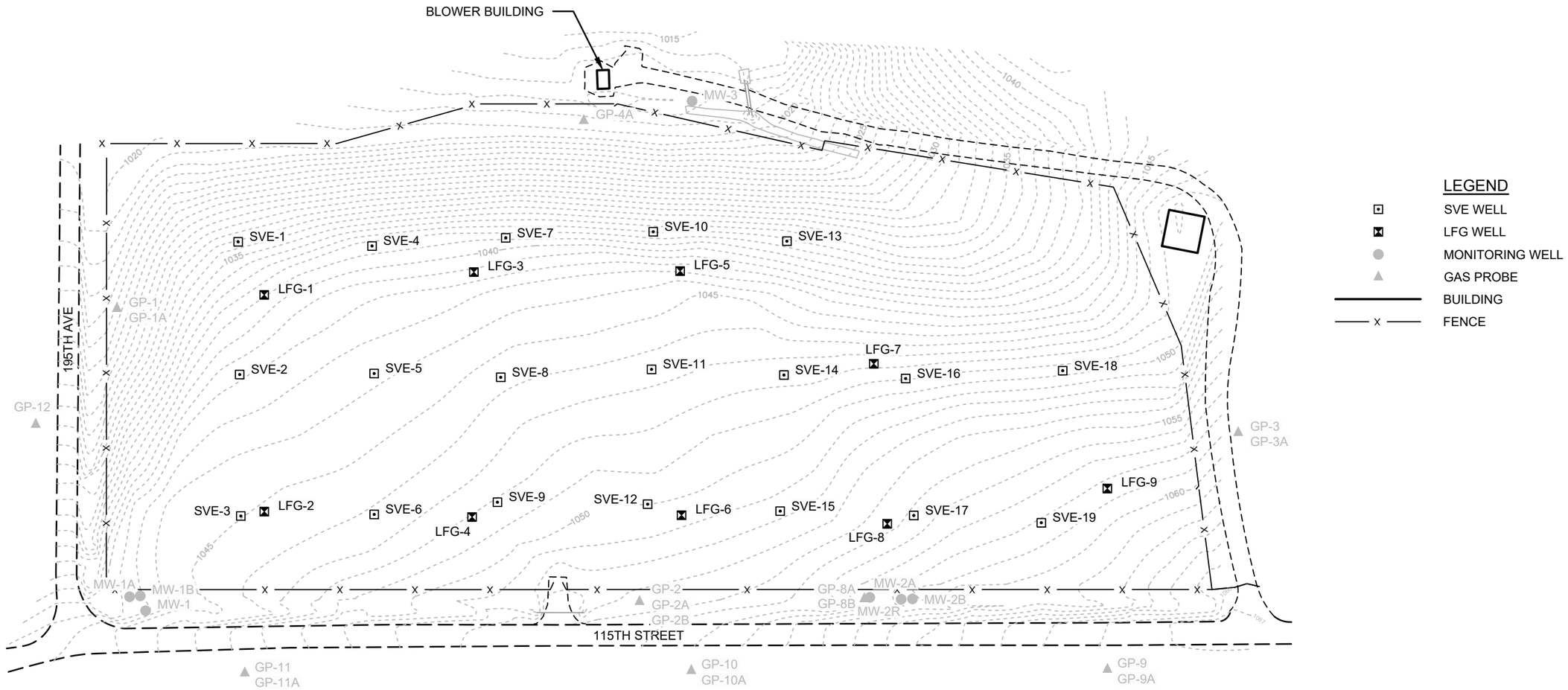
Project No. **48038**
Date **January 2024**

SITE PLAN

FIGURE 1.2

Data Source: SEH.

Filename: \\ghdnet\ghd\US\St Paul\Projects\563\048038\Digital_Design\ACAD 2017\Figures\RPT033\048038-GHD-00-00-RPT-EN-D102_WA-033.dwg
Plot Date: 16 January 2024 8:30 AM



0 50 100 ft

1" = 100 ft

N

GHD

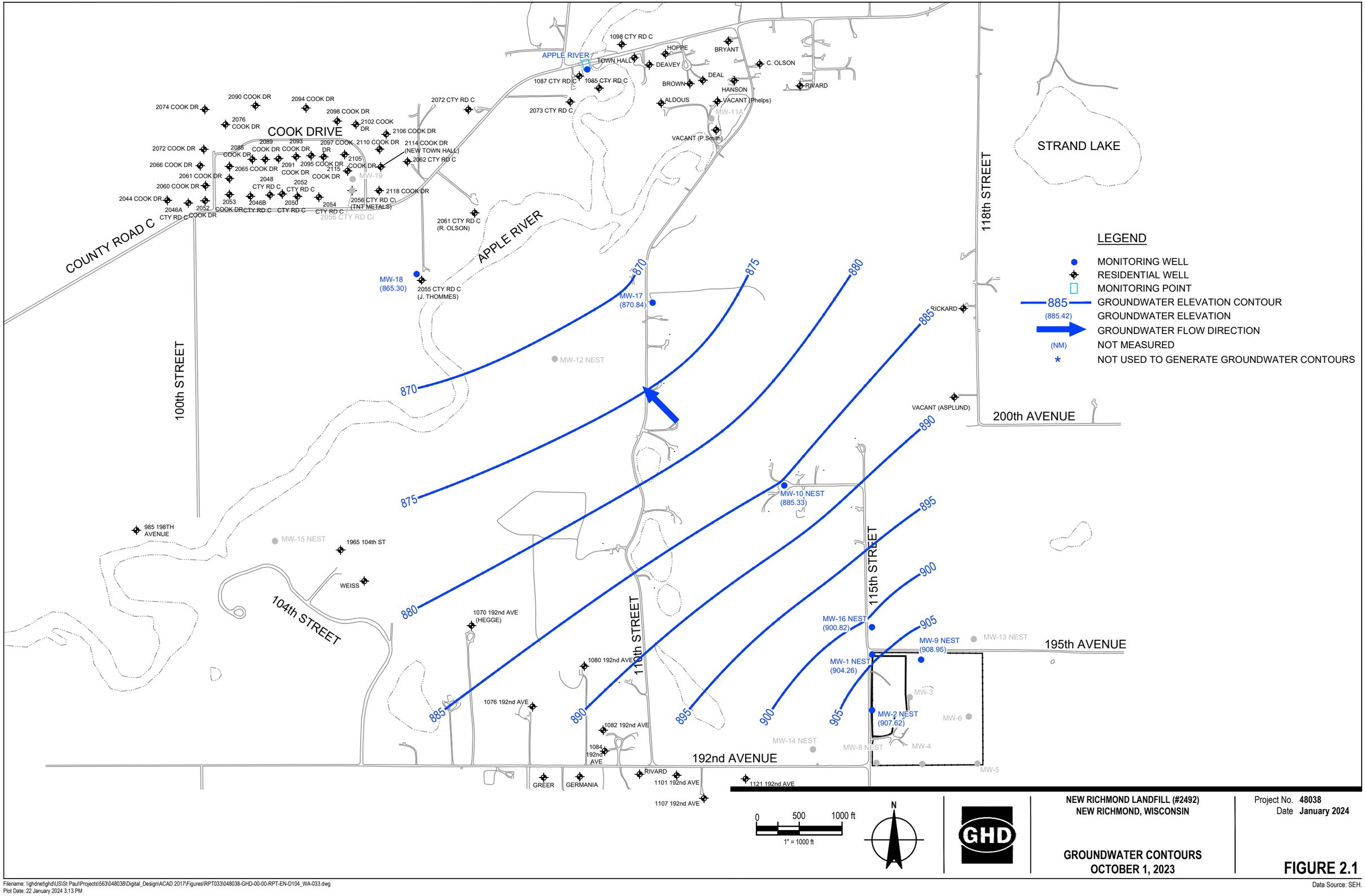
NEW RICHMOND LANDFILL (#2492)
NEW RICHMOND, WISCONSIN

Project No. **48038**
Date **January 2024**

SVE/LFG MONITORING LOCATIONS

FIGURE 1.3

Filename: \\ghdnet\ghd\US\St Paul\Projects\563\048038\Digital_Design\ACAD 2017\Figures\RPT033\048038-GHD-00-00-RPT-EN-D103_WA-033.dwg
Plot Date: 17 January 2024 2:47 PM



NEW RICHMOND LANDFILL (#2492)
NEW RICHMOND, WISCONSIN

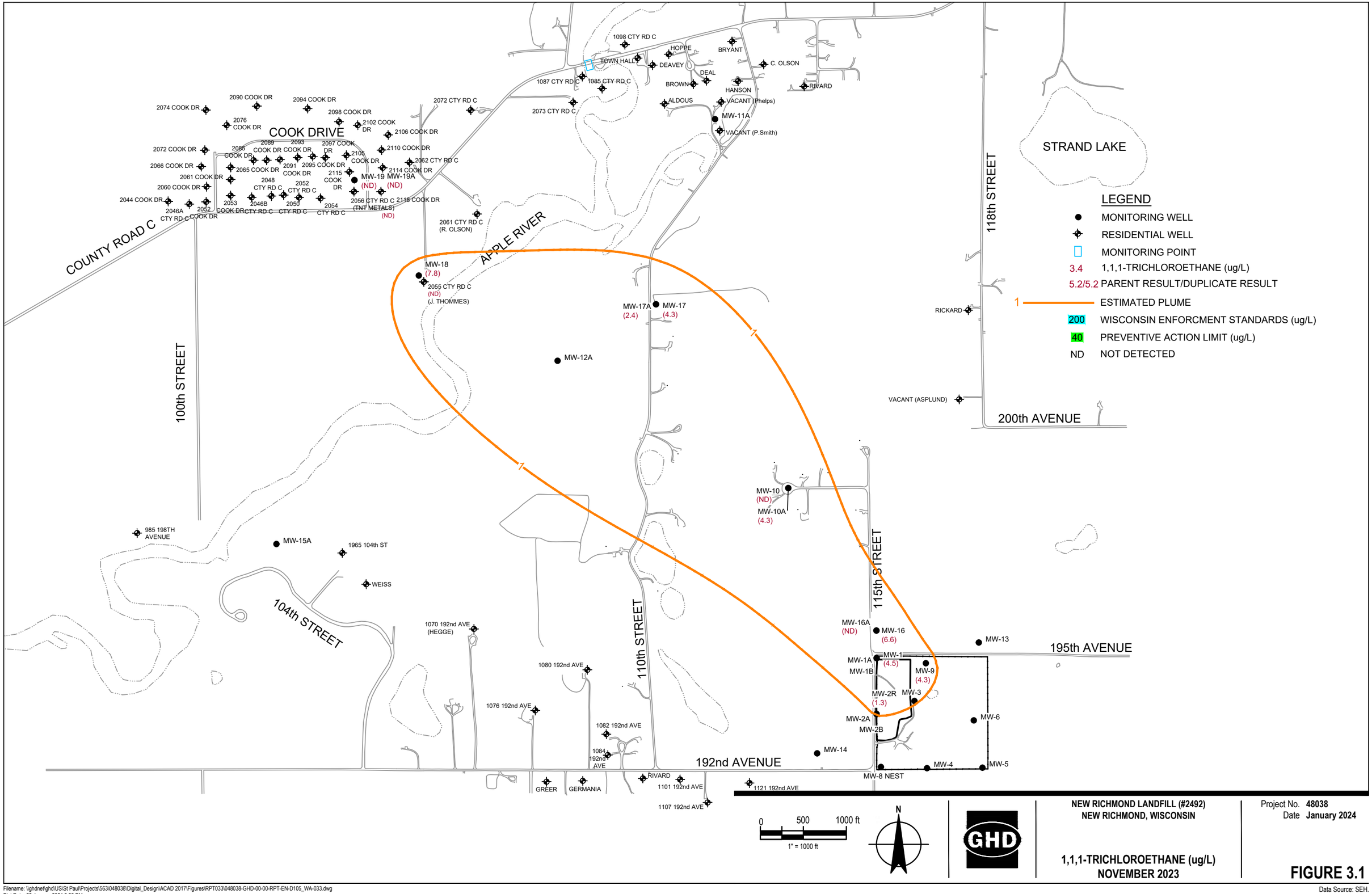
GROUNDWATER CONTOURS
OCTOBER 1, 2023

Project No. **48038**
Date **January 2024**

FIGURE 2.1

Data Source: SEH.

Filename: \\ghdnet\ghd\US\St Paul\Projects\563\048038\Digital_Design\ACAD 2017\Figures\RPT033\048038-GHD-00-00-RPT-EN-D104_WA-033.dwg
Plot Date: 22 January 2024 3:13 PM



NEW RICHMOND LANDFILL (#2492)
NEW RICHMOND, WISCONSIN

1,1,1-TRICHLOROETHANE (ug/L)
NOVEMBER 2023

Project No. **48038**
Date **January 2024**

FIGURE 3.1

Filename: \\ghdnet\ghd\US\St Paul\Projects\563\048038\Digital_Design\ACAD 2017\Figures\RPT033\048038-GHD-00-00-RPT-EN-D105_WA-033.dwg
Plot Date: 22 January 2024 3:23 PM

Data Source: SEH.

Figure 3.2

1,1,1-TCA and 1,1,-DCE Concentrations
(MW-2R)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

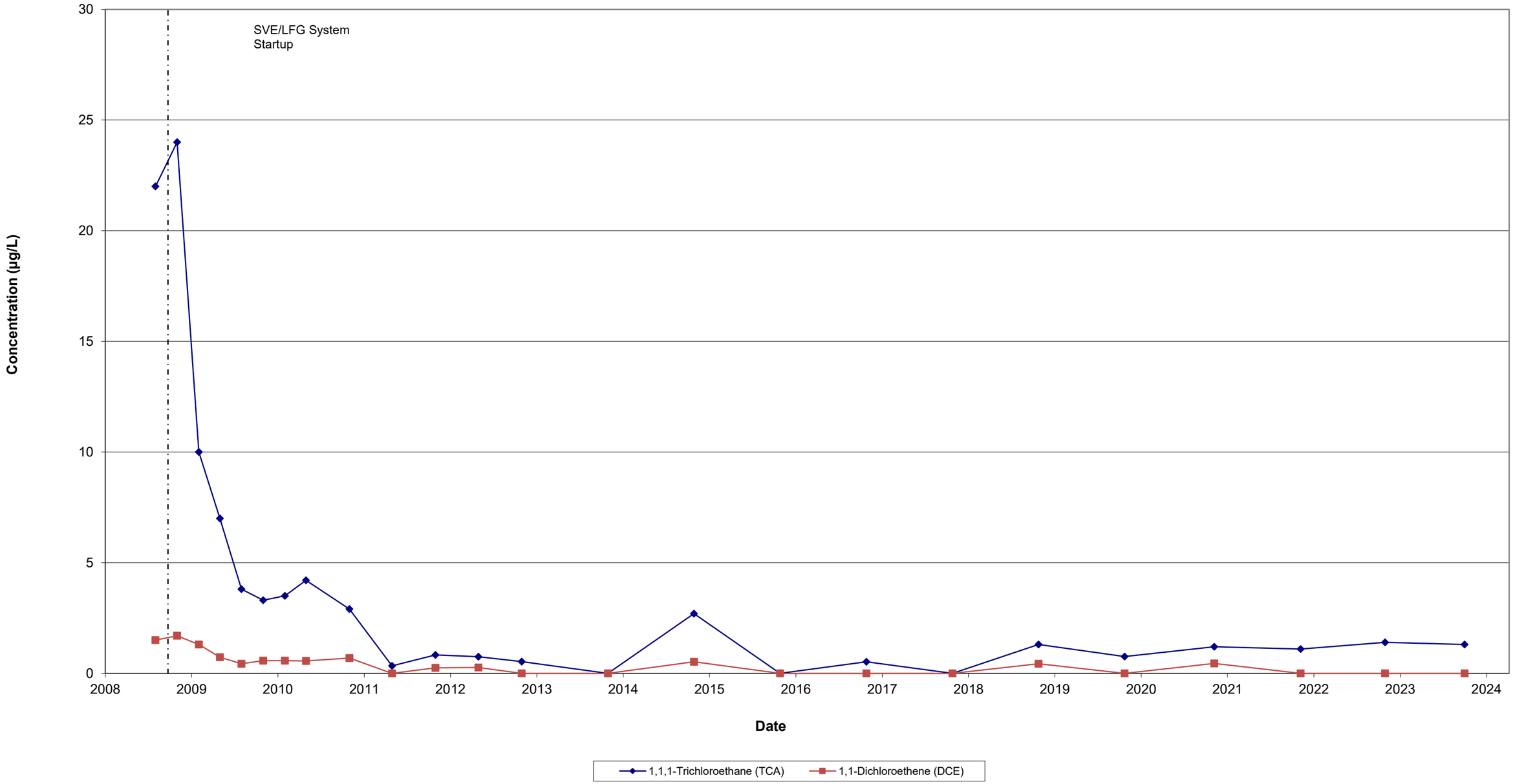


Figure 3.3

1,1,1-TCA, 1,1-DCE, and PCE Concentrations
(MW-16)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

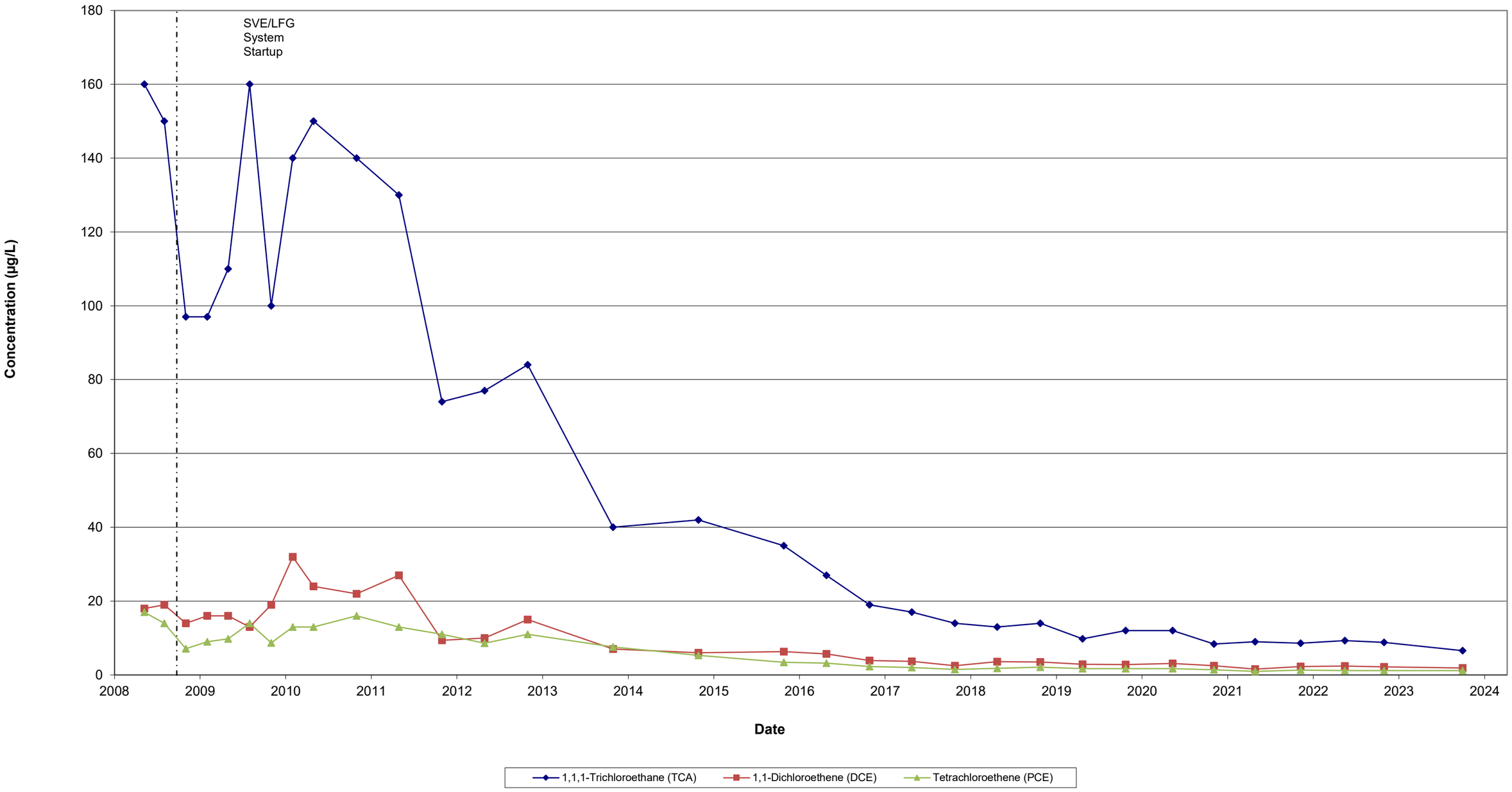


Figure 3.4

1,1,1-TCA, 1,1-DCE, and PCE Concentrations
(MW-10)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

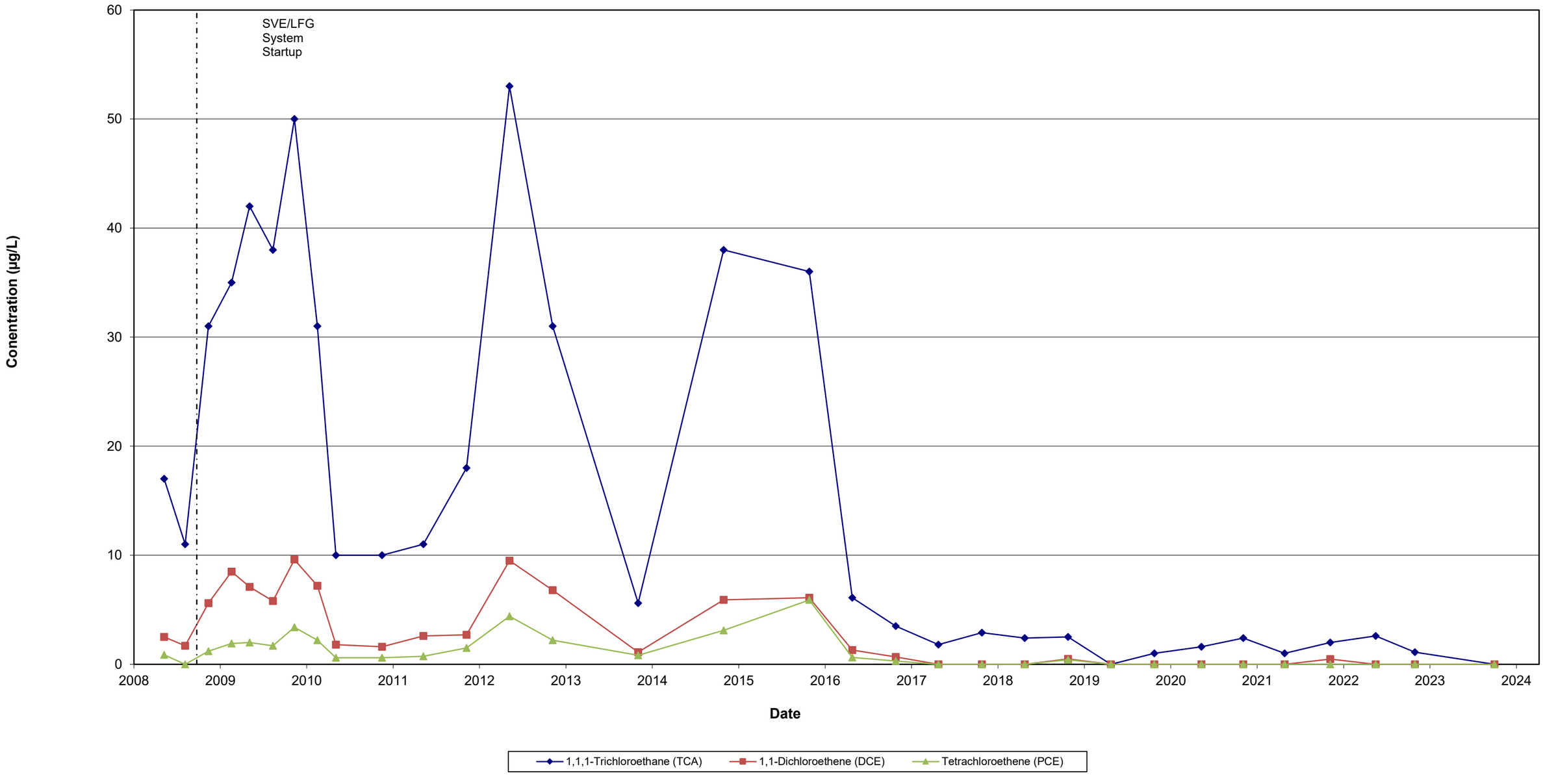


Figure 3.5

1,1,1-TCA, 1,1-DCE, and PCE Concentrations
(MW-10A)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

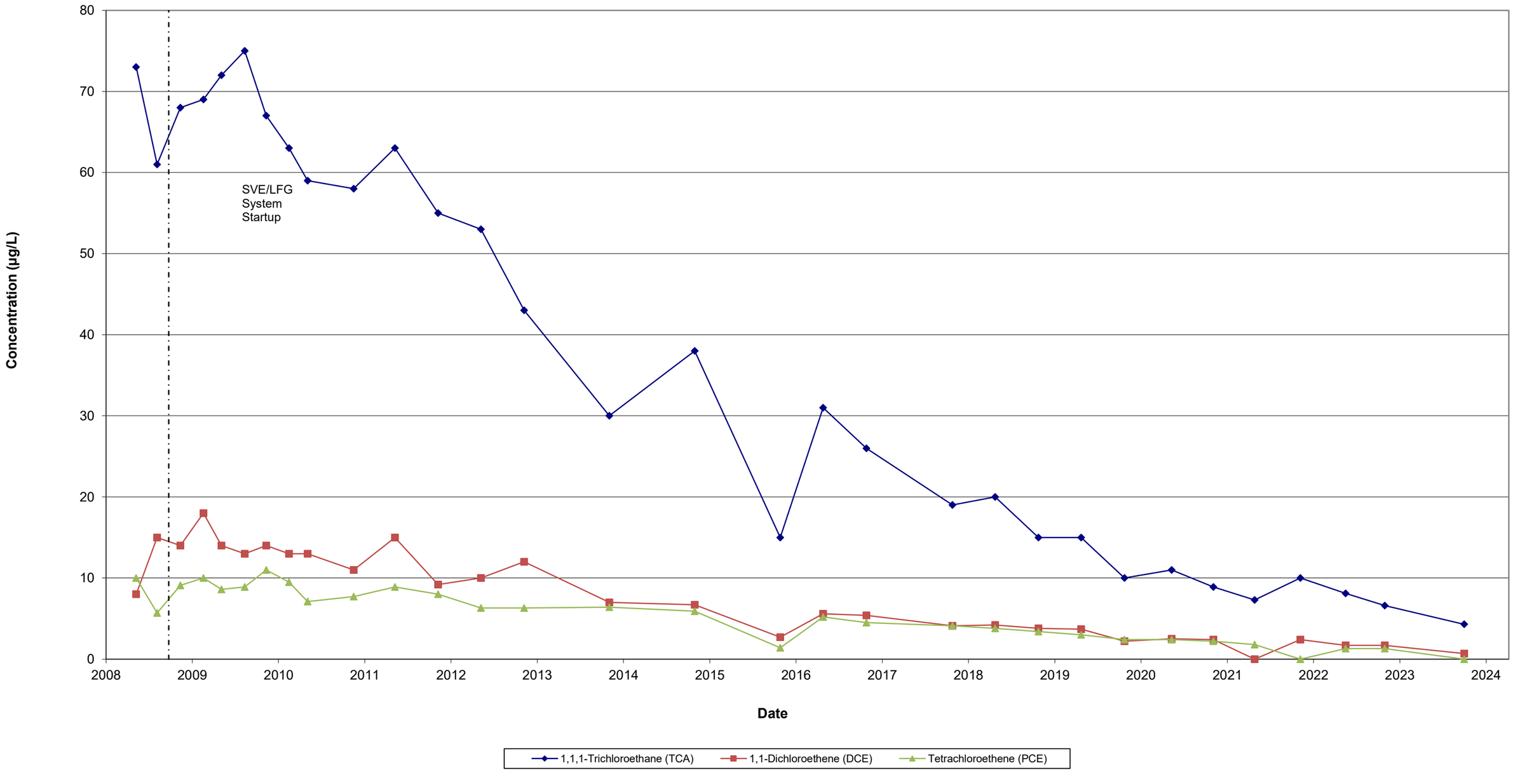


Figure 3.6

1,1,1-TCA, 1,1-DCE, and PCE Concentrations
(MW-17)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

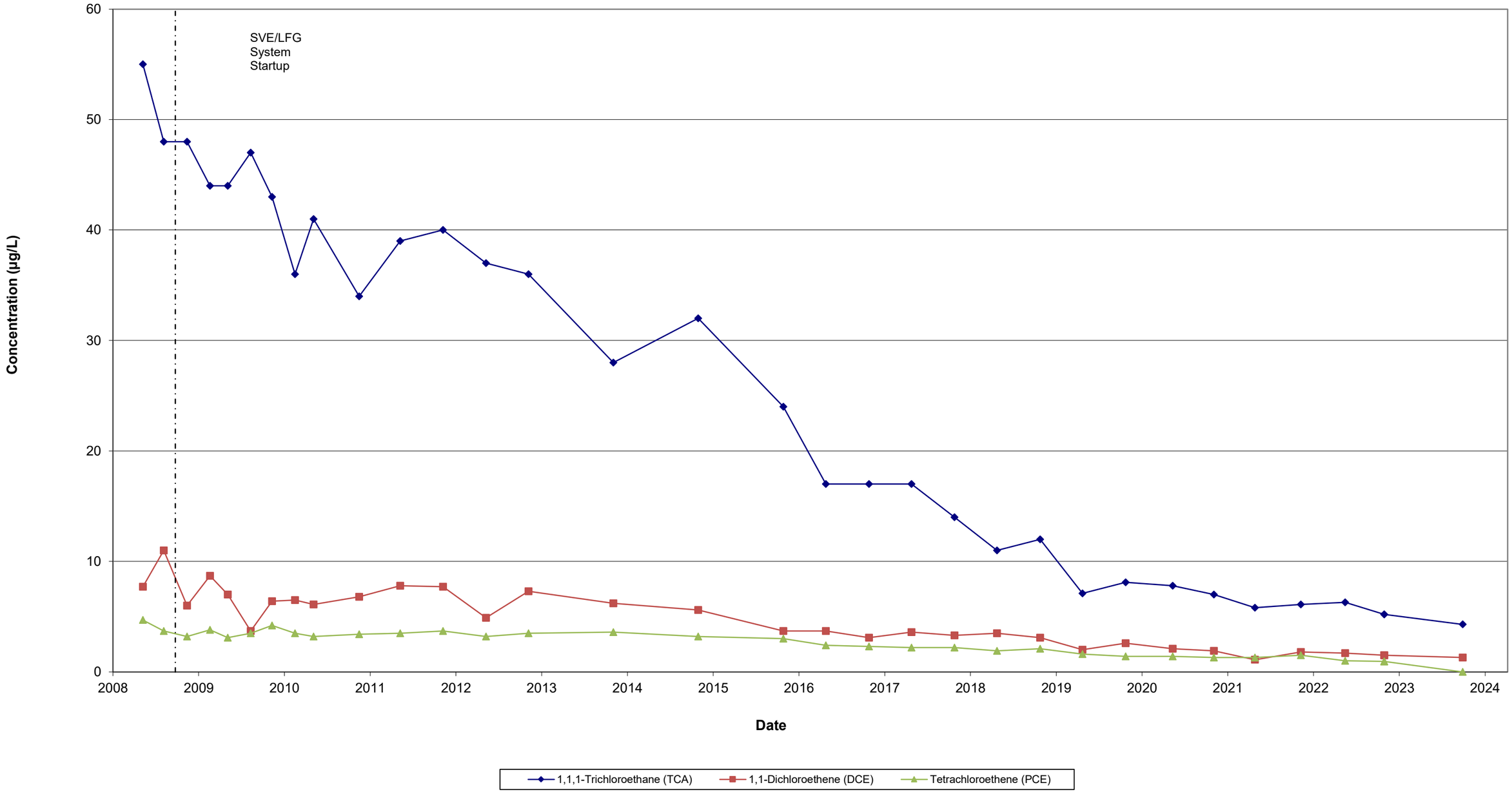
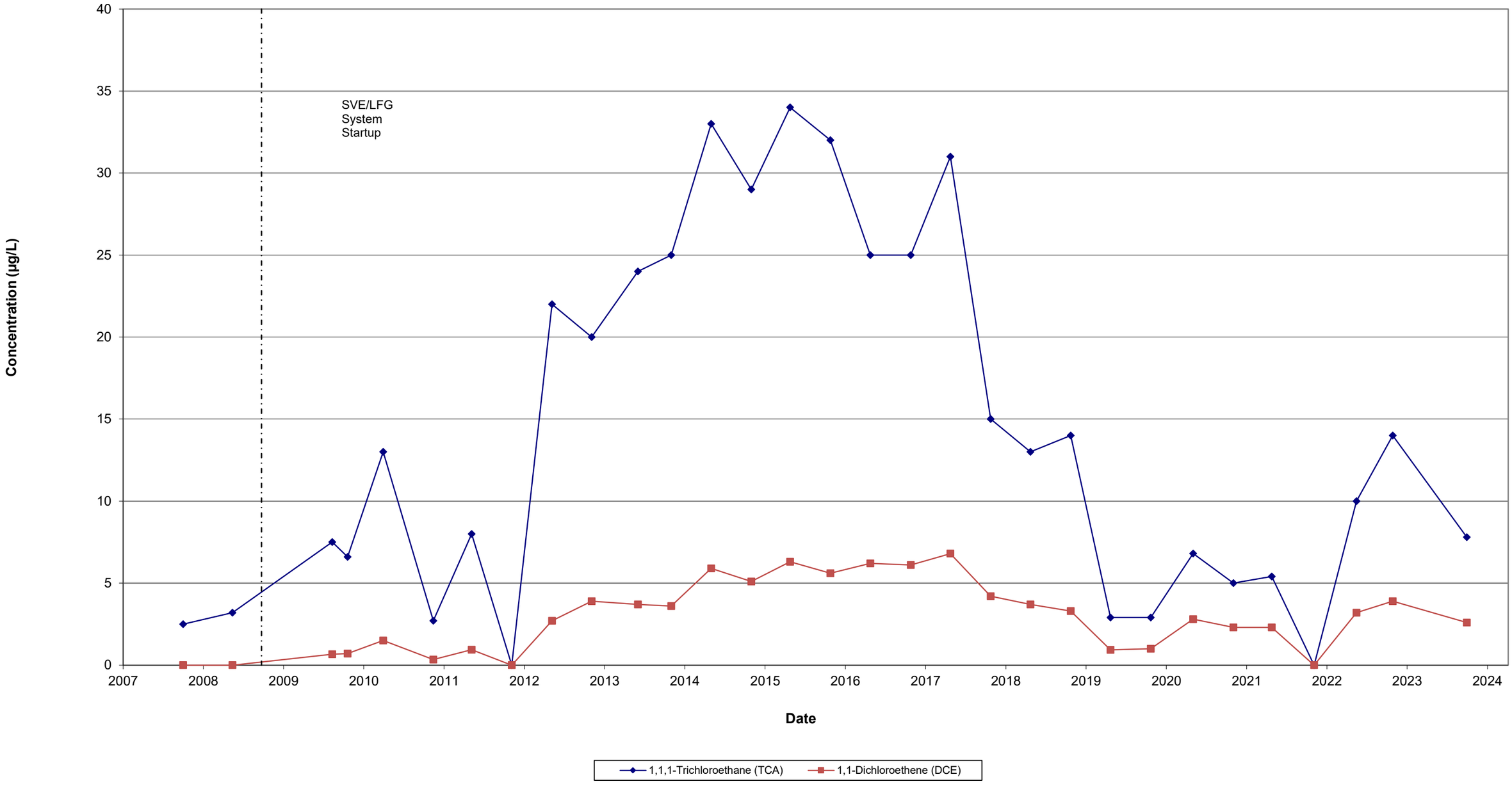
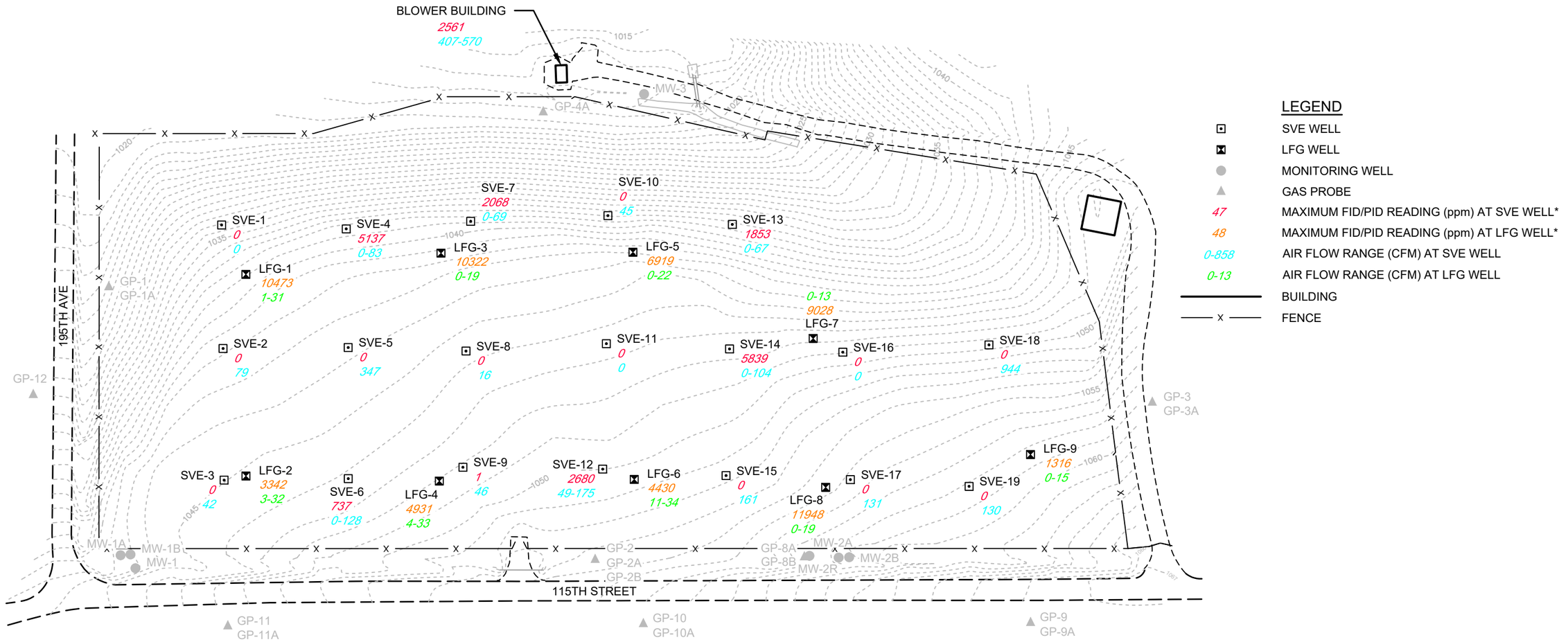


Figure 3.7

1,1,1-TCA and 1,1-DCE Concentrations
(MW-18)
New Richmond Landfill (#2492)
New Richmond, Wisconsin





NOTES:

* - WELL IS NOT UNDER VACUUM/FROZEN UNABLE TO OBTAIN FLOW READING.

• READINGS FOR THE FIRST THREE QUARTERS IN 2023 WERE RECORDED USING A FID. THE FOURTH QUARTER IN 2023 READINGS WERE RECORDED USING A PID.

0 50 100 ft

1" = 100 ft

N

GHD

NEW RICHMOND LANDFILL (#2492)
NEW RICHMOND, WISCONSIN

Project No. **48038**
Date **January 2024**

2023 LFG AND SVE WELL DATA

FIGURE 4.1

Filename: \\ghdnet\ghd\US\St Paul\Projects\563\048038\Digital_Design\ACAD 2017\Figures\RPT033\048038-GHD-00-00-RPT-EN-D106_WA-033.dwg
Plot Date: 18 January 2024 3:24 PM

Figure 4.2

Monthly Condensate Discharge Volumes to New Richmond WWTF
New Richmond Landfill (#2492)
New Richmond, Wisconsin

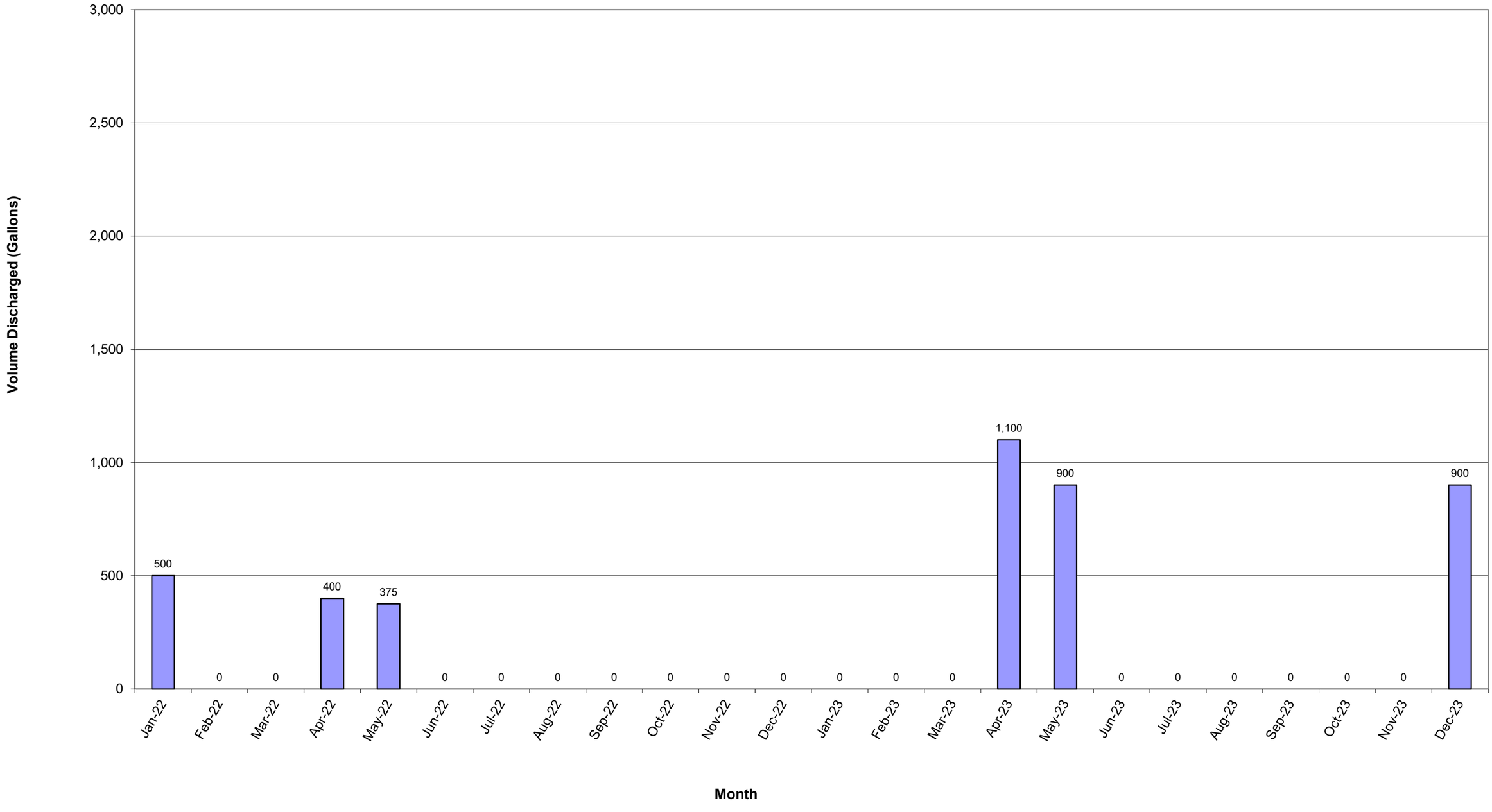


Figure 4.3

VOC Concentration Over Time, Selected VOCS
Blower Discharge
New Richmond Landfill (#2492)
New Richmond, Wisconsin

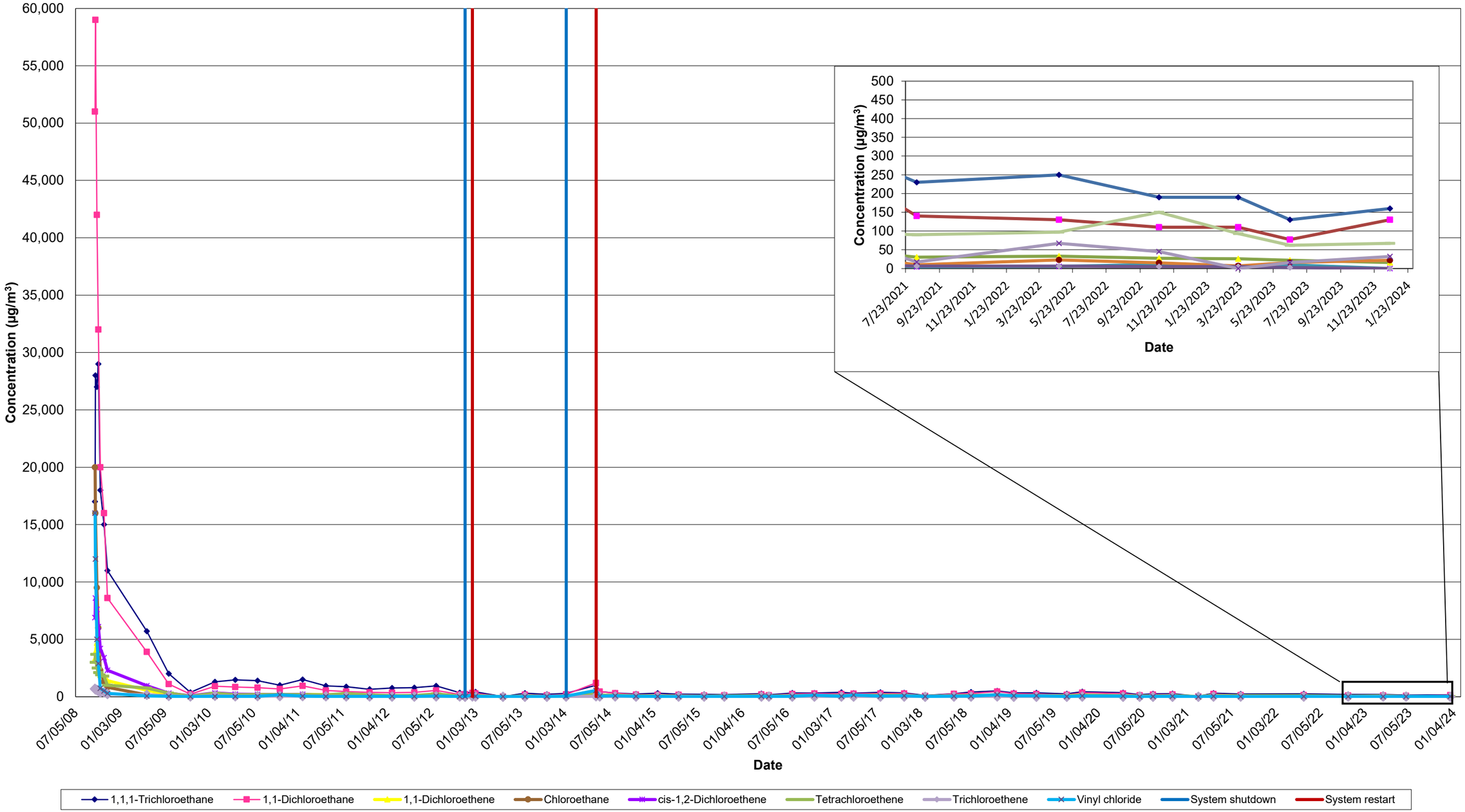


Figure 4.4

Historical Blower Discharge Removal of Select VOCs
(Cumulative Since September 2008)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

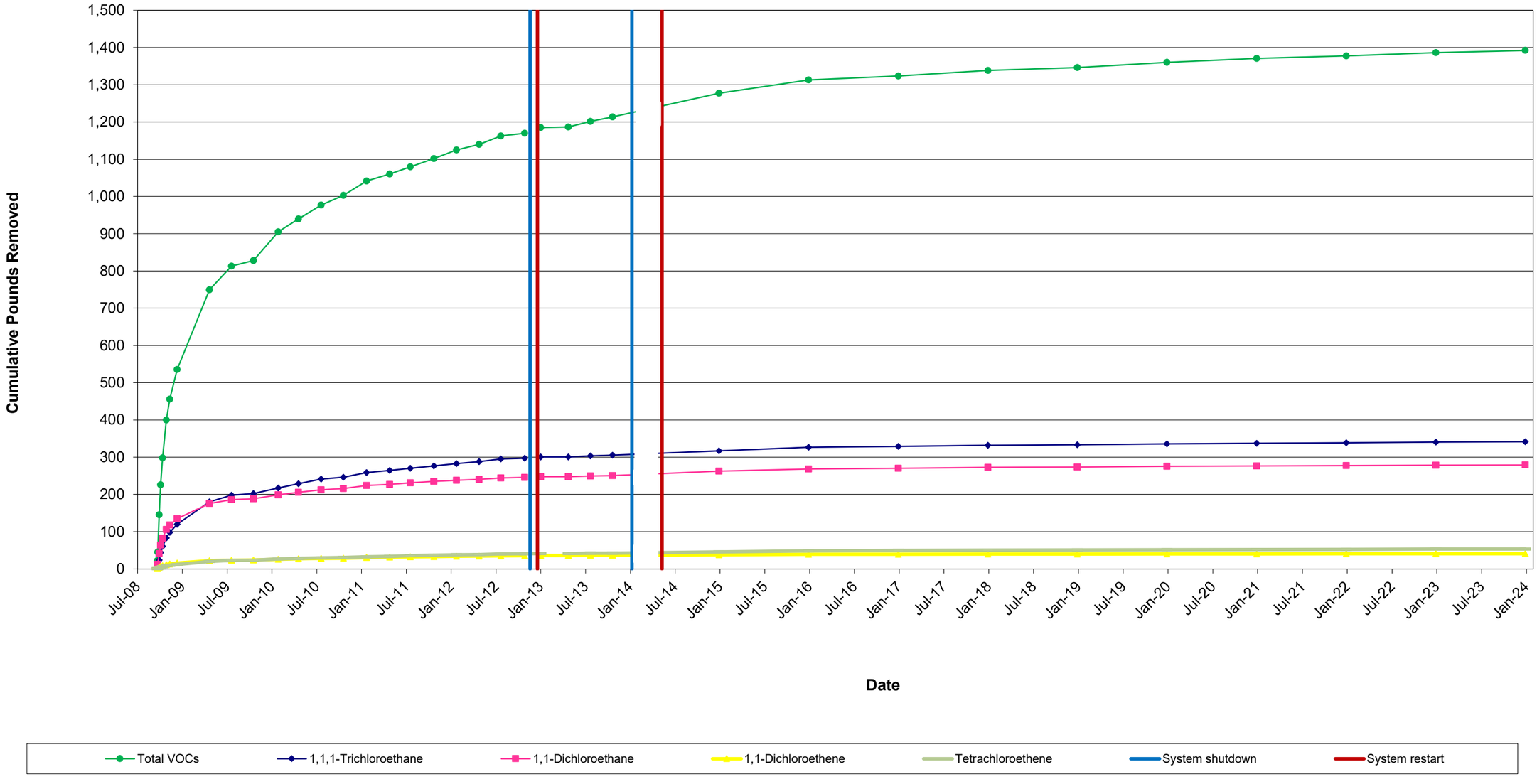


Figure 4.5

1,1,1-TCA Concentration Over Time
(SVE-2)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

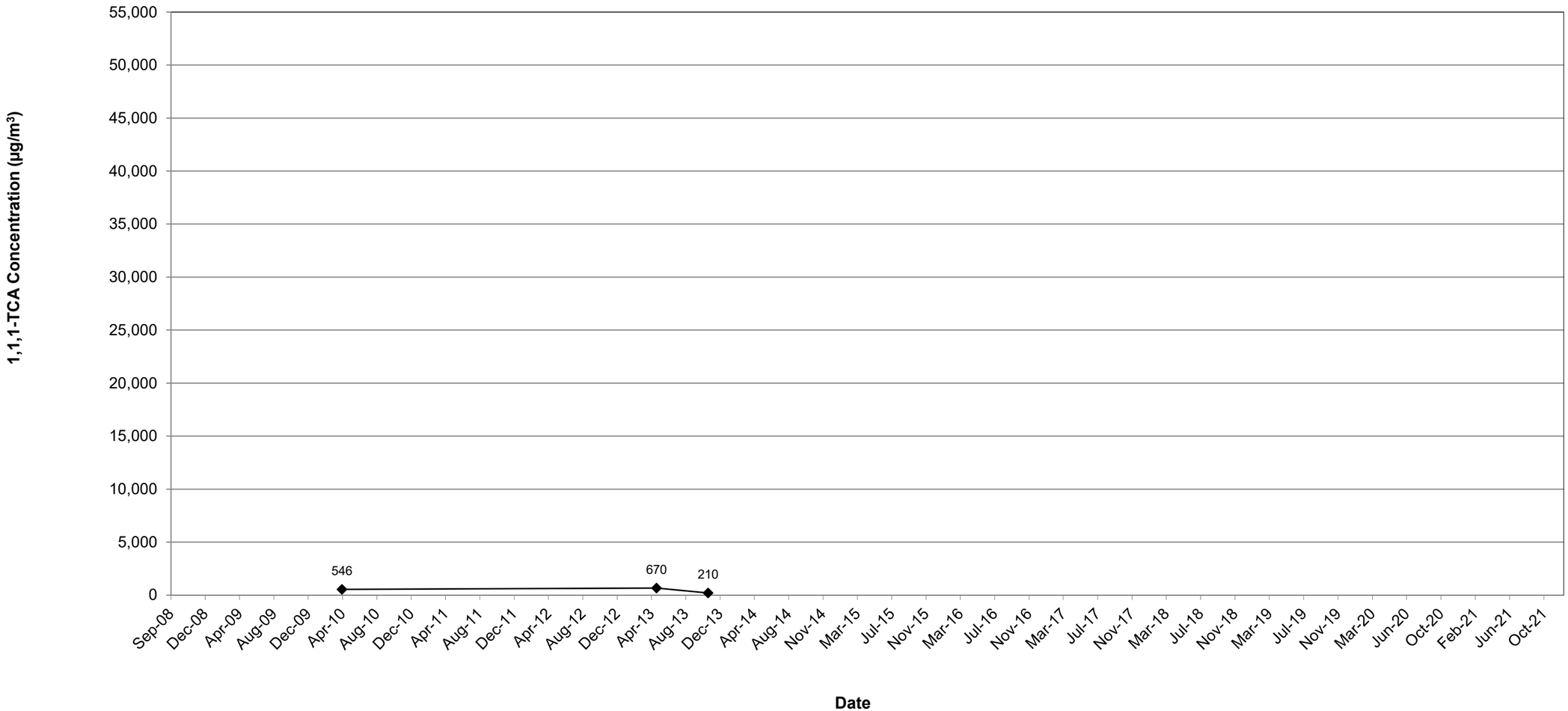


Figure 4.6

1,1,1-TCA Concentration Over Time
(SVE-3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

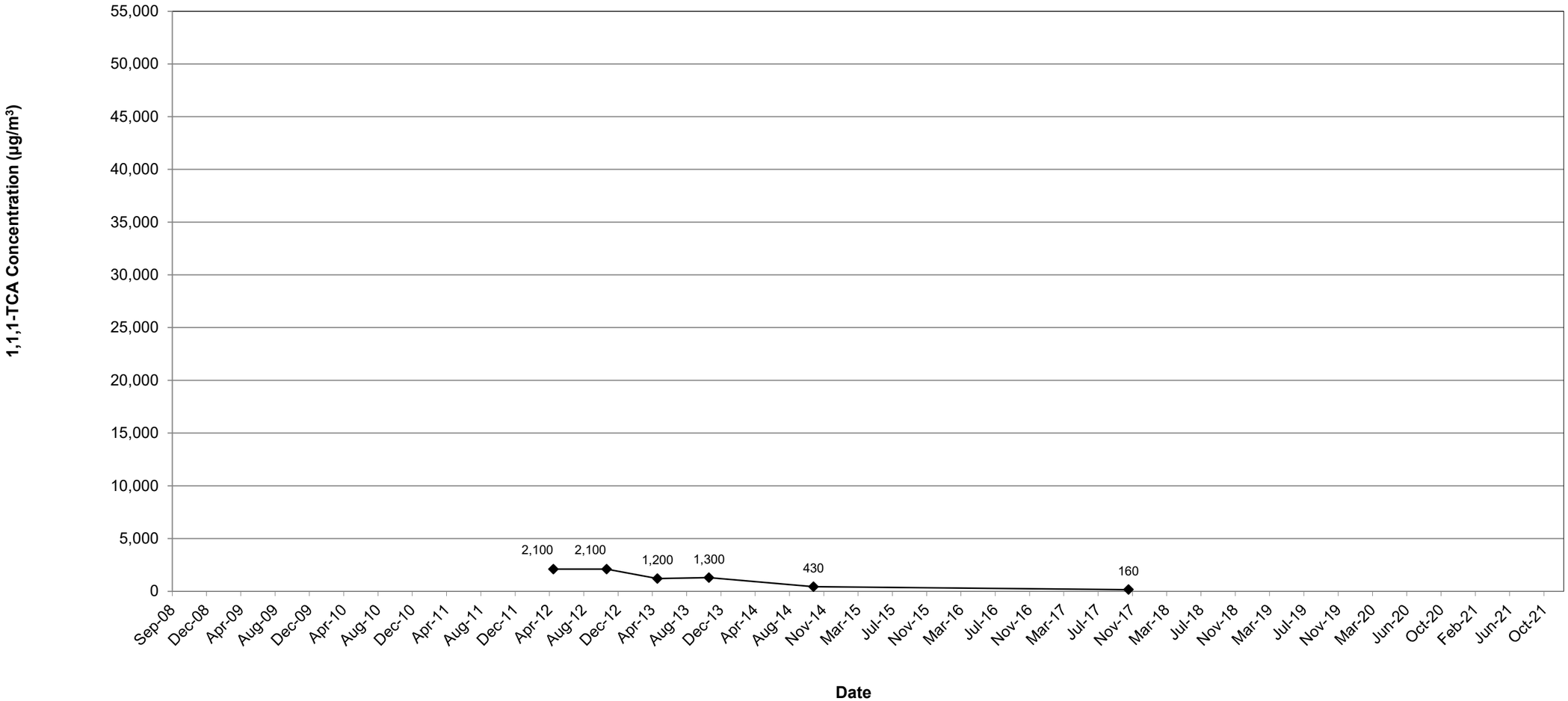


Figure 4.7

1,1,1-TCA Concentration Over Time
(SVE-4)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

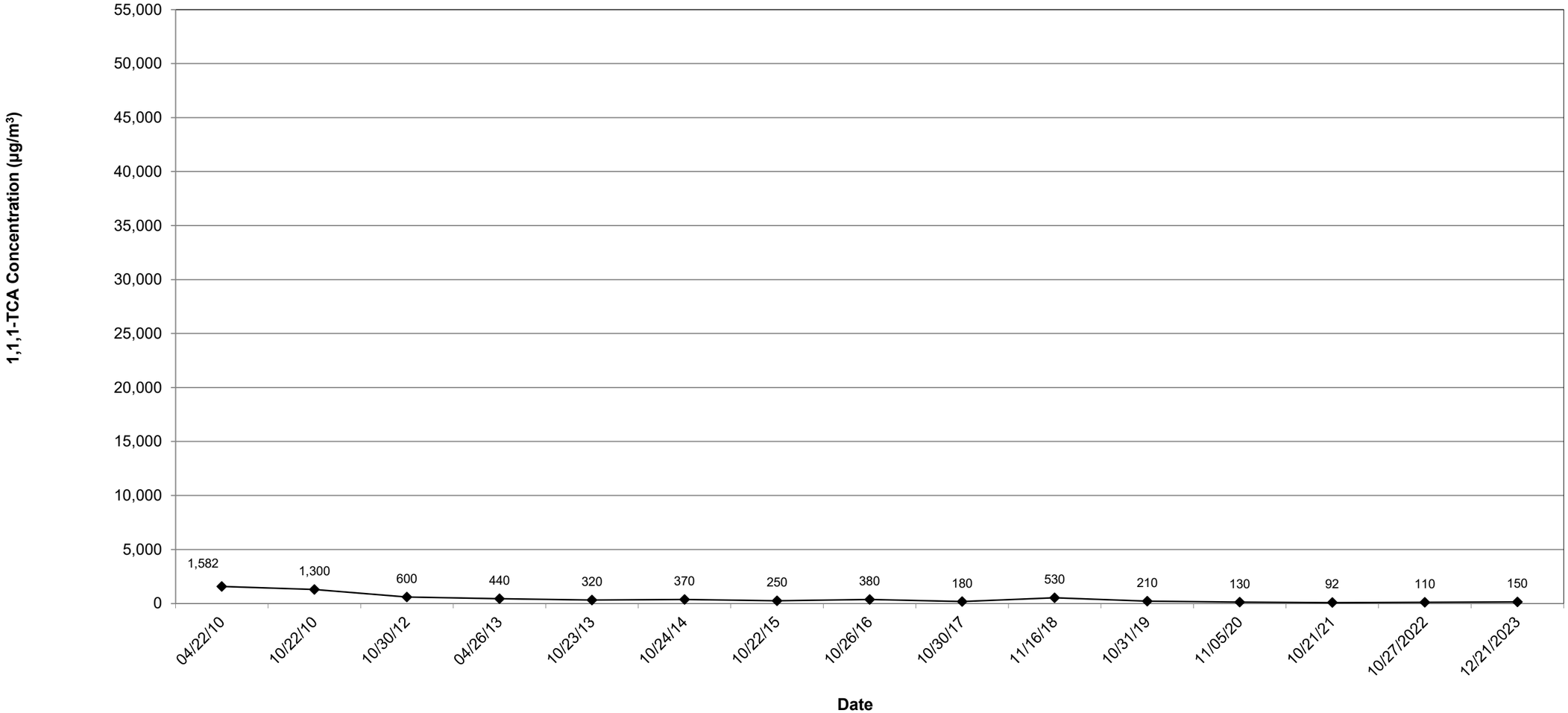


Figure 4.8

1,1,1-TCA Concentration Over Time
(SVE-5)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

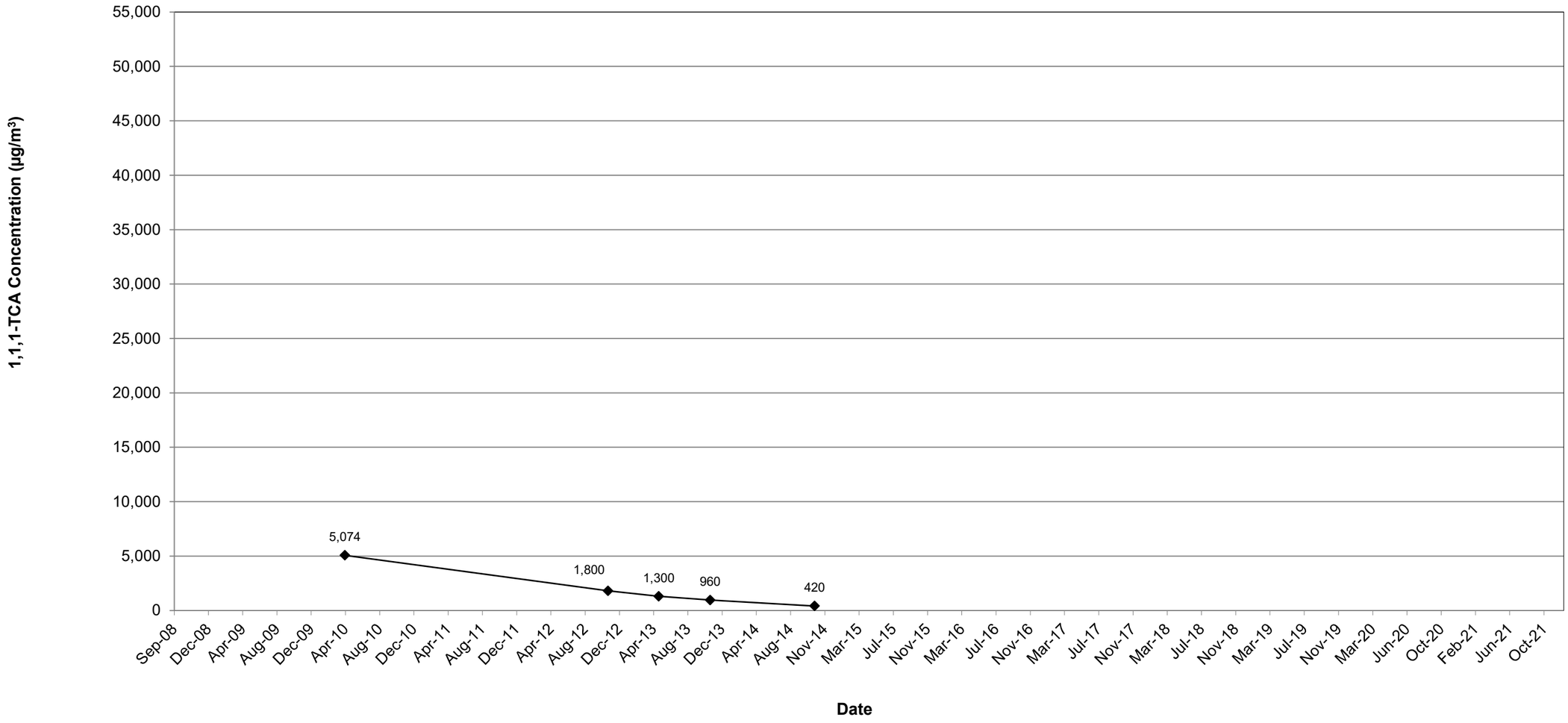


Figure 4.9

1,1,1-TCA Concentration Over Time
(SVE-6)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

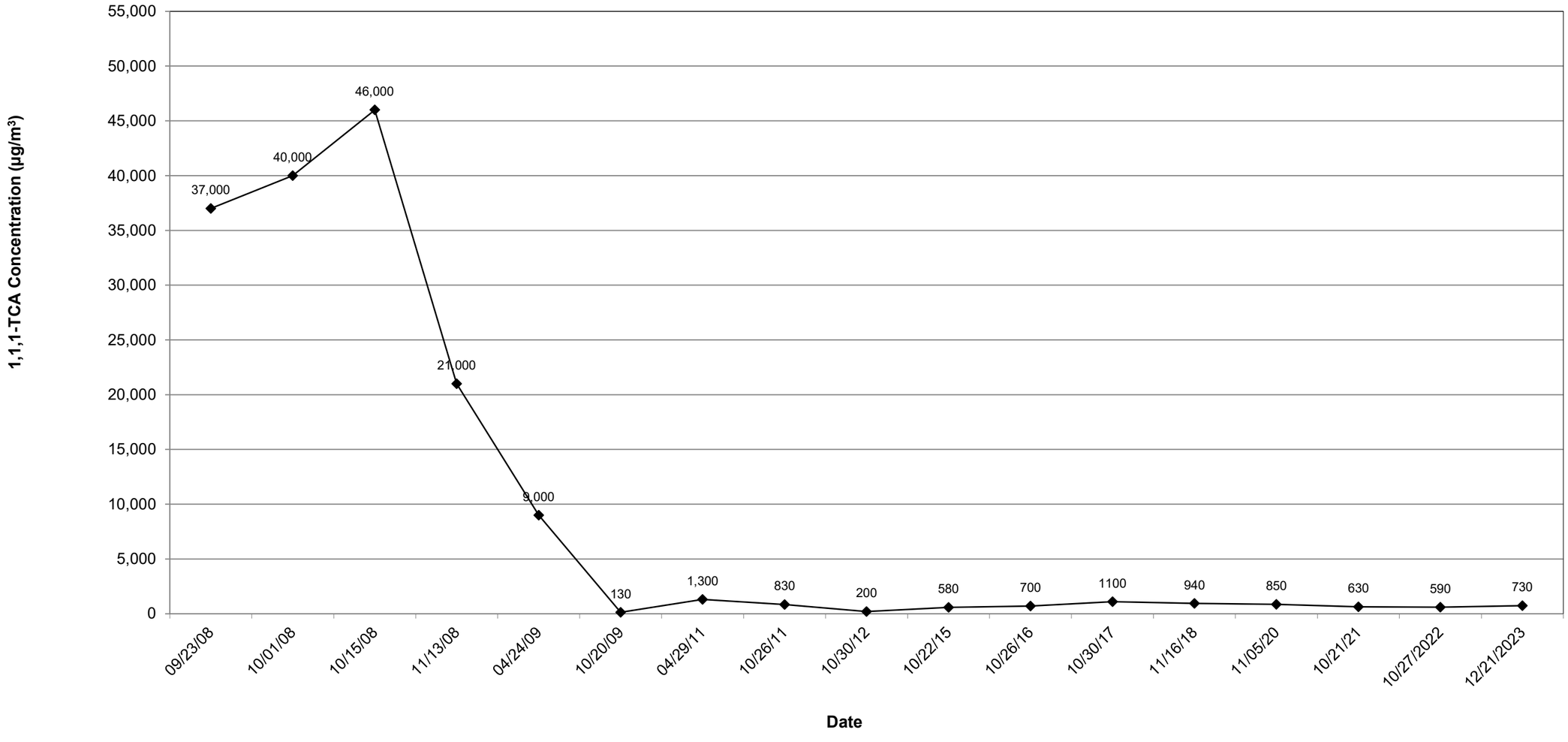


Figure 4.10

1,1,1-TCA Concentration Over Time
(SVE-7)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

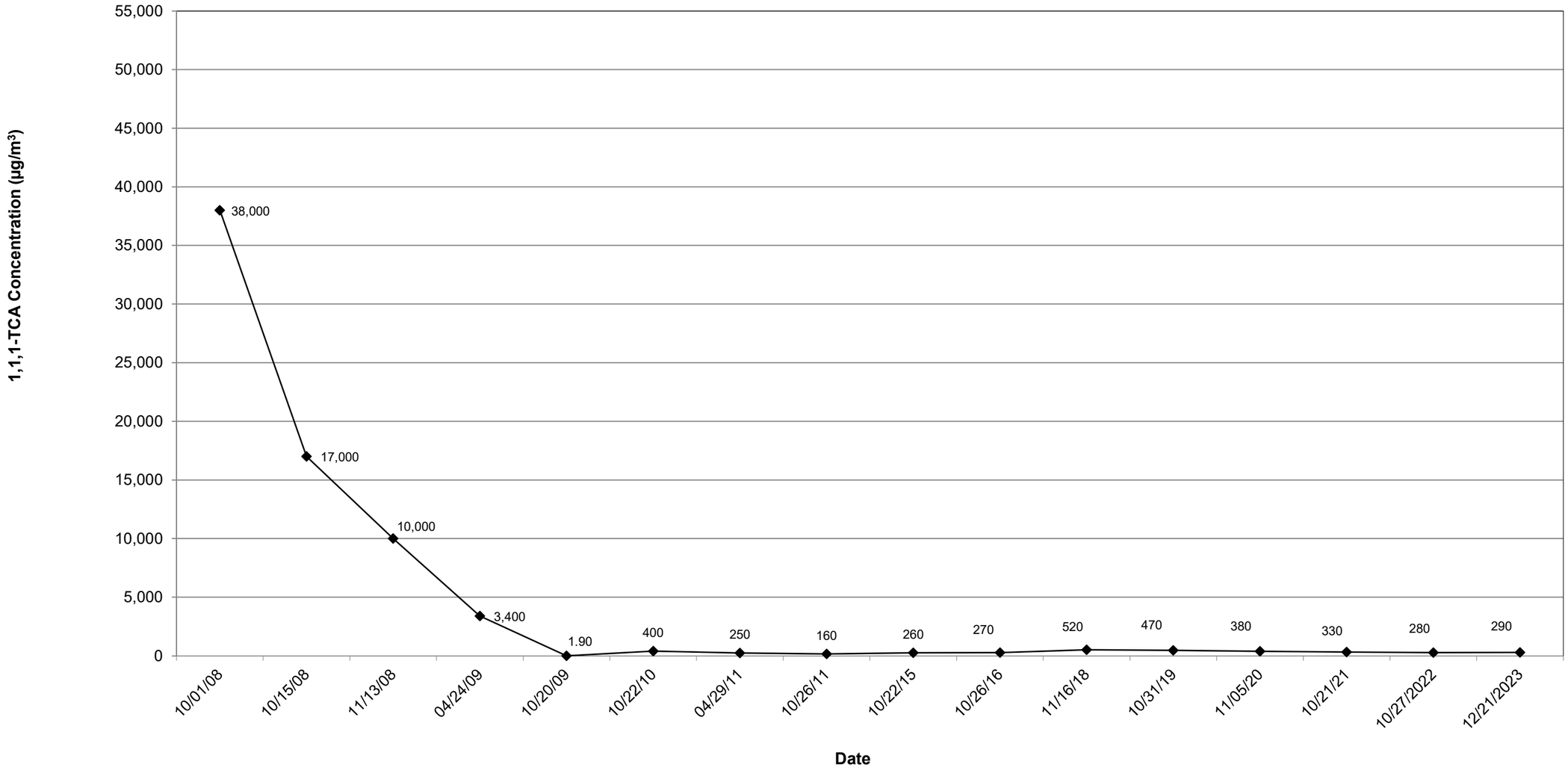


Figure 4.11

1,1,1-TCA Concentration Over Time
(SVE-8)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

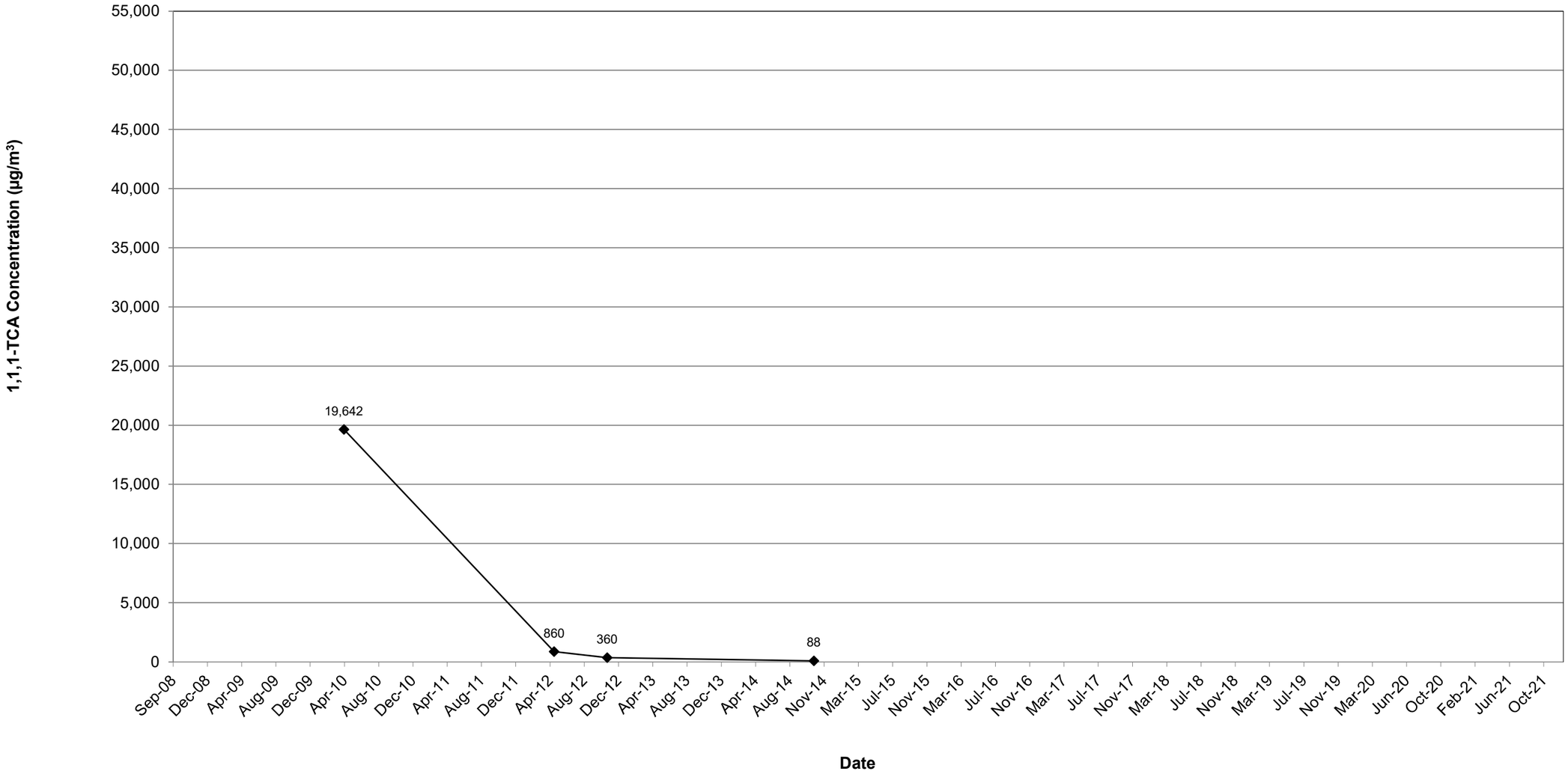


Figure 4.12

1,1,1-TCA Concentration Over Time
(SVE-10)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

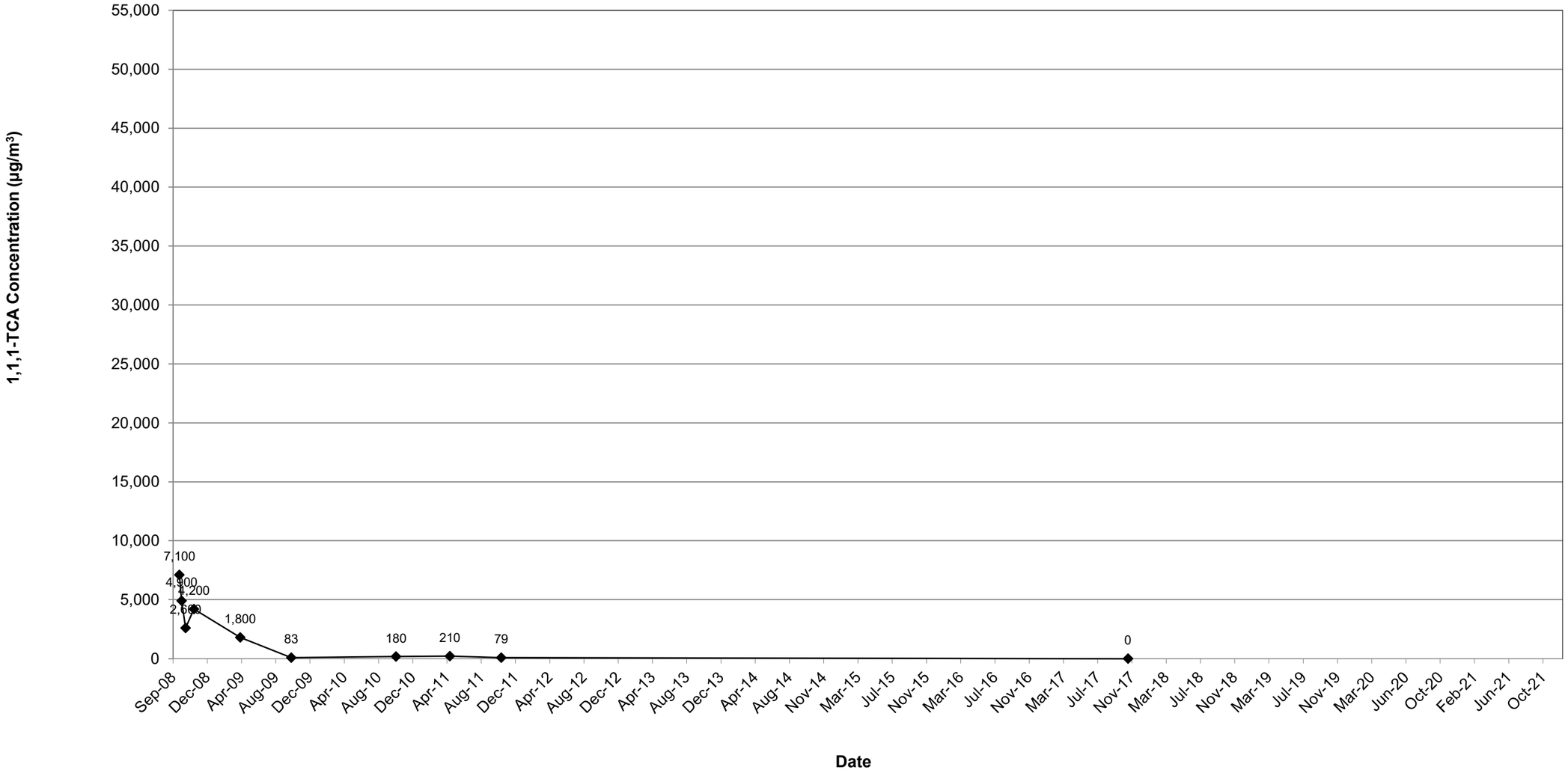


Figure 4.13

1,1,1-TCA Concentration Over Time
(SVE-12)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

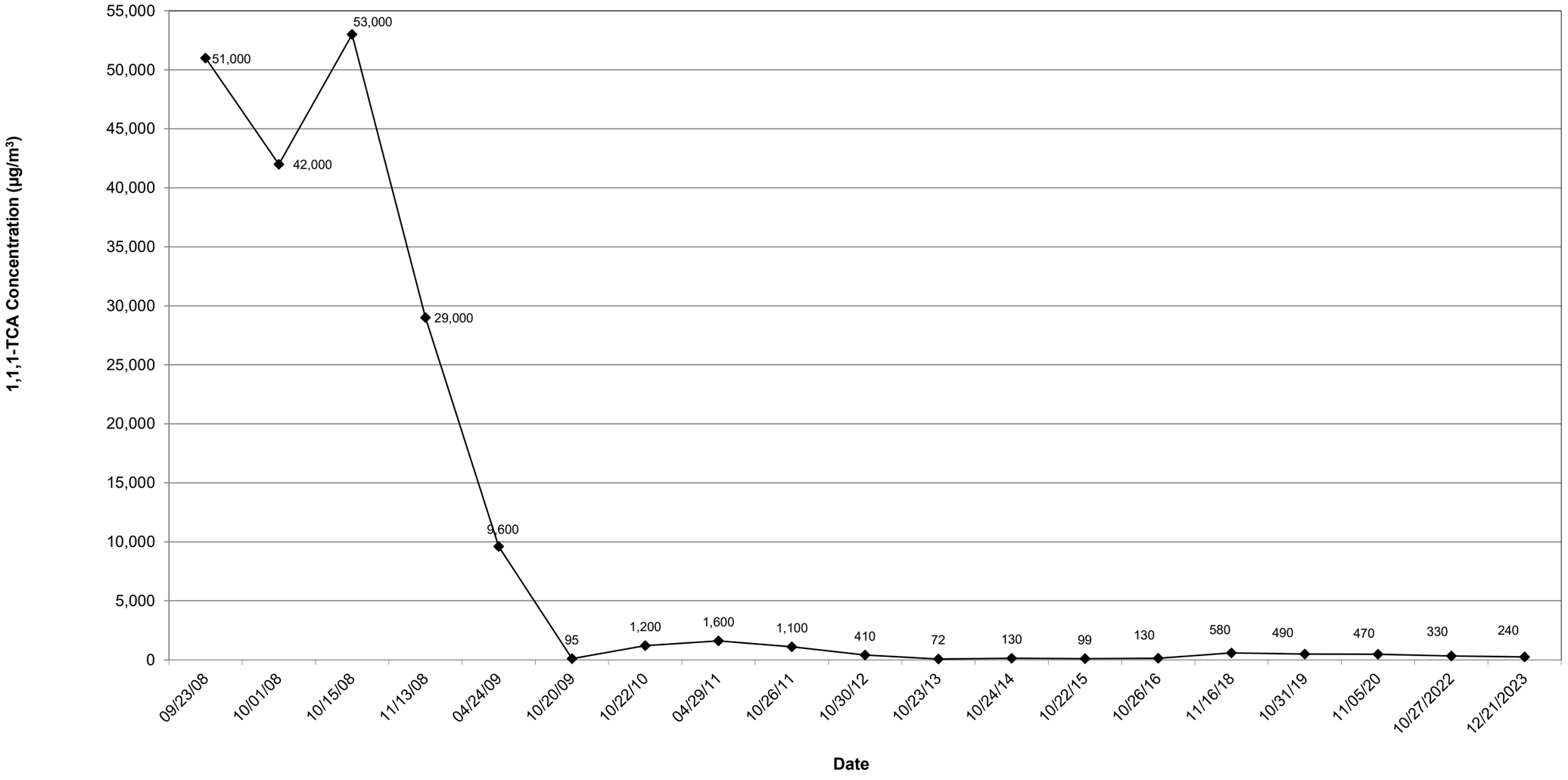


Figure 4.14

1,1,1-TCA Concentration Over Time
(SVE-14)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

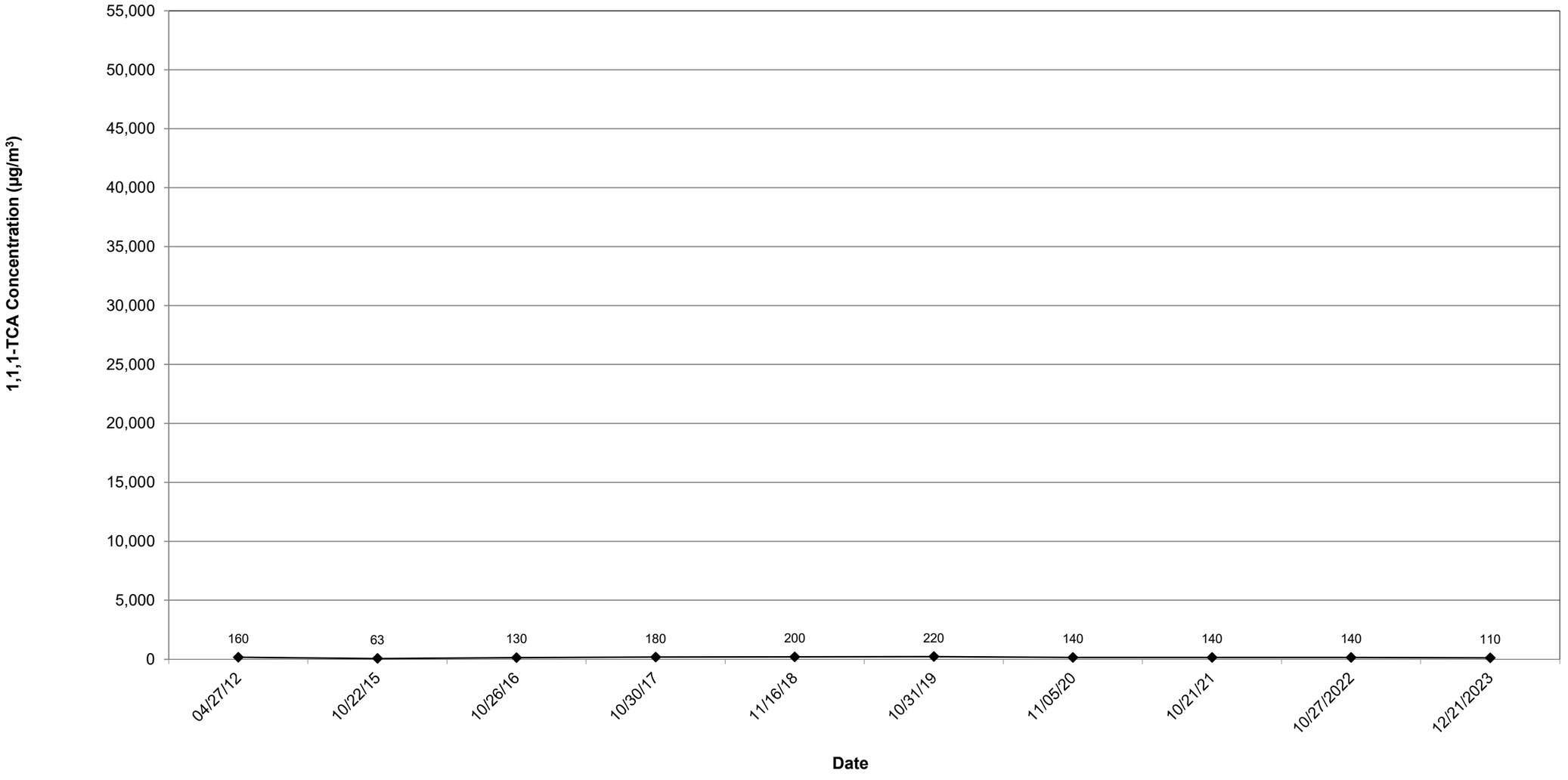


Figure 4.15

1,1,1-TCA Concentration Over Time
(SVE-15)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

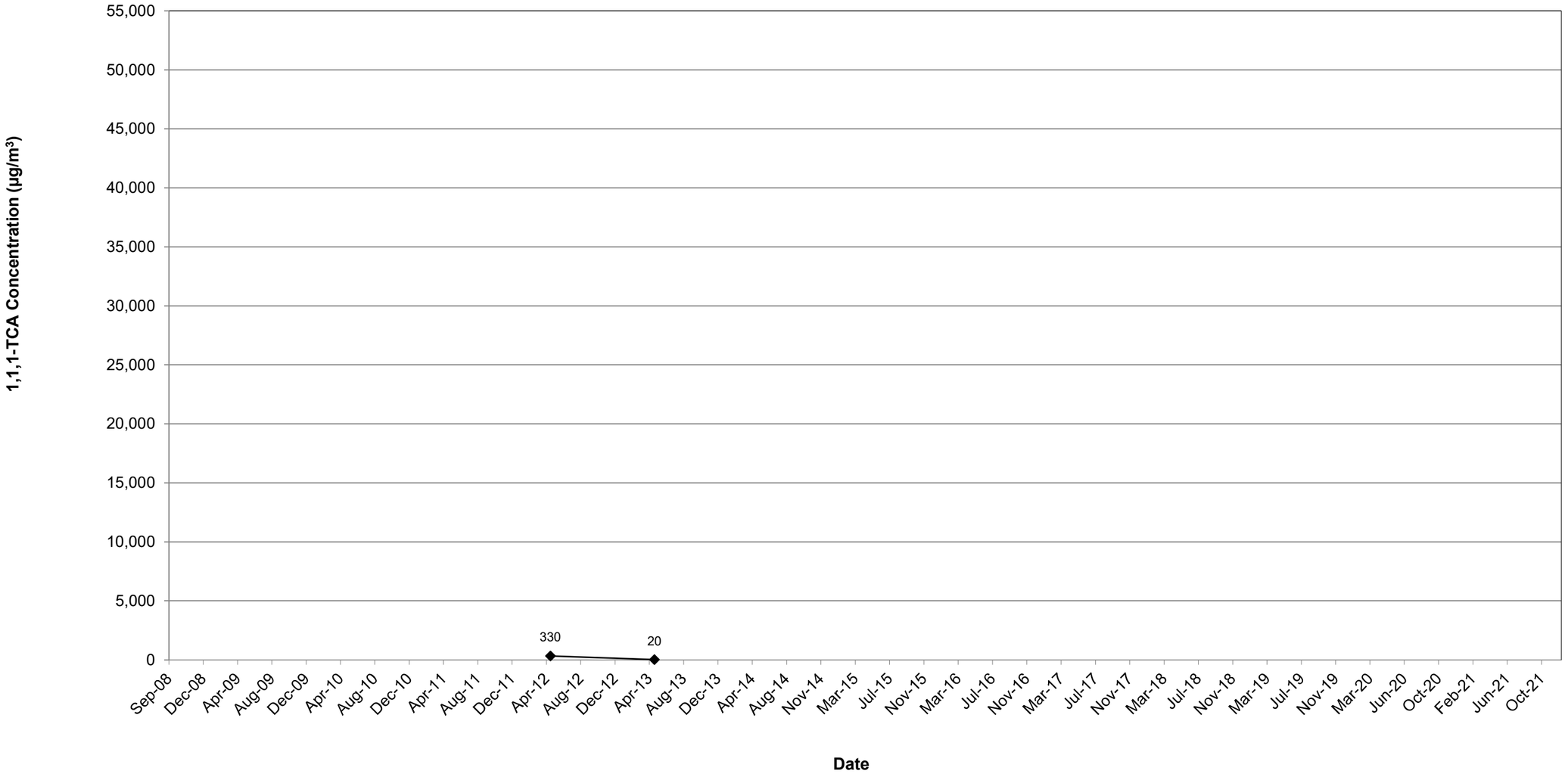
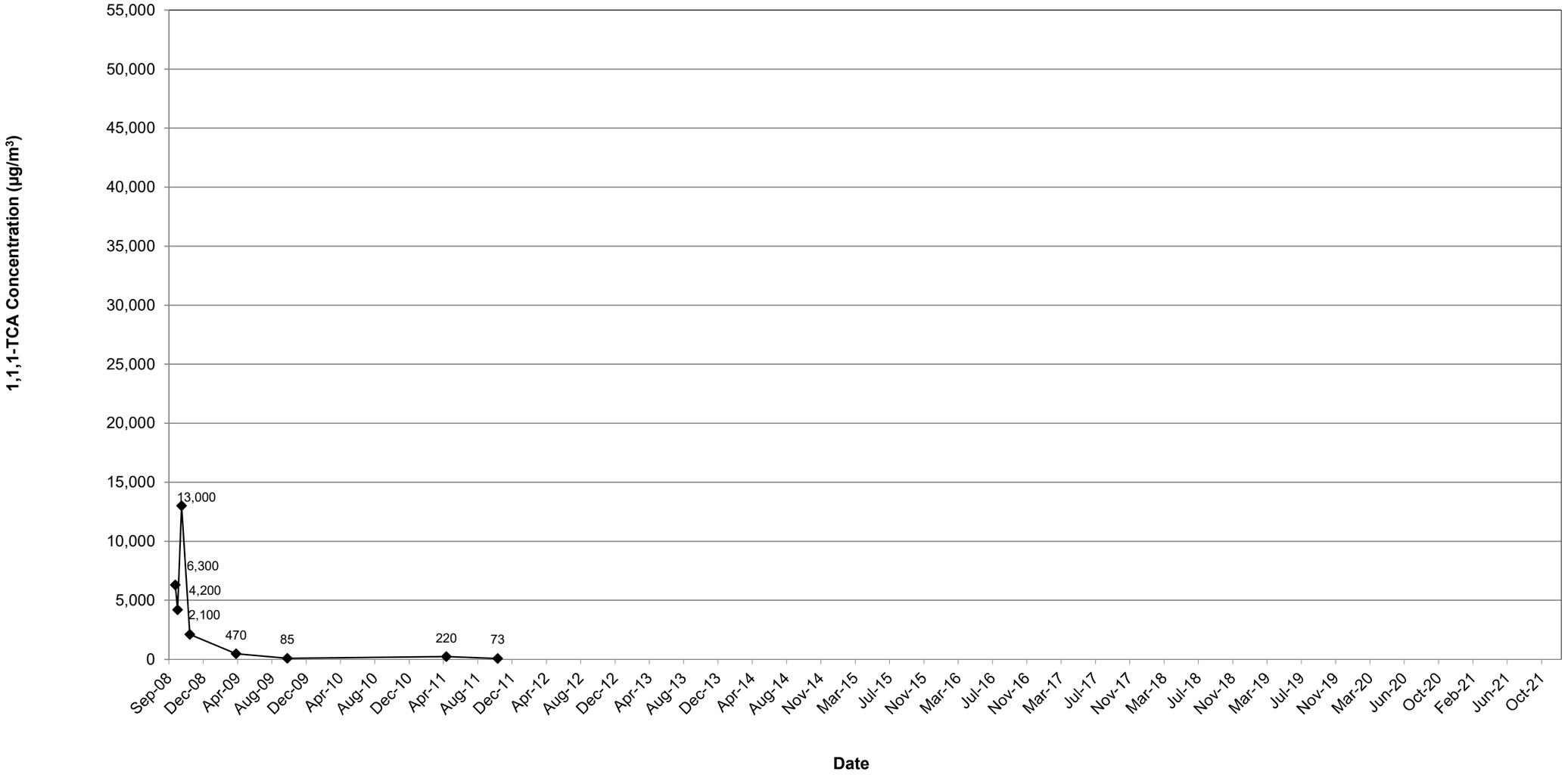


Figure 4.16

1,1,1-TCA Concentration Over Time
(SVE-16)
New Richmond Landfill (#2492)
New Richmond, Wisconsin



Tables

Table 2.1

Groundwater Elevation Summary
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Monitoring Well	Top of Casing Elevation	October 2023
MW-1	1044.71	904.26
MW-1A	1044.00	903.61
MW-1B	1044.86	903.66
MW-2R	1058.23	907.62
MW-2A	1058.62	907.96
MW-2B	1058.59	907.98
MW-9	1026.90	908.95
MW-9A	1026.03	907.75
MW-10	1029.08	885.33
MW-10A	1028.94	885.63
MW-10B	1028.79	884.98
MW-16	1039.90	900.82
MW-16A	1040.08	900.83
MW-17	907.23	870.84
MW-17A	907.44	871.39
MW-18	897.73	865.30
MW-19**	NA	38.05
MW-19A**	NA	38.05
Apple River*	870.68	860.43

Notes:
All elevations in feet above mean sea level (AMSL)
* - Measured from bridge on County Road C
** - TOC not surveyed. Value is feet below TOC

Table 2.2

Groundwater Monitoring Summary
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Monitoring Well	October 2023
MW1	V
MW1A	L
MW1B	L
MW2R	V
MW2A	L
MW2B	L
MW3	L
MW9	V
MW9A	L
MW10	V
MW10A	V
MW10B	L
MW16	V
MW16A	V
MW17	V
MW17A	V
MW18	V
MW19	V
MW19A	V
Apple River	L

Notes:
V - Sample collected for VOCs and collect water level
L - Collect water level

Table 3.1

ES and PAL Exceedances
New Richmond Landfill (#2492)
New Richmond, Wisconsin

				1,1-Dichloroethene	Chloroform (Trichloromethane)	Tetrachloroethene
			ES	**7**	**6**	**5**
			PAL	**0.7**	**0.6**	**0.5**
				µg/L	**µg/L**	**µg/L**
Location	**Sample Identification**	**Date**	**Dup**			
2055 Cty Rd C	**W-231010-RA-09**	**10/10/2023**		< 1.0	< 2.0	< 1.0
2056 Cty Rd C	**W-231010-RA-04**	**10/10/2023**		< 1.0	< 2.0	< 1.0
MW1	**W-231012-RA-15**	**10/12/2023**		< 1.0	**2.2**	< 1.0
MW2R	**W-231012-RA-16**	**10/12/2023**		< 1.0	**2**	< 1.0
MW9	**W-231011-RA-10**	**10/11/2023**		< 1.0	< 2.0	< 1.0
MW10	**W-231012-RA-14**	**10/12/2023**		< 1.0	< 2.0	< 1.0
MW10A	**W-231012-RA-13**	**10/12/2023**		0.69 J	< 2.0	< 1.0
MW16	**W-231011-RA-11**	**10/11/2023**		**1.9**	**0.65 J**	**1.2**
MW16A	**W-231011-RA-12**	**10/11/2023**		< 1.0	< 2.0	< 1.0
MW17	**W-231010-RA-05**	**10/10/2023**		**1.3**	< 2.0	< 1.0
MW17A	**W-231010-RA-06**	**10/10/2023**		< 1.0	< 2.0	< 1.0
MW18	**W-231010-RA-08**	**10/10/2023**		**2.6**	< 2.0	< 1.0
MW19	**W-231010-RA-01**	**10/10/2023**		< 1.0	< 2.0	< 1.0
MW19	**W-231010-RA-02**	**10/10/2023**	**D**	< 1.0	< 2.0	< 1.0
MW19A	**W-231010-RA-03**	**10/10/2023**		< 1.0	< 2.0	< 1.0

Notes:
Enforcement Standard (ES) and Preventative Action Limit (PAL) as found in Wisconsin Administrative Code Chapter NR 140 (July 2023).
D - Duplicate
< - Not detected at the associated reporting limit.
J - Estimated concentration
Bold Lettering - Exceeds PAL

Table 3.2

VOC Results
New Richmond Landfill (#2492)
New Richmond, Wisconsin

				1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Chloroform (Trichloromethane)	Tetrachloroethene	Toluene
			ES	**200**	**850**	**7**	**9000**	**6**	**5**	**800**
			PAL	**40**	**85**	**0.7**	**1800**	**0.6**	**0.5**	**160**
				µg/L	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**	**µg/L**
Location	**Sample Identification**	**Date**	**Dup**							
2055 Cty Rd C	**W-231010-RA-09**	**10/10/2023**		< 1.0	< 1.0	< 1.0	< 10	< 2.0	< 1.0	< 0.50
2056 Cty Rd C	**W-231010-RA-04**	**10/10/2023**		< 1.0	< 1.0	< 1.0	5.8 J	< 2.0	< 1.0	4.4
MW1	**W-231012-RA-15**	**10/12/2023**		4.5	7.6	< 1.0	< 10	**2.2**	< 1.0	< 0.50
MW2R	**W-231012-RA-16**	**10/12/2023**		1.3	2.2	< 1.0	< 10	**2**	< 1.0	< 0.50
MW9	**W-231011-RA-10**	**10/11/2023**		4.3	3.8	< 1.0	< 10	< 2.0	< 1.0	< 0.50
MW10	**W-231012-RA-14**	**10/12/2023**		< 1.0	< 1.0	< 1.0	< 10	< 2.0	< 1.0	< 0.50
MW10A	**W-231012-RA-13**	**10/12/2023**		4.3	6.8	0.69 J	< 10	< 2.0	< 1.0	< 0.50
MW16	**W-231011-RA-11**	**10/11/2023**		6.6	8.2	**1.9**	< 10	**0.65 J**	**1.2**	< 0.50
MW16A	**W-231011-RA-12**	**10/11/2023**		< 1.0	< 1.0	< 1.0	< 10	< 2.0	< 1.0	< 0.50
MW17	**W-231010-RA-05**	**10/10/2023**		4.3	6.1	**1.3**	< 10	< 2.0	< 1.0	< 0.50
MW17A	**W-231010-RA-06**	**10/10/2023**		2.4	< 1.0	< 1.0	< 10	< 2.0	< 1.0	< 0.50
MW18	**W-231010-RA-08**	**10/10/2023**		7.8	3.1	**2.6**	< 10	< 2.0	< 1.0	< 0.50
MW19	**W-231010-RA-01**	**10/10/2023**		< 1.0	< 1.0	< 1.0	< 10	< 2.0	< 1.0	< 0.50
MW19	**W-231010-RA-02**	**10/10/2023**	**D**	< 1.0	< 1.0	< 1.0	< 10	< 2.0	< 1.0	< 0.50
MW19A	**W-231010-RA-03**	**10/10/2023**		< 1.0	< 1.0	< 1.0	< 10	< 2.0	< 1.0	< 0.50

Notes:
Enforcement Standard (ES) and Preventative Action Limit (PAL) as found in Wisconsin Administrative Code Chapter NR 140 (July 2023).
D - Duplicate
< - Not detected at the associated reporting limit.
J - Estimated concentration
Bold Lettering - Exceeds PAL

Table 4.1

SVE/LFG Gas Extraction System Summary
(January - December 2023)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
Stack	1/12/2023	0.0	17.5	1.2	100	432	310-450	2,556
Stack	2/16/2023	0.0	15.5-15.7	1.5-2.2	60-108	427	310-450	2,561
Stack	3/20/2023	0.0	17.1-19.5	0.5-1.7	38	507	310-450	808
Stack	4/13/2023	0.0	16.8	-	44	515	310-450	1,117
Stack	5/2/2023	0.0	17.1	0.6	44	489	310-450	816
Stack	6/22/2023	0.0	18.5	0.8	67	526	310-450	569
Stack	7/31/2023	0.0	18.0	2.2	71	466	310-450	1,436
Stack	8/31/2023	0.0	18.2	1.6	71	407	310-450	1,951
Stack	9/28/2023	0.0	6.7	0.2	66	432	310-450	624
Stack	12/21/2023	0.0	-	-	46	570	310-450	0
SVE-1	12/21/2023	0.0	-	-12.2	46	0	-	0
SVE-2	12/21/2023	0.0	-	-10.1	46	79	-	0
SVE-3	12/21/2023	0.0	-	-10.2	46	42	-	0
SVE-4	1/12/2023	0.0	16.8	-10.4	42	35	40-50	105
SVE-4	2/16/2023	0.0	14.5	-13.7	38	83	40-50	1,127
SVE-4	3/20/2023	0.0	19.2	-14.6	38	38	40-50	13
SVE-4	4/13/2023	0.0	14.1	-17.6	44	0	40-50	10
SVE-4	5/2/2023	0.0	16.1	-16.1	44	75	40-50	5
SVE-4	6/22/2023	0.0	17.2	-12.9	67	34	40-50	310
SVE-4	7/31/2023	0.0	16.1	-10.9	71	0	40-50	1,690
SVE-4	8/31/2023	0.0	16.4	-10.6	71	0	40-50	3,089
SVE-4	9/28/2023	0.0	5.2	-10.6	67	30	40-50	5,137
SVE-4	12/21/2023	0.0	-	-12.4	46	0	40-50	0
SVE-5	12/21/2023	0.0	-	-11.9	46	347	-	0

Table 4.1

SVE/LFG Gas Extraction System Summary
(January - December 2023)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-6	1/12/2023	0.0	16.3	-10.6	42	0	40-50	41
SVE-6	2/16/2023	0.0	15.4	-12.0	38	88	40-50	737
SVE-6	3/20/2023	0.0	18.3	-14.6	38	49	40-50	0
SVE-6	4/13/2023	0.0	15.0	-17.4	44	128	40-50	0
SVE-6	5/2/2023	0.0	16.6	-16.2	44	77	40-50	0
SVE-6	6/22/2023	0.0	17.3	-13.0	67	74	40-50	448
SVE-6	7/31/2023	0.0	16.8	-10.6	71	0	40-50	267
SVE-6	8/31/2023	0.0	17.7	-10.3	71	68	40-50	320
SVE-6	9/28/2023	0.0	5.4	-10.6	67	73	40-50	358
SVE-6	12/21/2023	0.0	-	-12.4	46	79	40-50	0
SVE-7	1/12/2023	0.0	17.0	-10.8	42	45	40-50	172
SVE-7	2/16/2023	0.0	14.8	-13.7	38	56	40-50	1,426
SVE-7	3/20/2023	0.0	18.7	-14.6	38	69	40-50	308
SVE-7	4/13/2023	0.0	14.2	-17.4	44	38	40-50	126
SVE-7	5/2/2023	0.0	14.6	-15.9	44	34	40-50	390
SVE-7	6/22/2023	0.0	16.8	-12.9	67	0	40-50	340
SVE-7	7/31/2023	0.0	16.6	-11.3	71	0	40-50	1,322
SVE-7	8/31/2023	0.0	17.7	-10.6	71	56	40-50	1,990
SVE-7	9/28/2023	0.0	5.5	-10.6	67	0	40-50	2,068
SVE-7	12/21/2023	0.4	-	-12.4	46	16	40-50	0
SVE-8	12/21/2023	0.0	-	-11.4	46	16	-	0
SVE-9	12/21/2023	0.0	-	-11.4	46	46	-	1
SVE-10	12/21/2023	0.0	-	-12.2	46	45	-	0
SVE-11	12/21/2023	0.7	-	-11.9	46	0	-	0

Table 4.1

SVE/LFG Gas Extraction System Summary
(January - December 2023)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-12	1/12/2023	0.0	17.9	-10.2	42	60	40-50	167
SVE-12	2/16/2023	0.0	14.2	-13.3	38	49	40-50	1,855
SVE-12	3/20/2023	0.0	19.0	-14.0	38	93	40-50	718
SVE-12	4/13/2023	0.0	16.1	-17.0	44	114	40-50	2,461
SVE-12	5/2/2023	0.0	16.8	-15.6	44	121	40-50	2,680
SVE-12	6/22/2023	0.0	17.4	-12.2	67	54	40-50	647
SVE-12	7/31/2023	0.0	19.1	-10.5	71	85	40-50	442
SVE-12	8/31/2023	0.0	18.8	-9.8	71	78	40-50	485
SVE-12	9/28/2023	0.0	6.0	-9.8	67	85	40-50	582
SVE-12	12/21/2023	0.0	-	-11.6	46	175	40-50	0
SVE-13	1/12/2023	0.0	16.9	-10.8	42	56	40-50	13
SVE-13	2/16/2023	0.0	16.4	-13.8	38	34	40-50	48
SVE-13	3/20/2023	0.0	19.2	-14.6	38	49	40-50	0
SVE-13	4/13/2023	0.0	14.8	-17.7	44	31	40-50	25
SVE-13	5/2/2023	0.0	14.7	-16.6	44	67	40-50	5
SVE-13	6/22/2023	0.0	14.9	-12.8	67	0	40-50	282
SVE-13	7/31/2023	0.0	6.8	-11.4	71	46	40-50	1,390
SVE-13	8/31/2023	0.0	14.4	-10.5	71	0	40-50	1,853
SVE-13	9/28/2023	0.0	4.5	-10.6	67	0	40-50	29
SVE-13	12/21/2023	0.0	-	-12.4	46	0	40-50	0

Table 4.1

SVE/LFG Gas Extraction System Summary
(January - December 2023)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-14	1/12/2023	0.0	14.4	-10.8	42	42	40-50	4,757
SVE-14	2/16/2023	0.0	12.5	-13.6	38	63	40-50	1,856
SVE-14	3/20/2023	0.0	15.4	-14.6	38	45	40-50	57
SVE-14	4/13/2023	0.0	7.0	-17.5	44	41	40-50	259
SVE-14	5/2/2023	0.0	6.6	-16.3	44	104	40-50	40
SVE-14	6/22/2023	0.0	13.8	-12.8	67	0	40-50	518
SVE-14	7/31/2023	0.0	5.9	-11.6	71	0	40-50	2,844
SVE-14	8/31/2024	0.0	12.6	-10.5	71	0	40-50	5,839
SVE-14	9/28/2023	0.0	3.7	-10.6	67	0	40-50	6
SVE-14	12/21/2023	1.0	-	-12.2	46	0	40-50	0
SVE-15	12/21/2023	0.0	-	-12.2	46	161	-	0
SVE-16	12/21/2023	0.0	-	-12.2	46	0	-	0
SVE-17	12/21/2023	0.0	-	-11.9	46	131	-	0
SVE-18	12/21/2023	0.0	-	-7.4	46	944	-	0
SVE-19	12/21/2023	0.0	-	-12.0	46	130	-	0
LFG-1	1/12/2023	0.9	6.7	-6.8	50	18	5-10	5
LFG-1	2/16/2023	0.0	11.9	-10.0	46	12	5-10	NA [1]
LFG-1	3/20/2023	0.0	16.3	-10.0	45	29-31	5-10	3,390
LFG-1	4/13/2023	0.5	5.9	-16.4	63	3-6	5-10	NA [1]
LFG-1	5/2/2023	0.1	5.8	-11.4	54	1-5	5-10	NA [1]
LFG-1	6/22/2023	0.0	16.5	-13.6	74	13	5-10	2,835
LFG-1	7/31/2023	0.2	14.1	-11.4	75	10.00	5-10	8,161
LFG-1	8/31/2023	0.3	14.7	-10.2	75	10.00	5-10	10,473
LFG-1	9/28/2023	0.3	4.6	-8.0	73	17.00	5-10	1,023
LFG-1	12/21/2023	0.5	-	-6.8	54	26.00	5-10	0

Table 4.1

SVE/LFG Gas Extraction System Summary
(January - December 2023)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-2	1/12/2023	0.0	10.9	-3.2	44	5	5-10	1,008
LFG-2	2/16/2023	0.0	14.3	-4.4	40	9	5-10	3,342
LFG-2	3/20/2023	0.0	15.5	-14.1	44	29-32	5-10	310
LFG-2	4/13/2023	0.0	5.3	-17.4	67	7	5-10	-
LFG-2	5/2/2023	0.0	5.9	-16.0	53	9	5-10	68
LFG-2	6/22/2023	0.0	17.3	-13.6	80	10	5-10	793
LFG-2	7/31/2023	0.0	15.9	-10.7	73	3-6	5-10	1,329
LFG-2	8/31/2023	0.0	17.0	-10.2	71	14	5-10	1,930
LFG-2	9/28/2023	0.0	5.1	-7.8	70	9	5-10	2,103
LFG-2	12/21/2023	0.0	-	6.1	49	27	5-10	0
LFG-3	1/12/2023	0.4	14.4	10.5	41	6	5-10	8,135
LFG-3	2/16/2023	0.3	14.9	-13.4	38	0	5-10	10,322
LFG-3	3/20/2023	0.0	18.7	-13.6	42	13	5-10	823
LFG-3	4/13/2023	0.0	15.5	-16.3	66	0	5-10	171
LFG-3	5/2/2023	0.0	15.9	-16.0	53	0	5-10	82
LFG-3	6/22/2023	0.0	17.8	-13.2	76	2	5-10	1,833
LFG-3	7/31/2023	0.0	16.4	-11.4	73	0	5-10	4,658
LFG-3	8/31/2023	0.0	17.3	-10.3	74	0	5-10	5,790
LFG-3	9/28/2023	0.0	5.7	-10.4	69	6	5-10	6,444
LFG-3	12/21/2023	0.0	-	-12.6	44	19	5-10	0

Table 4.1

SVE/LFG Gas Extraction System Summary
(January - December 2023)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-4	1/12/2023	0.0	13.7	-4.2	47	20	15-20	519
LFG-4	2/16/2023	0.0	14.9	-6.9	42	18	15-20	4,931
LFG-4	3/20/2023	0.0	17.6	-13.8	44	15	15-20	1,006
LFG-4	4/13/2023	0.3	14.1	-17.2	66	21	15-20	4,589
LFG-4	5/2/2023	0.0	14.7	-15.6	50	18	15-20	2,347
LFG-4	6/22/2023	0.0	18.5	-13.6	75	4-15	15-20	928
LFG-4	7/31/2023	0.0	17.3	-11.6	73	11-17	15-20	630
LFG-4	8/31/2023	0.0	18.4	-10.2	71	15	15-20	1,337
LFG-4	9/28/2023	0.0	5.9	-10.4	70	16	15-20	1,616
LFG-4	12/21/2023	0.0	-	-7.3	49	33	15-20	0
LFG-5	1/12/2023	0.4	13.8	-9.4	42	13	5-10	6,919
LFG-5	2/16/2023	0.0	17.9	-12.5	38	0	5-10	4,714
LFG-5	3/20/2023	0.0	20.2	-11.9	43	4	5-10	958
LFG-5	4/13/2023	0.0	16.2	-16.3	61	4	5-10	469
LFG-5	5/2/2023	0.0	15.2	-13.5	50	6	5-10	274
LFG-5	6/22/2023	0.0	19.1	-13.4	70	12-19	5-10	356
LFG-5	7/31/2023	0.0	18.2	-11.9	72	12	5-10	786
LFG-5	8/31/2023	0.0	18.5	-10.2	72	9	5-10	1,657
LFG-5	9/28/2023	0.0	6.0	-10.3	70	13	5-10	2,170
LFG-5	12/21/2023	0.0	-	-10.0	46	22	5-10	0

Table 4.1

SVE/LFG Gas Extraction System Summary
(January - December 2023)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-6	1/12/2023	0.0	12.8	-4.0	52	20	15-20	3,641
LFG-6	2/16/2023	0.0	14.7	-6.3	44	18	15-20	4,430
LFG-6	3/20/2023	0.0	18.3	-13.3	43	20	15-20	1,304
LFG-6	4/13/2023	0.0	13.8	-14.7	67	19	15-20	3,615
LFG-6	5/2/2023	0.0	14.8	-7.7	50	22	15-20	752
LFG-6	6/22/2023	0.0	18.5	-12.8	70	15	15-20	486
LFG-6	7/31/2023	0.0	17.3	-11.0	72	11-18	15-20	1,280
LFG-6	8/31/2023	0.0	18.0	-9.8	73	17	15-20	2,462
LFG-6	9/28/2023	0.0	5.9	-9.8	71	21	15-20	3,168
LFG-6	12/21/2023	0.0	-	-5.7	50	34	15-20	0
LFG-7	1/12/2023	0.0	19.7	-0.5	28	0	5-10	35
LFG-7	2/16/2023	0.0	16.9	-5.4	33	0	5-10	9,028
LFG-7	3/20/2023	0.0	19.4	-1.6	48	0	5-10	43
LFG-7	4/13/2023	0.0	5.1	-17.7	80	0	5-10	NA [1]
LFG-7	5/2/2023	0.0	6.6	-15.8	52	12	5-10	973
LFG-7	6/22/2023	0.0	17.0	-13.5	73	13	5-10	698
LFG-7	7/31/2023	0.0	15.4	-11.9	74	14-18	5-10	1,509
LFG-7	8/31/2023	0.0	15.8	-10.2	74	1	5-10	563
LFG-7	9/28/2023	0.0	4.8	-9.2	72	0	5-10	3,123
LFG-7	12/21/2023	0.0	-	-12.4	45	12	5-10	0

Table 4.1

SVE/LFG Gas Extraction System Summary
(January - December 2023)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-8	1/12/2023	6.6	4.0	-10.7	40	19	15-20	NA [1]
LFG-8	2/16/2023	13.4	2.0	-12.2	36	0	15-20	NA [1]
LFG-8	3/20/2023	4.0	5.6	-12.8	42	9	15-20	NA [1]
LFG-8	4/13/2023	0.5	2.2	-17.0	80	9	15-20	NA [1]
LFG-8	5/2/2023	1.1	2.7	-14.8	54	0	15-20	NA [1]
LFG-8	6/22/2023	0.5	14.3	-13.4	82	0	15-20	11,948
LFG-8	7/31/2023	1.1	6.1	-11.2	80	1	15-20	NA [1]
LFG-8	8/31/2023	1.7	12.4	-10.5	70	0	15-20	NA [1]
LFG-8	9/28/2023	1.5	4.1	-10.4	72	1	15-20	NA [1]
LFG-8	12/21/2023	3.7	-	-12.9	42	0	15-20	0
LFG-9	1/12/2023	0.0	17.2	-0.7	41	5	5-10	6
LFG-9	2/16/2023	0.0	13.8	-0.2	42	9	5-10	61
LFG-9	3/20/2023	0.0	17.1	-13.9	42	9	5-10	1,316
LFG-9	4/13/2023	0.0	15.1	-18.1	52	10	5-10	58
LFG-9	5/2/2023	0.0	15.2	-15.6	48	5	5-10	119
LFG-9	6/22/2023	0.0	17.5	-13.6	65	10	5-10	1
LFG-9	7/31/2023	0.0	15.7	-12.0	69	0	5-10	97
LFG-9	8/31/2023	0.0	15.5	-10.6	69	9	5-10	421
LFG-9	9/28/2023	0.0	5.2	-10.4	66	7	5-10	0
LFG-9	12/21/2023	0.0	-	-0.2	45	15	5-10	0
GP-01	4/13/2023	0.0	18.4	-0.1				
GP-01	8/31/2023	0.0	19.9	0.0				
GP-01	12/21/2023	0.0	-	0.0				
GP-1A	4/13/2023	0.0	18.7	-0.2				
GP-1A	8/31/2023	0.0	20.6	0.0				
GP-1A	12/21/2023	0.0	-	-0.1				

Table 4.1

SVE/LFG Gas Extraction System Summary
(January - December 2023)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
GP-02	4/13/2023	0.0	18.8	0.0				
GP-02	8/31/2023	0.0	17.6	-0.6				
GP-02	12/21/2023	0.0	-	-0.2				
GP-2A	4/13/2023	0.0	15.9	-0.3				
GP-2A	8/31/2023	0.0	18.5	-0.4				
GP-2A	12/21/2023	0.0	-	-0.3				
GP-2B	4/13/2023	0.0	19.8	-0.7				
GP-2B	8/31/2023	0.0	20.5	-0.6				
GP-2B	12/21/2023	0.0	-	-0.8				
GP-03	4/13/2023	0.0	20.4	0.0				
GP-03	8/31/2023	0.0	14.5	-0.6				
GP-03	12/21/2023	0.0	-	-0.1				
GP-3A	4/13/2023	0.0	17.3	-0.2				
GP-3A	8/31/2023	0.0	16.6	-0.7				
GP-3A	12/21/2023	0.0	-	0.2				
GP-4A	4/13/2023	0.0	18.2	-0.2				
GP-4A	8/31/2023	0.0	20.8	0.0				
GP-4A	12/21/2023	0.0	-	0.0				
GP-8A	4/13/2023	0.0	19.4	-1.0				
GP-8A	8/31/2023	0.0	18.7	-0.8				
GP-8A	12/21/2023	0.0	-	-0.9				
GP-8B	4/13/2023	0.0	19.4	-1.0				
GP-8B	8/31/2023	0.0	19.0	-0.9				
GP-8B	12/21/2023	0.0	-	-1.0				

Table 4.1

SVE/LFG Gas Extraction System Summary
(January - December 2023)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
GP-09	4/13/2023	0.0	20.0	-0.1				
GP-09	8/31/2023	0.0	19.5	-0.7				
GP-09	12/21/2023	0.0	-	-0.2				
GP-9A	4/13/2023	0.0	19.9	0.0				
GP-9A	8/31/2023	0.0	18.8	-0.7				
GP-9A	12/21/2023	0.0	-	-0.2				
GP-10	4/13/2023	0.0	20.3	-0.1				
GP-10	8/31/2023	0.0	19.9	-0.5				
GP-10	12/21/2023	0.0	-	-0.2				
GP-10A	4/13/2023	0.0	20.3	0.0				
GP-10A	8/31/2023	0.0	18.8	-0.5				
GP-10A	12/21/2023	0.0	-	-0.2				
GP-11	4/13/2023	0.0	19.4	0.0				
GP-11	8/31/2023	0.0	18.4	-0.4				
GP-11	12/21/2023	0.0	-	-0.2				
GP-11A	4/13/2023	0.0	19.1	0.0				
GP-11A	8/31/2023	0.0	17.1	-0.4				
GP-11A	12/21/2023	0.0	-	-0.2				
GP-12	4/13/2023	0.0	20.3	0.0				
GP-12	8/31/2023	0.0	19.7	-0.3				
GP-12	12/21/2023	0.0	-	-0.2				

Table 4.1

SVE/LFG Gas Extraction System Summary
(January - December 2023)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)

Notes:

NA - Not applicable

*Readings for the first three quarters in 2023 were recorded using a FID. The fourth quarter in 2023 readings were recorded using a PID.

[1] No reading could be obtained; FID flamed out because of low oxygen level.

[2] Air flow is heard through the pipe, but no flow measurement could be determined.

[3] Values could not be determined due to equipment error.

With approval from the WDNR on 10/21/15, System modifications occurred on 10/29/15. Modifications included operating the system on a part tim (16 hrs/day) and operating only SVE wells SVE-4, SVE-6, SVE-7, SVE-12, SVE-13, and SVE-14. These wells are monitoried on a monthly basis. from the LFG wells was also modified in order to focus gas extraction in the vicinity of the GP-2 nest.

With approval from the WDNR on September 29, 2023, landfill gas extraction wells and select SVE (4, 6, 7, 12, 13, and 14) wells monitoring freque changed to quarterly. Additionally, the VOC monitoring method was modified to use a PID rather than a FID. All other SVE wells will be monitored semi-annual basis (April and October) and will be "turned on" on an as needed basis.

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	Blower Discharge 09/23/08 µg/m^3	Blower Discharge 09/25/08 µg/m^3	Blower Discharge 10/01/08 µg/m^3	Blower Discharge 10/07/08 µg/m^3	Blower Discharge 10/15/08 µg/m^3	Blower Discharge 10/30/08 µg/m^3	Blower Discharge 11/13/08 µg/m^3	Blower Discharge 04/24/09 µg/m^3	Blower Discharge 07/23/09 µg/m^3	Blower Discharge 10/20/09 µg/m^3	Blower Discharge 01/29/10 µg/m^3	Blower Discharge 04/22/10 µg/m^3	Blower Discharge 07/23/10 µg/m^3	Blower Discharge[1] 07/23/10 µg/m^3	Blower Discharge 10/22/10 µg/m^3	Blower Discharge 01/24/11 µg/m^3
1,1,1-Trichloroethane	17,000	28,000	27,000	29,000	18,000	15,000	11,000	5,700	2,000	380	1,300	1,473	1,400	1,700	1,000	1,500
1,1,2,2-Tetrachloroethane	< 510	< 650	< 470	< 310	< 140	< 150	< 68	< 25	< 27	< 2.7	< 5.5	< 27.46	< 14	< 14	< 14	< 14
1,1,2-Trichloroethane	< 400	< 510	< 380	< 250	< 110	< 120	< 54	22	< 22	< 2.2	11	< 21.82	< 11	< 11	< 11	< 11
1,1-Dichloroethane	51,000	59,000	42,000	32,000	20,000	16,000	8,600	3,900	1,100	220.0	920	850	790	950	680	940
1,1-Dichloroethene	3,300	3,900	4,700	3,800	1,900	1,700	1,400	560	180.0	29.00	180.0	150.7	140	160	110	190
1,2,4-Trichlorobenzene	< 2700	< 3500	< 2600	< 1700	< 760	< 820	< 370	< 130	< 150	< 15	< 30	< 148.43	< 74	< 74	< 74	< 74
1,2,4-Trimethylbenzene	< 360	< 460	< 340	< 220	< 100	130	< 49	24	20	2	16.0	< 19.66	< 9.8	< 9.8	17.0	< 9.8
1,2-Dibromoethane (Ethylene dibromide)	< 570	< 720	< 530	< 350	< 160	< 170	< 76	< 28	< 31	< 3.1	< 6.1	< 30.73	< 15	< 15	< 15	< 15
1,2-Dichlorobenzene	< 440	< 570	< 410	< 270	< 120	< 130	< 60	< 22	< 24	< 2.4	5.9	< 24.05	< 12	< 12	< 12	< 12
1,2-Dichloroethane	< 300	< 380	< 280	190	< 83	< 90	< 40	19	< 16	< 1.6	4.9	< 16.19	< 8.1	< 8.1	< 8.1	< 8.1
1,2-Dichloropropane	< 340	< 440	< 320	210	140	150	66	37	< 18	2.80	19.0	< 18.49	< 9.2	14.0	< 9.2	< 9.2
1,2-Dichlorotetrafluoroethane (CFC 114)	< 510	< 660	< 480	< 320	< 140	< 150	< 69	29	< 28	4	31	< 27.96	21	17	69	27
1,3,5-Trimethylbenzene	< 360	< 460	< 340	< 220	< 100	< 110	< 49	26	< 20	3	28.0	< 19.66	< 9.8	18.0	17.0	< 9.8
1,3-Butadiene	< 330	< 420	< 300	< 200	< 91	< 98	< 44	< 16	< 18	< 1.8	< 3.5	< 17.7	< 8.8	< 8.8	< 8.8	< 8.8
1,3-Dichlorobenzene	< 440	< 570	< 410	< 270	< 120	< 130	< 60	< 22	< 24	< 2.4	< 4.8	< 24.05	< 12	< 12	< 12	< 12
1,4-Dichlorobenzene	< 440	< 570	< 410	< 270	< 120	< 130	< 60	32	27	6	43.0	< 24.05	18.0	46.0	24.0	16.0
2-Butanone (Methyl ethyl ketone) (MEK)	2,600	4,700	3,500	2,600	3,200	3,400	1,700	790	250	43.00	360.0	79.6	81.0	160.0	< 29	33.0
2-Hexanone	< 750	< 960	< 700	< 460	< 210	< 230	< 100	44	< 41	< 4.1	15	< 40.97	< 20	< 20	< 20	< 20
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	< 750	1,400	1,200	950	1,200	1,700	830	560	240	29	380.0	114.7	100.0	240.0	37.0	52.0
Acetone	< 4400	< 5600	< 4100	< 2700	3,200	3,700	1,900	1,300	430	170	480.0	< 237.55	< 120	240.0	130.0	< 120
Acetonitrile	< 620	< 790	< 580	< 380	< 170	< 190	< 83	< 31	< 34	< 3.4	17.0	< 33.58	< 17	< 17	< 17	< 17
Acrolein	< 680	< 860	< 630	< 420	< 190	< 200	< 91	< 33	< 37	< 3.7	< 7.3	< 36.69	< 18	< 18	< 18	< 18
Acrylonitrile	< 1600	< 2000	< 1500	< 980	< 450	< 480	< 220	< 79	< 87	< 8.7	< 17	< 86.81	< 43	< 43	< 43	< 43
Allyl chloride (3-Chloropropene)	< 230	< 290	< 220	< 140	< 64	< 69	< 31	< 11	< 13	< 1.3	< 2.5	< 12.52	< 6.3	< 6.3	< 6.3	< 6.3
alpha-Methylstyrene	< 710	< 910	< 660	< 440	< 200	< 210	< 96	< 35	< 39	< 3.9	< 7.7	< -999	< 19	< 19	< 19	< 19
Benzene	780	750	460	300	160	130	50	16	< 13	1.6	6	< 12.78	< 6.4	< 6.4	8	< 6.4
Benzyl chloride	< 760	< 980	< 710	< 470	< 210	< 230	< 100	< 38	< 41	< 4.1	< 8.3	< 41.42	< 21	< 21	< 21	< 21
Bromodichloromethane	< 490	< 630	< 460	< 300	< 140	< 150	< 66	< 24	< 27	< 2.7	< 5.4	< 26.8	< 13	< 13	< 13	< 13
Bromoform	< 760	< 970	< 710	< 470	< 210	< 230	< 100	< 38	< 41	< 4.1	< 8.3	< 41.35	< 21	< 21	< 21	< 21
Bromomethane (Methyl bromide)	< 290	< 370	< 270	< 180	< 80	< 86	< 38	< 14	< 16	< 1.6	< 3.1	< 15.53	< 7.8	< 7.8	< 7.8	< 7.8
Butane	790	630	< 330	260	< 98	120	84	63	39	8	36	24	29	26	170	35
Carbon disulfide	< 570	< 730	< 540	< 350	270	370	260	65	< 31	< 3.1	17	< 31.14	< 16	< 16	22	< 16
Carbon tetrachloride	< 460	< 590	< 430	< 290	< 130	< 140	< 62	< 23	< 25	< 2.5	< 5.0	< 25.16	< 13	< 13	< 13	< 13
Chlorobenzene	420	< 430	< 320	< 210	< 95	< 100	< 46	< 17	< 18	< 1.8	8	< 18.41	< 9.2	< 9.2	< 9.2	< 9.2
Chlorodifluoromethane	3,400	2,600	1,200	670	200	130	81	27	17	3	10	< -999	12	11	71	17.0
Chloroethane	20,000	16,000	9,500	6,000	2,300	1,300	820	170	66	13.0	61	50	55.0	53	120	66
Chloroform (Trichloromethane)	< 360	< 460	< 340	< 220	140	170	110	66	26	5.2	27.0	27.8	25.0	36.0	18	36
Chloromethane (Methyl chloride)	< 380	< 490	< 360	< 230	< 110	< 110	< 51	< 19	< 21	3.3	5	< 20.65	< 10	< 10	< 10	< 10
cis-1,2-Dichloroethene	6,900	8,600	7,600	6,100	4,200	3,400	2,300	950	310	73.0	330	222	210	240	180	200
cis-1,3-Dichloropropene	< 330	< 430	< 310	< 210	< 93	< 100	< 45	< 17	< 18	< 1.8	< 3.6	< 18.15	< 9.1	< 9.1	< 9.1	< 9.1
Cyclohexane	4,400	2,900	1,500	980	460	430	300	140	64	14	85	45	51	53	82	48
Dibromochloromethane	< 630	< 800	< 590	< 390	< 180	< 190	< 84	< 31	< 34	< 3.4	< 6.8	< 34.07	< 17	< 17	< 17	< 17
Dibromomethane	< 1000	< 1300	< 980	< 640	< 290	< 310	< 140	< 52	< 57	< 5.7	< 11	< -999	< 28	< 28	< 28	< 28

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	Blower Discharge 09/23/08 µg/m^3	Blower Discharge 09/25/08 µg/m^3	Blower Discharge 10/01/08 µg/m^3	Blower Discharge 10/07/08 µg/m^3	Blower Discharge 10/15/08 µg/m^3	Blower Discharge 10/30/08 µg/m^3	Blower Discharge 11/13/08 µg/m^3	Blower Discharge 04/24/09 µg/m^3	Blower Discharge 07/23/09 µg/m^3	Blower Discharge 10/20/09 µg/m^3	Blower Discharge 01/29/10 µg/m^3	Blower Discharge 04/22/10 µg/m^3	Blower Discharge 07/23/10 µg/m^3	Blower Discharge[1] 07/23/10 µg/m^3	Blower Discharge 10/22/10 µg/m^3	Blower Discharge 01/24/11 µg/m^3
Dichlorodifluoromethane (CFC-12)	2,800	2,300	1,700	1,700	650	700	1,200	300	180	28.0	57	109	120	110	840	280
Ethyl ether	< 2200	< 2900	< 2100	< 1400	< 620	660	340	200	< 120	16.0	120.0	< 121.26	< 61	74.0	< 61	< 61
Ethylbenzene	6,000	5,200	1,900	1,100	1,100	1,000	370	180	82	12.0	82	< 17.37	30	30	160	22
Hexachlorobutadiene	< 3900	< 5000	< 3700	< 2400	< 1100	< 1200	< 530	< 190	< 210	< 21	< 43	< 213.3	< 110	< 110	< 110	< 110
Hexane	2,300	1,400	660	< 400	230	< 190	120	57	< 35	8.6	33	< 35.25	32	31	110	35
Isopropyl benzene (Cumene)	< 720	< 930	< 680	< 450	< 200	< 220	< 97	< 36	< 39	< 3.9	10	< 39.33	< 20	< 20	< 20	< 20
m&p-Xylenes	10,000	9,500	4,600	2,800	2,900	3,000	1,000	740	370	43.0	280	65	94	150	350	63
Methyl tert butyl ether (MTBE)	< 1300	< 1700	< 1200	< 820	< 370	< 400	< 180	< 66	< 72	< 7.2	< 14	< 72.11	< 36	< 36	< 36	< 36
Methylene chloride	7,100	6,700	5,800	4,900	3,100	2,500	1,900	460	160	12.0	64	52	37	41	35	46
Naphthalene	< 970	< 1200	< 900	< 590	< 270	< 290	< 130	< 48	< 52	< 5.2	< 10	< 52.42	< 26	< 26	< 26	< 26
N-Decane	< 2100	< 2700	< 2000	< 1300	< 600	< 640	< 290	150	< 120	20.0	150	< 116.39	< 58	130	100	< 58
N-Dodecane	< 2600	< 3300	< 2400	< 1600	< 720	< 770	< 350	< 130	< 140	< 14	< 28	< 139.34	< 70	< 70	< 70	< 70
N-Heptane	5,400	3,400	1,400	770	500	630	330	430	140	25.0	110	66	67	110	130	26
Nonane	2,300	2,100	< 900	< 590	360	570	180	170	81	15.0	120	< 52.46	43	100	120	47
N-Propylbenzene	< 720	< 930	< 680	< 450	< 200	< 220	< 97	< 36	< 39	< 3.9	< 7.9	< 39.33	< 20	< 20	< 20	< 20
N-Undecane	< 2400	< 3000	< 2200	< 1400	< 660	< 710	< 320	< 120	< 130	< 13	27	< 127.86	< 64	< 64	< 64	< 64
Octane	1,900	1,500	< 640	< 420	320	290	140	62	< 37	5.8	43	< 37.38	< 19	29	53	< 19
o-Xylene	2,400	2,400	890	560	870	940	290	170	94	12.0	90	19	30	63	68	23
Pentane	< 1100	< 1400	< 1000	< 670	< 300	< 330	< 150	80	< 59	7.0	36	< 59.02	< 30	< 30	93	< 30
Styrene	< 310	< 400	< 290	< 190	< 88	< 94	< 42	< 15	< 17	< 1.7	< 3.4	< 17.04	< 8.5	< 8.5	< 8.5	< 8.5
Tetrachloroethene	3,000	3,700	2,500	2,100	1,900	1,800	1,000	760	320	49.0	300	176	190	310	190	190
Toluene	24,000	25,000	21,000	14,000	10,000	7,900	3,300	780	270	38.0	160	45	110	230	340	52
trans-1,2-Dichloroethene	< 290	< 370	< 270	< 180	87	< 88	< 39	< 14	< 16	< 1.6	< 3.2	< 15.86	< 7.9	< 7.9	< 7.9	< 7.9
trans-1,3-Dichloropropene	< 330	< 430	< 310	< 210	< 93	< 100	< 45	< 17	< 18	< 1.8	< 3.6	< 18.15	< 9.1	< 9.1	< 9.1	< 9.1
Trichloroethene	690	630	590	490	360	390	240	170	66	16.0	71	41	46	68	51	48
Trichlorofluoromethane (CFC-11)	450	710	810	880	410	430	720	250	150	29.0	92.0	101.1	150.0	100.0	220.0	140.0
Trifluorotrichloroethane (Freon 113)	< 560	< 720	< 530	< 350	< 160	< 170	< 76	< 28	< 31	< 3.1	< 6.1	< 30.65	< 15	< 15	< 15	< 15
Vinyl acetate	< 1300	< 1700	< 1200	< 800	< 360	< 390	< 170	< 64	< 70	< 7.0	< 14	< 70.42	< 35	< 35	< 35	< 35
Vinyl chloride	16,000	12,000	5,000	2,900	730	500	290	62	34	9.4	40.0	21.5	35.0	34.0	160.0	44.0
Total VOCs	**194,930**	**205,020**	**145,510**	**115,070**	**78,800**	**68,360**	**40,581**	**20,243**	**7,023**	**1,427**	**6,651**	**4,453**	**4,175**	**5,574**	**5,629**	**4,521**

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	Blower Discharge 04/29/11 µg/m^3	Blower Discharge 07/22/11 µg/m^3	Blower Discharge 10/26/11 µg/m^3	Blower Discharge 01/26/12 µg/m^3	Blower Discharge 04/27/12 µg/m^3	Blower Discharge 07/25/12 µg/m^3	Blower Discharge 10/30/12 µg/m^3	Blower Discharge 11/21/12 µg/m^3	Blower Discharge 12/21/12 µg/m^3	Blower Discharge 01/03/13 µg/m^3	Blower Discharge 04/26/13 µg/m^3	Blower Discharge 07/25/13 µg/m^3	Blower Discharge 10/23/13 µg/m^3	Blower Discharge 01/10/14 µg/m^3	Blower Discharge 05/13/14 µg/m^3	Blower Discharge 05/28/14 µg/m^3
1,1,1-Trichloroethane	940	870	650	760	790	940	350	330	400	420	15	300	200	290	1,000	440
1,1,2,2-Tetrachloroethane	< 14	< 2.7	< 14	< 14	< 14	< 14	< 2.7	< 14	< 14	< 14	< 1.4	< 14	< 14	< 5.5	< 25	< 7.0
1,1,2-Trichloroethane	< 11	4	< 11	< 11	< 11	< 11	< 2.2	< 11	< 11	< 11	< 1.1	< 11	< 11	< 4.4	< 20	< 5.5
1,1-Dichloroethane	550	450	370	350	370	550	190	220	330	290	12	180	120	200	1200	450
1,1-Dichloroethene	180	150	70	76	83	100	43	53	47	61	2.1	38	25	37	110	61
1,2,4-Trichlorobenzene	< 74	< 15	< 74	< 74	< 74	< 74	< 15	< 74	< 74	< 74	< 7.4	< 74	< 74	< 30	< 130	< 38
1,2,4-Trimethylbenzene	< 9.8	< 2.0	< 9.8	< 9.8	< 9.8	< 9.8	< 2.0	< 9.8	< 9.8	< 9.8	< 0.98	< 9.8	< 9.8	< 3.9	< 18	< 5.0
1,2-Dibromoethane (Ethylene dibromide)	< 15	< 3.1	< 15	< 15	< 15	< 15	< 3.1	< 15	< 15	< 15	< 1.5	< 15	< 15	< 6.1	< 28	< 7.8
1,2-Dichlorobenzene	< 12	< 2.4	< 12	< 12	< 12	< 12	< 2.4	< 12	< 12	< 12	< 1.2	< 12	< 12	< 4.8	< 22	< 6.1
1,2-Dichloroethane	< 8.1	1.9	< 8.1	< 8.1	< 8.1	< 8.1	< 1.6	< 8.1	< 8.1	< 8.1	< 0.81	< 8.1	< 8.1	< 3.2	< 15	< 4.1
1,2-Dichloropropane	< 9.2	4.9	< 9.2	< 9.2	< 9.2	< 9.2	< 1.8	< 9.2	< 9.2	< 9.2	< 0.92	< 9.2	< 9.2	< 3.7	< 17	< 4.7
1,2-Dichlorotetrafluoroethane (CFC 114)	16	17	< 14	64.0	< 14	58	16	19	170	19	< 1.4	< 14	19	20	110	19
1,3,5-Trimethylbenzene	< 9.8	< 2.0	< 9.8	< 9.8	< 9.8	< 9.8	< 2.0	< 9.8	< 9.8	< 9.8	< 0.98	< 9.8	< 9.8	< 3.9	< 18	< 5.0
1,3-Butadiene	< 8.8	< 1.8	< 8.8	< 8.8	< 8.8	< 8.8	< 1.8	< 8.8	< 8.8	< 8.8	< 0.88	< 8.8	< 8.8	< 3.5	< 16	< 4.5
1,3-Dichlorobenzene	< 12	< 2.4	< 12	< 12	< 12	< 12	< 2.4	< 12	< 12	< 12	< 1.2	< 12	< 12	< 4.8	< 22	< 6.1
1,4-Dichlorobenzene	< 12	< 2.4	14.0	< 12	< 12	< 12	4	< 12	< 12	13	< 1.2	< 12	< 12	5.5	< 22	< 6.1
2-Butanone (Methyl ethyl ketone) (MEK)	< 29	7.9	< 29	< 29	< 29	< 29	< 5.9	< 29	< 29	< 29	< 2.9	< 29	< 29	< 12	< 54	17
2-Hexanone	< 20	< 4.1	< 20	< 20	< 20	< 20	< 4.1	< 20	< 20	< 20	< 2.0	< 20	< 20	< 8.2	< 37	< 10
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	33.0	110.0	50.0	22.0	< 20	< 20	< 4.1	< 20	< 20	< 20	< 2.0	< 20	< 20	< 8.2	< 37	< 10
Acetone	< 120	31.0	< 120	< 120	< 120	< 120	< 24	< 120	140	< 120	< 12	< 120	< 120	< 48	< 220	< 60
Acetonitrile	< 17	< 3.4	< 17	< 17	< 17	< 17	< 3.4	< 17	< 17	< 17	< 1.7	< 17	< 17	< 6.7	< 31	< 8.5
Acrolein	< 18	< 3.7	< 18	< 18	< 18	< 18	< 3.7	< 18	< 18	< 18	< 1.8	< 18	< 23	< 9.2	< 42	< 12
Acrylonitrile	< 43	< 8.7	< 43	< 43	< 43	< 43	< 8.7	< 43	< 43	< 43	< 4.3	< 43	< 43	< 17	< 79	< 22
Allyl chloride (3-Chloropropene)	< 6.3	< 1.3	< 6.3	< 6.3	< 6.3	< 6.3	< 1.3	< 6.3	< 6.3	< 6.3	< 0.63	< 6.3	< 6.3	< 2.5	< 11	< 3.2
alpha-Methylstyrene	< 19	< 3.9	< 19	< 19	< 19	< 19	< 3.9	< 19	< 19	< 19	< 1.9	< 19	< 19	< 7.7	< 35	< 9.8
Benzene	< 6.4	1.4	< 6.4	< 6.4	< 6.4	< 6.4	1.3	< 6.4	7	< 6.4	1.8	< 6.4	< 6.4	< 2.6	< 12	< 3.2
Benzyl chloride	< 21	< 4.1	< 21	< 21	< 21	< 21	< 4.1	< 21	< 21	< 21	< 2.1	< 21	< 21	< 8.3	< 38	< 11
Bromodichloromethane	< 13	< 2.7	< 13	< 13	< 13	< 13	< 2.7	< 13	< 13	< 13	< 1.3	< 13	< 13	< 5.4	< 24	< 6.8
Bromoform	< 21	< 4.1	< 21	< 21	< 21	< 21	< 4.1	< 21	< 21	< 21	< 2.1	< 21	< 21	< 8.3	< 38	< 11
Bromomethane (Methyl bromide)	< 7.8	< 1.6	< 7.8	< 7.8	< 7.8	< 7.8	< 1.6	< 7.8	< 7.8	< 7.8	< 0.78	< 7.8	< 7.8	< 3.1	< 14	< 3.9
Butane	29	14	16	58	16	66	9	< 9.5	170	23	62	< 9.5	14	34	250	26
Carbon disulfide	< 16	5.8	< 16	< 16	< 16	< 16	< 3.1	< 16	< 16	< 16	< 1.6	< 16	< 16	< 6.2	< 28	< 7.9
Carbon tetrachloride	< 13	< 2.5	< 13	< 13	< 13	< 13	< 2.5	< 13	< 13	< 13	< 1.3	< 13	< 13	< 5.0	< 23	< 6.4
Chlorobenzene	< 9.2	2.9	< 9.2	< 9.2	< 9.2	< 9.2	2.5	< 9.2	< 9.2	< 9.2	< 0.92	< 9.2	< 9.2	< 3.7	< 17	< 4.7
Chlorodifluoromethane	18	14	20.0	36.0	13.0	27.0	6.1	< 7.1	71	20.0	6	< 7.1	10 J	29	210	56
Chloroethane	45	38	25	39	42	63.0	15.0	19.0	91	44.0	2.2	9.6	18	25	190	41
Chloroform (Trichloromethane)	25	25	20.00	17.00	19.00	33	13	13	13.0	16	< 0.98	17	11	13	36	28
Chloromethane (Methyl chloride)	< 10	3.1	< 10	< 10	< 10	< 10	< 2.1	< 10	< 10	< 10	1.3	< 10	< 10	< 4.1	< 19	< 5.2
cis-1,2-Dichloroethene	94	54	39.0	61	64	130	25.0	37	54	58	< 0.79	36	13	24	130	66
cis-1,3-Dichloropropene	< 9.1	< 1.8	< 9.1	< 9.1	< 9.1	< 9.1	< 1.8	< 9.1	< 9.1	< 9.1	< 0.91	< 9.1	< 9.1	< 3.6	< 17	< 4.6
Cyclohexane	23.0	17.0	20.0	34	28	36.0	14.0	21.0	51.0	29.0	2.4	< 17	< 17	25	110	20
Dibromochloromethane	< 17	< 3.4	< 17	< 17	< 17	< 17	< 3.4	< 17	< 17	< 17	< 1.7	< 17	< 17	< 6.8	< 31	< 8.7
Dibromomethane	< 28	< 5.7	< 28	< 28	< 28	< 28	< 5.7	< 28	< 28	< 28	< 2.8	< 28	< 28	< 11	< 52	< 14

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	Blower Discharge 04/29/11 µg/m^3	Blower Discharge 07/22/11 µg/m^3	Blower Discharge 10/26/11 µg/m^3	Blower Discharge 01/26/12 µg/m^3	Blower Discharge 04/27/12 µg/m^3	Blower Discharge 07/25/12 µg/m^3	Blower Discharge 10/30/12 µg/m^3	Blower Discharge 11/21/12 µg/m^3	Blower Discharge 12/21/12 µg/m^3	Blower Discharge 01/03/13 µg/m^3	Blower Discharge 04/26/13 µg/m^3	Blower Discharge 07/25/13 µg/m^3	Blower Discharge 10/23/13 µg/m^3	Blower Discharge 01/10/14 µg/m^3	Blower Discharge 05/13/14 µg/m^3	Blower Discharge 05/28/14 µg/m^3
Dichlorodifluoromethane (CFC-12)	100	35	86	200	100	160	48.0	330.0	580	110	6.8	37	60	97	370	74
Ethyl ether	< 61	32.0	< 61	< 61	< 61	< 61	< 12	< 61	< 61	< 61	< 6.1	< 61	< 61	< 24	< 110	< 31
Ethylbenzene	< 8.7	18.0	13.0	33	9.6	37	12	16	50	33	2	< 8.7	< 8.7	20	63	10
Hexachlorobutadiene	< 110	< 21	< 110	< 110	< 110	< 110	< 21	< 110	< 110	< 110	< 11	< 110	< 110	< 43	< 190	< 54
Hexane	< 18	12.0	< 18	30	< 18	32	9.4	< 18	51	23	11	< 18	< 18	22	88	14
Isopropyl benzene (Cumene)	< 20	< 3.9	< 20	< 20	< 20	< 20	< 3.9	< 20	< 20	< 20	< 2.0	< 20	< 20	< 7.9	< 36	< 10
m&p-Xylenes	27.0	48.0	25.0	57	16	75	21	23	70	74	5.7	< 8.7	< 8.7	31	88	27
Methyl tert butyl ether (MTBE)	< 36	< 7.2	< 36	< 36	< 36	< 36	< 7.2	< 36	< 36	< 36	< 3.6	< 36	< 36	< 14	< 66	< 18
Methylene chloride	34.0	28.0	22.0	< 17	18	21	9.7	23	< 17	< 17	75	< 17	< 17	< 6.9	< 32	9.6
Naphthalene	< 26	< 5.2	< 26	< 26	< 26	< 26	< 5.2	< 26	< 26	< 26	< 2.6	< 26	< 26	< 10	< 48	< 13
N-Decane	< 58	< 12	< 58	< 58	< 58	< 58	13	< 58	< 58	< 58	< 5.8	< 58	< 58	< 23	< 110	< 30
N-Dodecane	< 70	< 14	< 70	< 70	< 70	< 70	< 14	< 70	< 70	< 70	< 7.0	< 70	< 70	< 28	< 130	< 35
N-Heptane	< 20	5.4	< 20	25	31	28	6.5	< 20	63	21	2.9	< 20	< 20	14	180	11
Nonane	< 26	< 5.2	< 26	< 26	< 26	45	9.3	< 26	64	34	< 2.6	< 26	< 26	21	160	22
N-Propylbenzene	< 20	< 3.9	< 20	< 20	< 20	< 20	< 3.9	< 20	< 20	< 20	< 2.0	< 20	< 20	< 7.9	< 36	< 10
N-Undecane	< 64	< 13	< 64	< 64	< 64	< 64	< 13	< 64	< 64	< 64 J	< 6.4	< 64	< 64	< 26	< 120	< 32
Octane	< 19	4.1	< 19	< 19	< 19	< 19	< 3.7	< 19	31	< 19	< 1.9	< 19	< 19	9.1	53	< 9.5
o-Xylene	11.0	11.0	< 8.7	11	< 8.7	20	4.7	< 8.7	13	18	1.6	< 8.7	< 8.7	5.2	16	7.2
Pentane	41.0	16.0	< 30	38	< 30	< 30	6.1	< 30	79	< 30	37	< 30	< 30	16	110	< 15
Styrene	< 8.5	< 1.7	< 8.5	< 8.5	< 8.5	< 8.5	< 1.7	< 8.5	< 8.5	< 8.5	< 0.85	< 8.5	< 8.5	< 3.4	< 15	< 4.3
Tetrachloroethene	160.0	270.0	170.0	95	110	250	66	80	110	110	1.9	74	16	59	260	130
Toluene	17.0	11.0	< 7.5	27	16	36	2.6	< 7.5	34	17	12	< 7.5	< 7.5	3.7	43	14
trans-1,2-Dichloroethene	< 7.9	< 1.6	< 7.9	< 7.9	< 7.9	< 7.9	< 1.6	< 7.9	< 7.9	< 7.9	< 0.79	< 7.9	< 7.9	< 3.2	< 14	< 4.0
trans-1,3-Dichloropropene	< 9.1	< 1.8	< 9.1	< 9.1	< 9.1	< 9.1	< 1.8	< 9.1	< 9.1	< 9.1	< 0.91	< 9.1	< 9.1	< 3.6	< 17	< 4.6
Trichloroethene	30	23	17	12	13	27	25	< 11	15	14	< 1.1	< 11	< 11	8.3	40	20
Trichlorofluoromethane (CFC-11)	130.0	88.0	64.0	120.0	66.0	170.0	54.0	47.0	120.0	87.0	12.0	40.0	66.0	57	100	43
Trifluorotrichloroethane (Freon 113)	< 15	< 3.1	< 15	< 15	< 15	< 15	< 3.1	< 15	< 15	< 15	< 1.5	< 15	< 15	< 6.1	< 28	< 7.8
Vinyl acetate	< 35	< 7.0	< 35	< 35	< 35	< 35	< 7.0	< 35	< 35	< 35	< 3.5	< 35	< 35	< 14	< 64	< 18
Vinyl chloride	16.0	15.0	18.0	35.0	21.0	70.0	12.0	14.0	160.0	41.0	1.3	7.0	26.0	49	540	45
Total VOCs	**3,145**	**2,633**	**2,369**	**2,821**	**2,149**	**3,116**	**1,102**	**1,245.0**	**2,983.5**	**2,202**	**337.6**	**1,454.3**	**1,296.3**	**1,356**	**6,571**	**1,960**

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	Blower Discharge 07/31/14 µg/m^3	Blower Discharge 10/24/14 µg/m^3	Blower Discharge 01/21/15 µg/m^3	Blower Discharge 04/17/15 µg/m^3	Blower Discharge 07/31/15 µg/m^3	Blower Discharge 10/22/15 µg/m^3	Blower Discharge 03/22/16 µg/m^3	Blower Discharge 04/22/16 µg/m^3	Blower Discharge 07/27/16 µg/m^3	Blower Discharge 10/26/16 µg/m^3	Blower Discharge 02/14/17 µg/m^3	Blower Discharge 04/05/17 µg/m^3	Blower Discharge 07/24/17 µg/m^3
1,1,1-Trichloroethane	320	240	300	220	210	180	260	170	320	320	380	310	370
1,1,2,2-Tetrachloroethane	< 3.4	< 1.4	< 1.4	< 1.4	< 3.4	< 5.5	< 1.4	< 3.6	< 2.7	< 5.5	< 1.4	< 2.7	< 5.5
1,1,2-Trichloroethane	< 3.8	2.4	1.2	< 1.1	< 2.7	< 4.4	1.6	< 2.9	< 2.2	< 4.4	< 1.1	< 2.2	< 4.4
1,1-Dichloroethane	310	180	170	160	110	120	190	120	230	280	230	260	280
1,1-Dichloroethene	40	41	35	30	22	28	22	15	26	24	30	23	44
1,2,4-Trichlorobenzene	< 19	< 7.4	< 7.4	< 7.4	< 19	< 30	< 7.4	< 20	< 15	< 30	< 7.4	< 15	< 30
1,2,4-Trimethylbenzene	< 2.5	1.1	< 0.98	< 0.98	< 2.5	< 3.9	< 0.98	< 2.6	< 2.0	< 3.9	< 0.98	< 2.0	< 3.9
1,2-Dibromoethane (Ethylene dibromide)	< 3.8	< 1.5	< 1.5	< 1.5	< 3.8	< 6.1	< 1.5	< 4.0	< 3.1	< 6.1	< 1.5	< 3.1	< 6.1
1,2-Dichlorobenzene	< 3.0	< 1.2	< 1.2	< 1.2	< 3	< 4.8	< 1.2	< 3.2	< 2.4	< 4.8	< 1.2	< 2.4	< 4.8
1,2-Dichloroethane	< 2.0	< 0.81	< 0.81	< 0.81	< 2	< 3.2	< 0.81	< 2.1	< 1.6	< 3.2	< 0.81	< 1.6	< 3.2
1,2-Dichloropropane	2.4	2.2	1.7	1.4	< 2.3	< 3.7	1.5	< 2.4	< 1.8	< 3.7	1.9	< 1.8	< 3.7
1,2-Dichlorotetrafluoroethane (CFC 114)	93	9.1	7.4	11	6.7	29	29	12	24	80	19	60	47
1,3,5-Trimethylbenzene	< 2.5	0.96	< 0.98	< 0.98	< 2.5	< 3.9	< 0.98	< 2.6	< 2.0	< 3.9	< 0.98	< 2.0	< 3.9
1,3-Butadiene	< 2.2	< 0.88	< 0.88	< 0.88	< 2.2	< 3.5	< 0.88	< 2.3	< 1.8	< 3.5	< 0.88	< 1.8	< 3.5
1,3-Dichlorobenzene	< 3	< 1.2	< 1.2	< 1.2	< 3	< 4.8	< 1.2	< 3.2	< 2.4	< 4.8	< 1.2	< 2.4	< 4.8
1,4-Dichlorobenzene	< 3	2.8	4.6	< 1.2	< 3	< 4.8	< 1.2	< 3.2	2.8	< 4.8	1.2	< 2.4	< 4.8
2-Butanone (Methyl ethyl ketone) (MEK)	9.8	< 2.9	< 2.9	17	< 7.4	< 12	10	< 7.8	< 5.9	< 12	4	7.8	< 12
2-Hexanone	< 5.1	< 2	< 2	< 2	< 5.1	< 8.2	< 2.0	< 5.4	< 4.1	< 8.2	< 2.0	< 4.1	< 8.2
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	5.11	< 2	< 2	< 2	< 5.1	< 8.2	4.6	6.4	< 4.1	24	< 2.0	< 4.1	< 8.2
Acetone	57	< 12	< 12	< 12	< 30	< 48	< 12	< 31	24	< 48	< 12	25	< 48
Acetonitrile	< 4.2	< 1.7	< 1.7	< 1.7	< 4.2	< 6.7	< 1.7	< 4.4	< 3.4	< 6.7	< 1.7	< 3.4	< 6.7
Acrolein	< 5.7	< 2.3	< 2.3	4.1	< 5.7	< 9.2	< 2.3	< 6.0	< 4.6	< 9.2	< 2.3	< 4.6	< 9.2
Acrylonitrile	< 11	< 4.3	< 4.3	< 4.3	< 11	< 17	< 4.3	< 11	< 8.7	< 17	< 4.3	< 8.7	< 17
Allyl chloride (3-Chloropropene)	< 1.6	< 0.63	< 0.63	< 0.63	< 1.6	< 2.5	< 0.63	< 1.6	< 1.3	< 2.5	< 0.63	< 1.3	< 2.5
alpha-Methylstyrene	< 4.8	< 1.9	< 1.9	< 1.9	< 4.8	< 7.7	< 1.9	< 5.1	< 3.9	< 7.7	< 1.9	< 3.9	< 7.7
Benzene	2.7	1.1	0.99	1	< 1.6	< 2.6	1.2	< 1.7	1.6	4.9	1.6	3.8	< 2.6
Benzyl chloride	< 5.2	< 2.1	< 2.1	< 2.1	< 5.2	< 8.3	< 2.1	< 5.5	< 4.1	< 8.3	< 2.1	< 4.1	< 8.3
Bromodichloromethane	< 3.4	< 1.3	< 1.3	< 1.3	< 3.4	< 5.4	< 1.3	< 3.5	< 2.7	< 5.4	< 1.3	< 2.7	< 5.4
Bromoform	< 5.2	< 2.1	< 2.1	< 2.1	< 5.2	< 8.3	< 2.1	< 5.4	< 4.1	< 8.3	< 2.1	< 4.1	< 8.3
Bromomethane (Methyl bromide)	< 1.9	< 0.78	< 0.78	< 0.78	< 1.9	< 5.4	< 0.78	< 2.0	< 1.6	< 3.1	< 0.78	< 1.6	< 3.1
Butane	43	7.6	4.9	11	4.9	6.9	33	12	32	110	13	100	24
Carbon disulfide	< 3.9	< 1.6	< 1.6	< 1.6	< 3.9	< 6.2	< 1.6	< 4.1	< 3.1	< 6.2	< 1.6	< 3.1	< 6.2
Carbon tetrachloride	< 3.1	< 1.3	< 1.3	< 1.3	< 3.1	< 5.0	< 1.3	< 3.3	< 2.5	< 5.0	< 1.3	< 2.5	< 5.0
Chlorobenzene	2.8	1.9	1.5	< 0.92	< 2.3	< 3.7	< 0.92	< 2.4	2.8	4.6	1.1	2.4	5
Chlorodifluoromethane	50	5.6	5.5	3.4	2.4	3.8	18	11	22	62	14	44	30
Chloroethane	56	23	15	9.6	11	11	11	11	25	59	17	53	38
Chloroform (Trichloromethane)	22	23	20	17	14	14	25	15	25	22	32	17	44
Chloromethane (Methyl chloride)	< 2.6	2.2	< 1	1.3	< 2.6	< 4.1	< 1.0	< 2.7	< 2.1	< 4.1	< 1.0	< 2.1	< 4.1
cis-1,2-Dichloroethene	34	30	12	9.4	9.5	11	32	15	22	47	26	33	60
cis-1,3-Dichloropropene	< 2.3	< 0.91	< 0.91	< 0.91	< 2.3	< 3.6	< 0.91	< 2.4	< 1.8	< 3.6	< 0.91	< 1.8	< 3.6
Cyclohexane	31	13	10	8.8	< 4.3	< 6.9	12	5.6	14	31	11	23	11
Dibromochloromethane	< 4.3	< 1.7	< 1.7	< 1.7	< 4.3	< 6.8	< 1.7	< 4.5	< 3.4	< 6.8	< 1.7	< 3.4	< 6.8
Dibromomethane	< 7.1	< 2.8	< 2.8	< 2.8	< 7.1	< 11	< 2.8	< 7.5	< 5.7	< 11	< 2.8	< 5.7	< 11

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	Blower Discharge 07/31/14 µg/m^3	Blower Discharge 10/24/14 µg/m^3	Blower Discharge 01/21/15 µg/m^3	Blower Discharge 04/17/15 µg/m^3	Blower Discharge 07/31/15 µg/m^3	Blower Discharge 10/22/15 µg/m^3	Blower Discharge 03/22/16 µg/m^3	Blower Discharge 04/22/16 µg/m^3	Blower Discharge 07/27/16 µg/m^3	Blower Discharge 10/26/16 µg/m^3	Blower Discharge 02/14/17 µg/m^3	Blower Discharge 04/05/17 µg/m^3	Blower Discharge 07/24/17 µg/m^3
Dichlorodifluoromethane (CFC-12)	49	37	41	54	30	45	76	42	78	190	53	180	90
Ethyl ether	< 15	6.8	< 6.1	< 6.1	< 15	< 24	< 6.1	< 16	< 12	< 24	< 6.1	< 12	< 24
Ethylbenzene	11	9.8	5.5	6.2	4.1	< 3.5	2.7	< 2.3	3.6	7.6	1.5	3.4	3.6
Hexachlorobutadiene	< 27	< 11	< 11	< 11	< 27	< 43	< 11	< 28	< 21	< 43	< 11	< 21	< 43
Hexane	40	7.9	4.6	5	< 4.4	< 7.0	7.6	< 4.6	11	31	8.3	21	10
Isopropyl benzene (Cumene)	< 4.9	2	< 2	< 2	< 4.9	< 7.9	< 2.0	< 5.2	< 3.9	< 7.9	< 2.0	< 3.9	< 7.9
m&p-Xylenes	17	10	7.7	7.5	5.3	< 3.5	2.9	< 2.3	4.6	11	1.9	4.7	3.6
Methyl tert butyl ether (MTBE)	< 9	< 3.8	< 3.6	< 3.6	< 9	< 14	< 3.6	< 9.5	< 7.2	< 14	< 3.6	< 7.2	< 14
Methylene chloride	11	5.8	4.7	2.9	4.4	7.1	2.6	< 4.6	< 3.5	31	< 1.7	< 3.5	8.8
Naphthalene	< 6.6	< 2.6	< 2.6	< 2.6	< 6.6	< 10	6.5	< 15	< 12	< 23	< 5.8	< 12	< 23
N-Decane	< 15	12	14	11	< 15	< 23	< 7.0	< 18	< 14	< 28	< 7.0	< 14	< 28
N-Dodecane	< 17	< 7	< 7	< 7	< 17	< 28	3.4	< 5.4	< 4.1	13	4.8	9.9	< 8.2
N-Heptane	19	4.7	5.1	15	< 5.1	< 8.2	< 2.0	< 5.2	< 3.9	< 7.9	< 2.0	< 3.9	< 7.9
Nonane	12	11	12	11	< 6.6	< 10	< 6.4	< 17	< 13	< 26	< 6.4	< 13	< 26
N-Propylbenzene	< 4.9	< 2	< 2	< 2	< 4.9	< 7.9	< 2.6	< 6.9	< 5.2	< 10	< 2.6	< 5.2	< 10
N-Undecane	< 16	< 6.4	< 6.4	< 6.4	< 16	< 26	3.7	< 6.9	< 5.2	12	6.5	10	< 10
Octane	8.5	2.9	3.7	4.5	< 4.7	< 7.5	1.1	< 2.3	< 1.7	< 3.5	< 0.87	< 1.7	< 3.5
o-Xylene	3.6	3.9	2.7	1.6	< 2.2	< 3.5	< 1.9	< 4.9	< 3.7	< 7.5	2.9	3.7	< 7.5
Pentane	65	4.6	< 3	6	< 7.4	< 12	15	< 7.8	12	42	10	39	< 12
Styrene	< 2.1	< 0.85	< 0.85	< 0.85	< 2.1	< 3.4	< 0.85	< 2.2	< 1.7	< 3.4	< 0.85	< 1.7	< 3.4
Tetrachloroethene	140	84	81	56	55	70	95	47	89	110	95	120	130
Toluene	10	2	0.97	2.3	3.9	< 3.0	1.3	< 2.0	< 1.5	4.7	< 0.75	< 1.5	< 3.0
trans-1,2-Dichloroethene	< 2	< 0.79	< 0.79	< 0.79	< 2	< 3.2	< 0.79	< 2.1	< 1.6	< 3.2	< 0.79	< 1.6	< 3.2
trans-1,3-Dichloropropene	< 2.3	< 0.91	< 0.91	< 0.91	< 2.3	< 3.6	< 0.91	< 2.4	< 1.8	< 3.6	< 0.91	< 1.8	< 3.6
Trichloroethene	22	9.4	6.9	6.1	4.6	5.9	9.2	5.9	9.8	13	6.7	8.6	14
Trichlorofluoromethane (CFC-11)	110	43	43	53	42	42	77	100	140	130	54	110	100
Trifluorotrichloroethane (Freon 113)	< 3.8	< 1.5	< 1.5	< 1.5	< 3.8	< 6.1	< 1.5	< 4.0	< 3.1	< 6.1	< 1.5	< 3.1	< 6.1
Vinyl acetate	< 8.8	< 3.5	< 3.5	< 3.5	< 8.8	< 14	< 3.5	< 9.3	< 7.0	< 14	< 3.5	< 7.0	< 14
Vinyl chloride	74	29	19	11	8.8	19	40	22	42	130	34	150	53
Total VOCs	**1,798**	**922**	**898**	**812**	**717**	**867**	**1,049**	**787**	**1,277**	**2,032**	**1,119**	**1,730**	**1,626**

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	Blower Discharge 10/30/17 µg/m^3	Blower Discharge 01/24/18 µg/m^3	Blower Discharge 05/22/18 µg/m^3	Blower Discharge 07/31/18 µg/m^3	Blower Discharge 11/16/18 µg/m^3	Blower Discharge 01/23/19 µg/m^3	Blower Discharge 04/26/19 µg/m^3	Blower Discharge 08/29/19 µg/m^3	Blower Discharge 10/31/19 µg/m^3	Blower Discharge 04/16/20 µg/m^3	Blower Discharge 06/23/20 µg/m^3	Blower Discharge 08/17/20 µg/m^3	Blower Discharge 11/05/20 µg/m^3	Blower Discharge 02/19/21 µg/m^3	Blower Discharge 04/22/21 µg/m^3
1,1,1-Trichloroethane	330	100	260	400	510	340	340	250	430	350	180	250	260	35	300
1,1,2,2-Tetrachloroethane	< 14	< 14	< 14	< 6.9	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 14	< 1.4
1,1,2-Trichloroethane	< 11	< 11	< 11	< 5.5	< 11	< 11	< 11	< 11	< 11	< 11	< 11	< 11	< 11	< 11	< 1.1
1,1-Dichloroethane	280	58	250	280	450	260	230	170	350	280	120	180	190	22	240
1,1-Dichloroethene	33	< 7.9	30	48	54	38	38	33	66	54	26	28	33	< 7.9	46
1,2,4-Trichlorobenzene	< 74	< 74	< 74	< 37	< 74	< 74	< 74	< 74	< 74	< 74	< 74	< 74	< 74	< 74	< 7.4
1,2,4-Trimethylbenzene	< 9.8	< 9.8	< 9.8	< 4.9	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 0.98
1,2-Dibromoethane (Ethylene dibromide)	< 15	< 15	< 15	< 7.7	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 1.5
1,2-Dichlorobenzene	< 12	< 12	< 12	< 6.0	< 24	< 24	< 24	< 24	< 24	< 24	< 24	< 24	< 24	< 24	< 2.4
1,2-Dichloroethane	< 8.1	< 8.1	< 8.1	< 4.0	< 8.1	< 8.1	< 8.1	< 8.1	< 8.1	< 8.1	< 8.1	< 8.1	< 8.1	< 8.1	< 0.81
1,2-Dichloropropane	< 9.2	< 9.2	< 9.2	< 4.6	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	2.2
1,2-Dichlorotetrafluoroethane (CFC 114)	62	76	28	23	60	33	39	15	25	17	< 14	19	36	24	12
1,3,5-Trimethylbenzene	< 9.8	< 9.8	< 9.8	< 4.9	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 0.98
1,3-Butadiene	< 8.8	< 8.8	< 8.8	< 4.4	< 8.8	< 8.8	< 8.8	< 8.8	< 8.8	< 8.8	< 8.8	< 8.8	< 8.8	< 8.8	< 0.88
1,3-Dichlorobenzene	< 12	< 12	< 12	< 6.0	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 1.2
1,4-Dichlorobenzene	< 12	< 12	< 12	< 6.0	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 1.2
2-Butanone (Methyl ethyl ketone) (MEK)	< 29	31	< 29	< 15	< 29	< 29	< 29	< 29	< 29	< 29	< 29	< 29	< 29	< 29	< 2.9
2-Hexanone	< 20	< 20	< 20	< 10	< 16	< 16	< 16	< 16	< 16	< 16	< 16	< 16	< 16	< 16	< 1.6
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	< 20	< 20	< 20	< 10	< 41	< 41	< 41	< 41	< 41	< 41	< 41	< 41	< 41	< 41	< 4.1
Acetone	< 120	170	< 120	< 59	< 180	< 180	< 180	< 180	< 180	< 180	< 180	< 180	< 180	< 180	< 18
Acetonitrile	< 17	< 17	< 17	< 8.4	< 17	< 17	< 17	< 17	< 17	< 17	< 17	< 17	< 17	< 17	< 1.7
Acrolein	< 23	< 23	< 23	< 11	< 23	< 23	< 23	< 23	< 23	< 23	< 23	< 23	< 23	< 23	< 2.3
Acrylonitrile	< 43	< 43	< 43	< 22	< 43	< 43	< 43	< 43	< 43	< 43	< 43	< 43	< 43	< 43	< 4.3
Allyl chloride (3-Chloropropene)	< 6.3	< 6.3	< 6.3	< 3.1	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 0.63
alpha-Methylstyrene	< 19	< 19	< 19	< 9.7	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 1.9
Benzene	< 6.4	< 6.4	< 6.4	3.3	6.3	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	1.8
Benzyl chloride	< 21	< 21	< 21	< 10	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 2.1
Bromodichloromethane	< 13	< 13	< 13	< 6.7	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 1.3
Bromoform	< 21	< 21	< 21	< 10	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 2.1
Bromomethane (Methyl bromide)	< 7.8	< 7.8	< 7.8	< 3.9	< 7.8	< 7.8	< 7.8	< 7.8	< 7.8	< 7.8	< 7.8	< 7.8	< 7.8	< 7.8	< 0.78
Butane	69	70	27	23	75	49	28	< 24	< 24	< 24	< 24	< 24	< 24	< 24	13
Carbon disulfide	< 16	< 16	< 16	< 7.8	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 12	< 1.2
Carbon tetrachloride	< 13	< 13	< 13	< 6.3	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 13	< 1.3
Chlorobenzene	< 9.2	< 9.2	< 9.2	< 4.6	13	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	3.2
Chlorodifluoromethane	49	22	21	21	59	29	35	10	19	15 J	< 7.1	9.3	22	8.3	12
Chloroethane	48	6.5	61	56	100	58	44	18	34	41	17	21	31	6.7	33
Chloroform (Trichloromethane)	33	< 9.8	30	42	48	38	40	35	66	51	29	36	33	< 9.8	44
Chloromethane (Methyl chloride)	< 10	< 10	< 10	< 5.2	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 2.1
cis-1,2-Dichloroethene	35	< 7.9	14	14	32	18	21	20	39	35	13	22	25	< 7.9	12
cis-1,3-Dichloropropene	< 9.1	< 9.1	< 9.1	< 4.5	< 18	< 18	< 18	< 18	< 18	< 18	< 18	< 18	< 18	< 18	< 1.8
Cyclohexane	23	< 17	24	17	34	< 14	15	< 14	< 14	< 14	< 14	< 14	18	< 14	7.4
Dibromochloromethane	< 17	< 17	< 17	< 8.5	< 17	< 17	< 17	< 17	< 17	< 17	< 17	< 17	< 17	< 17	< 1.7
Dibromomethane	< 28	< 28	< 28	< 14	< 28	< 28	< 28	< 28	< 28	< 28	< 28	< 28	< 28	< 28	< 2.8

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	Blower Discharge 10/30/17 µg/m^3	Blower Discharge 01/24/18 µg/m^3	Blower Discharge 05/22/18 µg/m^3	Blower Discharge 07/31/18 µg/m^3	Blower Discharge 11/16/18 µg/m^3	Blower Discharge 01/23/19 µg/m^3	Blower Discharge 04/26/19 µg/m^3	Blower Discharge 08/29/19 µg/m^3	Blower Discharge 10/31/19 µg/m^3	Blower Discharge 04/16/20 µg/m^3	Blower Discharge 06/23/20 µg/m^3	Blower Discharge 08/17/20 µg/m^3	Blower Discharge 11/05/20 µg/m^3	Blower Discharge 02/19/21 µg/m^3	Blower Discharge 04/22/21 µg/m^3
Dichlorodifluoromethane (CFC-12)	280	150	160	89	240	130	150	60	94	59	33	68	37	34	31
Ethyl ether	< 61	< 61	< 61	< 30	< 61	< 61	< 61	< 61	< 61	< 61	< 61	< 61	< 61	< 61	< 6.1
Ethylbenzene	< 8.7	< 8.7	< 8.7	< 4.3	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 0.87
Hexachlorobutadiene	< 110	< 110	< 110	< 53	< 110	< 110	< 110	< 110	< 110	< 110	< 110	< 110	< 110	< 110	< 11
Hexane	27	< 18	19	14	38	17	16	< 14	< 14	< 14	< 14	< 14	20	< 14	4.0
Isopropyl benzene (Cumene)	< 20	< 20	< 20	< 9.8	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 2.0
m&p-Xylenes	9.1	< 8.7	< 8.7	< 4.3	9.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	13	< 8.7	2.4
Methyl tert butyl ether (MTBE)	< 36	< 36	< 36	< 18	< 36	< 36	< 36	< 36	< 36	< 36	< 36	< 36	< 36	< 36	< 3.6
Methylene chloride	< 17	< 17	< 17	10	< 35	< 35	< 35	< 35	< 35	< 35	< 35	< 35	< 35	< 35	7.4
Naphthalene	< 58	< 58	< 58	< 29	< 58	< 58	< 58	< 58	< 58	< 58	< 58	< 58	< 58	< 58	< 5.8
N-Decane	< 70	< 70	< 70	35J	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 70	< 7.0
N-Dodecane	< 20	< 20	22	11	28	< 16	< 16	< 16	< 16	< 16	< 16	< 16	< 16	< 16	5.2
N-Heptane	< 20	< 20	< 20	< 9.8	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 20	< 2.0
Nonane	< 64	< 64	< 64	< 32	< 64	< 64	< 64	< 64	< 64	< 64	< 64	< 64	< 64	< 64	< 6.4
N-Propylbenzene	< 26	< 26	< 26	< 13	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 2.1
N-Undecane	< 26	< 26	< 26	< 13	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	< 21	2.3
Octane	< 8.7	< 8.7	< 8.7	< 4.3	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 0.87
o-Xylene	< 19	< 19	< 19	< 9.3	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 19	< 1.9
Pentane	< 30	< 30	< 30	< 15	< 74	< 74	< 74	< 74	< 74	< 74	< 74	< 74	< 74	< 74	< 7.4
Styrene	< 8.5	< 8.5	< 8.5	< 4.3	< 8.5	< 8.5	< 8.5	< 8.5	< 8.5	< 8.5	< 8.5	< 8.5	< 8.5	< 8.5	< 0.85
Tetrachloroethene	120	34	95	110	150	94	90	97	150	93	62	67	92	20	100
Toluene	< 7.5	< 7.5	< 7.5	< 3.8	< 38	< 38	< 38	< 38	< 38	< 38	< 38	< 38	< 38	< 38	< 3.8
trans-1,2-Dichloroethene	< 7.9	< 7.9	< 7.9	< 4.0	< 7.9	< 7.9	< 7.9	< 7.9	< 7.9	< 7.9	< 7.9	< 7.9	< 7.9	< 7.9	< 0.79
trans-1,3-Dichloropropene	< 9.1	< 9.1	< 9.1	< 4.5	< 9.1	< 9.1	< 9.1	< 9.1	< 9.1	< 9.1	< 9.1	< 9.1	< 9.1	< 9.1	< 0.91
Trichloroethene	13	< 11	12	11	15	< 11	< 11	< 11	13	< 11	< 11	< 11	< 11	< 11	10
Trichlorofluoromethane (CFC-11)	140	51	120	78	140	100	86	90	110	62	47	68	95	26	82
Trifluorotrichloroethane (Freon 113)	< 15	< 15	< 15	< 7.7	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 15	< 1.5
Vinyl acetate	< 35	< 35	< 35	< 18	< 35	< 35	< 35	< 35	< 35	< 35	< 35	< 35	< 35	< 35	< 3.5
Vinyl chloride	84	16	54	55	160	73	71	17	67	45	< 10	16	32	< 10	38
Total VOCs	**2,306**	**1,421**	**1,892**	**1,613**	**2,969**	**2,057**	**2,016**	**1,614**	**2,256**	**1,901**	**1,341**	**1,583**	**1,717**	**992**	**1,080**

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	Blower Discharge 08/12/21 µg/m^3	Blower Discharge 4/28/2022 µg/m^3	Blower Discharge 10/27/2022 µg/m^3	Blower Discharge 3/20/2023 µg/m^3	Blower Discharge 6/22/2023 µg/m^3	Blower Discharge 12/21/2023 µg/m^3	SVE-1 04/27/12 µg/m^3	SVE-2 04/22/10 µg/m^3	SVE-2 04/26/13 µg/m^3	SVE-2 10/23/13 µg/m^3	SVE-3 04/27/12 µg/m^3	SVE-3 10/30/12 µg/m^3	SVE-3 04/26/13 µg/m^3	SVE-3 10/23/13 µg/m^3	SVE-3 10/24/14 µg/m^3	SVE-3 10/30/17 µg/m^3
1,1,1-Trichloroethane	230	250	190	190.0	130.0	160.0	44.0	546	670	210	2100	2100	1200	1300	430	160
1,1,2,2-Tetrachloroethane	< 1.4	< 4.7	< 2.8	< 5.5	< 2.4	< 14	< 14	< 13.73	< 14	< 14	< 14	< 14	< 14	< 14	< 1.4	< 14
1,1,2-Trichloroethane	< 1.1	< 3.8	< 2.3	< 4.4	< 1.9	< 11	< 11	< 10.91	< 11	< 11	< 11	< 11	< 11	< 11	< 1.5	< 11
1,1-Dichloroethane	140	130	110	110.0	77.0	130.0	35.0	567	580	220	690	650	450	340	150	91
1,1-Dichloroethene	30	33	27	26.0	22.0	16.0	< 7.9	83.3	50	18	610.0	520.0	310	260	95	12
1,2,4-Trichlorobenzene	< 7.4	< 26	< 15	< 30	< 13	< 74	< 74	< 74.21	< 74	< 74	< 74	< 74	< 74	< 74	< 7.4	< 74
1,2,4-Trimethylbenzene	< 0.98	< 3.4	2.9	< 3.9	< 1.7	< 9.8	< 9.8	< 9.83	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 0.98	< 9.8
1,2-Dibromoethane (Ethylene dibromide)	< 1.5	< 5.3	< 3.2	< 6.1	< 2.7	< 15	< 15	< 15.37	< 15	< 15	< 15	< 15	< 15	< 15	< 1.5	< 15
1,2-Dichlorobenzene	< 2.4	< 8.3	< 5.0	< 9.6	< 4.2	< 24	< 12	< 12.02	< 12	< 12	< 12	< 12	< 12	< 12	< 1.2	< 12
1,2-Dichloroethane	< 0.81	< 2.8	< 1.7	< 3.2	< 1.4	< 8.1	< 8.1	< 8.09	< 8.1	< 8.1	< 8.1	< 8.1	< 8.1	< 8.1	< 0.81	< 8.1
1,2-Dichloropropane	1.2	< 3.2	< 1.9	< 3.7	< 1.6	< 9.2	< 9.2	< 9.24	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	0.97	< 9.2
1,2-Dichlorotetrafluoroethane (CFC 114)	12	26	16	20.0	7.1	19.0	< 14	26	82	< 14	< 14	< 14	< 14	< 14	3.1	94
1,3,5-Trimethylbenzene	< 0.98	< 6.8	< 4.1	< 7.9	< 3.5	< 20	< 9.8	< 9.83	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 9.8	< 0.98	< 9.8
1,3-Butadiene	< 0.88	< 3.0	< 1.8	< 3.5	< 1.6	< 8.8	< 8.8	< 8.85	< 8.8	< 8.8	< 8.8	< 8.8	< 8.8	< 8.8	< 0.88	< 8.8
1,3-Dichlorobenzene	< 1.2	< 4.1	< 2.5	< 4.8	< 2.1	< 12	< 12	< 12.02	< 12	< 12	< 12	< 12	< 12	< 12	< 1.2	< 12
1,4-Dichlorobenzene	< 1.2	< 4.1	< 2.5	< 4.8	< 2.1	< 12	< 12	< 12.02	< 12	< 12	< 12	< 12	< 12	< 12	< 1.2	< 12
2-Butanone (Methyl ethyl ketone) (MEK)	12	< 10	< 6.1	< 12	15.0	< 29	< 29	< 29.49	< 29	< 29	< 29	< 29	< 29	< 29	< 2.9	< 29
2-Hexanone	< 1.6	< 7.1	< 4.2	< 8.2	< 3.6	< 20	< 20	< 20.48	< 20	< 20	< 20	< 20	< 20	< 20	< 2	< 20
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	< 4.1	< 14	< 8.5	< 16	< 7.2	< 41	< 20	< 20.48	< 20	< 20	< 20	< 20	< 20	< 20	< 2	< 20
Acetone	23	< 61	< 37	< 71	42.0	< 180	< 120	< 118.77	< 120	< 120	< 120	< 120	< 120	< 120	< 12	< 120
Acetonitrile	< 1.7	< 5.8	< 3.5	< 6.7	< 3.0	< 17	< 17	< 16.79	< 17	< 17	< 17	< 17	< 17	< 17	< 1.7	< 17
Acrolein	< 2.3	< 7.9	< 4.7	< 9.2	< 4.0	< 23	< 18	< 18.34	< 18	< 23	< 18	< 18	< 18	< 23	< 2.3	< 23
Acrylonitrile	< 4.3	< 15	< 9.0	< 17	< 7.6	< 43	< 43	< 43.4	< 43	< 43	< 43	< 43	< 43	< 43	< 4.3	< 43
Allyl chloride (3-Chloropropene)	< 0.63	< 2.2	< 1.3	< 2.5	< 1.1	< 6.3	< 6.3	< 6.26	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 6.3	< 0.63	< 6.3
alpha-Methylstyrene	< 1.9	< 6.7	< 4.0	< 7.7	< 3.4	< 19	< 19	< -999	< 19	< 19	< 19	< 19	< 19	< 19	< 1.9	< 19
Benzene	0.87	4	3	< 2.6	7.0	< 6.4	< 6.4	< 6.39	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 6.4	< 0.64	< 6.4
Benzyl chloride	< 2.1	< 7.1	< 4.3	< 8.3	< 3.6	< 21	< 21	< 20.71	< 21	< 21	< 21	< 21	< 21	< 21	< 2.1	< 21
Bromodichloromethane	< 1.3	< 4.6	< 2.8	< 5.4	< 2.4	< 13	< 13	< 13.4	< 13	< 13	< 13	< 13	< 13	< 13	< 1.3	< 13
Bromoform	< 2.1	< 7.1	< 4.3	< 8.3	< 3.6	< 21	< 21	< 20.67	< 21	< 21	< 21	< 21	< 21	< 21	< 2.1	< 21
Bromomethane (Methyl bromide)	< 0.78	< 2.7	< 1.6	< 3.1	< 1.4	< 7.8	< 7.8	< 7.77	< 7.8	< 7.8	< 7.8	< 7.8	< 7.8	< 7.8	< 0.78	< 7.8
Butane	24	18	9.6	< 9.5	< 4.2	< 24	< 9.5	22.8	40	10	< 9.5	< 9.5	< 9.5	< 9.5	1.2	< 9.5
Carbon disulfide	< 1.2	< 4.3	< 2.6	< 5.0	< 2.2	< 12	< 16	< 15.57	< 16	< 16	< 16	< 16	< 16	< 16	< 1.6	< 16
Carbon tetrachloride	1.3	9.3	< 2.6	< 5.0	< 2.2	< 13	< 13	< 12.58	< 13	< 13	< 13	< 13	< 13	< 13	< 1.3	< 13
Chlorobenzene	< 0.92	< 3.2	< 1.9	< 3.7	< 1.6	< 9.2	< 9.2	< 9.21	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	< 9.2	< 0.92	< 9.2
Chlorodifluoromethane	8.4	24	12	6.4	3.1	21.0	< 7.1	7.1	27	< 7.1	< 7.1	< 7.1	< 7.1	< 7.1	3	< 7.1
Chloroethane	10	23	15	6.6	16.0	22.0	8.5	60.7	34	12	27.0	22.0	12	9.7	11	< 5.3
Chloroform (Trichloromethane)	26	38	22	29.0	21.0	21.0	< 9.8	< 9.77	< 9.8	< 9.8	37.0	43.0	31	31	15	< 9.8
Chloromethane (Methyl chloride)	< 2.1	< 7.1	< 4.3	< 8.3	< 3.6	< 21	< 10	< 10.33	< 10	< 10	< 10	< 10	< 10	< 10	< 1	< 10
cis-1,2-Dichloroethene	4.0	5.6	11.0	6.3	10.0	< 7.9	< 7.9	28.2	13	< 7.9	22.0	22.0	14	< 7.9	14	< 7.9
cis-1,3-Dichloropropene	< 1.8	< 6.3	< 3.8	< 7.3	< 3.2	< 18	< 9.1	< 9.08	< 9.1	< 9.1	< 9.1	< 9.1	< 9.1	< 9.1	< 0.91	< 9.1
Cyclohexane	4.4	11	7	< 5.5	< 2.4	< 14	< 17	< 17.21	46	< 17	< 17	< 17	< 17	< 17	1.8	< 17
Dibromochloromethane	< 1.7	< 5.9	< 3.5	< 6.8	< 3.0	< 17	< 17	< 17.04	< 17	< 17	< 17	< 17	< 17	< 17	< 1.7	< 17
Dibromomethane	< 2.8	< 9.8	< 5.9	< 11	< 5.0	< 28	< 28	< 28	< 28	< 28	< 28	< 28	< 28	< 28	< 2.8	< 28

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	Blower Discharge 08/12/21 µg/m^3	Blower Discharge 4/28/2022 µg/m^3	Blower Discharge 10/27/2022 µg/m^3	Blower Discharge 3/20/2023 µg/m^3	Blower Discharge 6/22/2023 µg/m^3	Blower Discharge 12/21/2023 µg/m^3	SVE-1 04/27/12 µg/m^3	SVE-2 04/22/10 µg/m^3	SVE-2 04/26/13 µg/m^3	SVE-2 10/23/13 µg/m^3	SVE-3 04/27/12 µg/m^3	SVE-3 10/30/12 µg/m^3	SVE-3 04/26/13 µg/m^3	SVE-3 10/23/13 µg/m^3	SVE-3 10/24/14 µg/m^3	SVE-3 10/30/17 µg/m^3
Dichlorodifluoromethane (CFC-12)	53	71	54	83.0	22.0	79.0	< 9.9	203	220	60	86.0	72	47	50	290	320
Ethyl ether	< 6.1	< 21	< 13	< 24	< 11	< 61	< 61	< 60.63	< 61	< 61	< 61	< 61	< 61	< 61	< 6.1	< 61
Ethylbenzene	2.3	3.3	4.4	< 3.5	< 1.5	< 8.7	< 8.7	< 8.68	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 0.87	< 8.7
Hexachlorobutadiene	< 11	< 37	< 22	< 43	< 19	< 110	< 110	< 106.65	< 110	< 110	< 110	< 110	< 110	< 110	< 11	< 110
Hexane	4.9	7.9	5	< 5.6	< 2.5	< 14	< 18	< 17.62	24	< 18	< 18	< 18	< 18	< 18	< 1.8	< 18
Isopropyl benzene (Cumene)	< 2.0	< 6.8	< 4.1	< 7.9	< 3.5	< 20	< 20	< 19.66	< 20	< 20	< 20	< 20	< 20	< 20	< 2	< 20
m&p-Xylenes	2.1	8.3	7.7	< 3.5	1.7	< 8.7	< 8.7	< 8.68	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 0.87	< 8.7
Methyl tert butyl ether (MTBE)	< 3.6	< 12	< 7.5	< 14	< 6.3	< 36	< 36	< 36.05	< 36	< 36	< 36	< 36	< 36	< 36	< 3.6	< 36
Methylene chloride	< 3.5	28	< 7.2	< 14	< 6.1	< 35	< 17	32	< 17	< 17	17	21	< 17	< 17	5.9	< 17
Naphthalene	< 5.8	< 20	< 12	< 23	< 10	< 58	< 26	< 26.21	< 26	< 26	< 26	< 26	< 26	< 26	< 2.6	< 58
N-Decane	< 7.0	< 24	< 14	< 28	< 12	< 70	< 58	< 58.2	< 58	< 58	< 58	< 58	< 58	< 58	< 5.8	< 70
N-Dodecane	2.8	11	3.9	< 6.6	< 2.9	< 16	< 70	< 69.67	< 70	< 70	< 70	< 70	< 70	< 70	< 7.0	< 20
N-Heptane	< 2.0	< 6.8	< 4.1	< 7.9	< 3.5	< 20	< 20	< 20.49	22	< 20	< 20	< 20	< 20	< 20	< 2	< 20
Nonane	< 6.4	< 22	< 13	< 26	< 11	< 64	< 26	< 26.23	< 26	< 26	< 26	< 26	< 26	< 26	< 2.6	< 64
N-Propylbenzene	< 2.1	< 7.2	< 4.3	< 8.4	< 3.7	< 21	< 20	< 19.66	< 20	< 20	< 20	< 20	< 20	< 20	< 2	< 26
N-Undecane	< 2.1	< 7.2	< 4.3	< 8.4	< 3.7	< 21	< 64	< 63.93	< 64	< 64	< 64	< 64	< 64	< 64	< 6.4	< 26
Octane	< 0.87	< 3.0	2.4	< 3.5	< 1.5	< 8.7	< 19	< 18.69	< 19	< 19	< 19	< 19	< 19	< 19	< 1.9	< 8.7
o-Xylene	< 1.9	< 6.4	< 3.9	< 7.5	< 3.3	< 19	< 8.7	< 8.68	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 8.7	< 0.87	< 19
Pentane	7.5	< 25	< 15	< 30	< 13	< 74	< 30	< 29.51	30	< 30	< 30	< 30	< 30	< 30	< 3	< 30
Styrene	< 0.85	< 2.9	< 1.8	< 3.4	< 1.5	< 8.5	< 8.5	< 8.52	< 8.5	< 8.5	< 8.5	< 8.5	< 8.5	< 8.5	< 0.85	< 8.5
Tetrachloroethene	91	87	48	79.0	17.0	22.0	< 14	18	16	< 14	20	22	25	20	24	< 14
Toluene	< 3.8	< 13	< 7.8	< 15	< 6.6	< 38	< 7.5	< 7.53	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5	< 7.5	< 0.75	< 7.5
trans-1,2-Dichloroethene	< 0.79	< 2.7	< 1.6	< 3.2	< 1.4	< 7.9	< 7.9	< 7.93	< 7.9	< 7.9	< 7.9	< 7.9	< 7.9	< 7.9	< 0.79	< 7.9
trans-1,3-Dichloropropene	< 0.91	< 3.1	< 1.9	< 3.6	< 1.6	< 9.1	< 9.1	< 9.08	< 9.1	< 9.1	< 9.1	< 9.1	< 9.1	< 9.1	< 0.91	< 9.1
Trichloroethene	6.4	6.3	4.9	5.0	2.6	< 11	< 11	< 10.75	< 11	< 11	< 11	< 11	< 11	< 11	5.4	< 11
Trichlorofluoromethane (CFC-11)	120	67	63	69.0	52.0	82.0	18.0	84.3	45	59	40	42	24	27	72	12
Trifluorotrichloroethane (Freon 113)	< 1.5	< 5.3	< 3.2	< 6.1	< 2.7	< 15	< 15	< 15.33	< 15	< 15	< 15	< 15	< 15	< 15	< 1.5	< 15
Vinyl acetate	< 3.5	< 12	< 7.3	< 14	< 6.2	< 35	< 35	< 35.21	< 35	< 35	< 35	< 35	< 35	< 35	< 3.5	< 35
Vinyl chloride	8.6	20	13	11.0	7.6	27.0	< 5.1	11.5	21.0	< 5.1	< 5.1	< 5.1	< 5.1	< 5.1	1.1	< 5.1
Total VOCs	**885**	**1,132**	**785**	**960**	**574**	**1,409**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	SVE-4 04/22/10 µg/m^3	SVE-4 10/22/10 µg/m^3	SVE-4 10/30/12 µg/m^3	SVE-4 04/26/13 µg/m^3	SVE-4 10/23/13 µg/m^3	SVE-4 10/24/14 µg/m^3	SVE-4 10/22/15 µg/m^3	SVE-4 10/26/16 µg/m^3	SVE-4 10/30/17 µg/m^3	SVE-4 11/16/18 µg/m^3	SVE-4 10/31/19 µg/m^3	SVE-4 11/05/20 µg/m^3	SVE-4 10/21/21 µg/m^3	SVE-4 10/27/2022 µg/m^3	SVE-4 12/21/2023 µg/m^3	SVE-5 04/22/10 µg/m^3
1,1,1-Trichloroethane	1,582	1,300	600	440	320	370	250	380	180	530	210	130	92	110	150	5,074
1,1,2,2-Tetrachloroethane	< 13.73	< 14	< 14	< 5.5	< 14	< 1.4	< 2.7	< 6.9	< 14	< 14	< 14	< 14	< 1.4	< 5.2	< 14	< 51.49
1,1,2-Trichloroethane	< 10.91	< 11	< 11	< 4.4	< 11	1.3	< 2.2	< 5.5	< 11	< 11	< 11	< 11	< 1.1	< 4.1	< 11	< 40.92
1,1-Dichloroethane	809	800	410	320	220	330	200	420	250	530	240	210	130	130	160	2,590
1,1-Dichloroethene	178.4	150.0	85.0	70	34	55	34	41	22	73	42	21	18	19	23	634.4
1,2,4-Trichlorobenzene	< 74.21	< 74	< 74	< 30	< 74	< 7.4	< 15	< 37	< 74	< 74	< 74	< 74	< 7.4	< 28	< 74	< 274.59
1,2,4-Trimethylbenzene	< 9.83	< 9.8	< 9.8	< 3.9	< 9.8	< 0.98	< 2.0	< 4.9	< 9.8	< 9.8	< 9.8	< 9.8	< 0.98	< 3.7	< 9.8	< 36.87
1,2-Dibromoethane (Ethylene dibromide)	< 15.37	< 15	< 15	< 6.1	< 15	< 1.5	< 3.1	< 7.7	< 15	< 15	< 15	< 15	< 1.5	< 5.8	< 15	< 57.63
1,2-Dichlorobenzene	< 12.02	< 12	< 12	< 4.8	< 12	< 1.2	< 2.4	< 6.0	< 12	< 24	< 24	< 24	< 2.4	< 9.1	< 24	< 45.09
1,2-Dichloroethane	< 8.09	< 8.1	< 8.1	< 3.2	< 8.1	1.2	< 1.6	< 4.0	< 8.1	< 8.1	< 8.1	< 8.1	1.0	< 3.1	< 8.1	< 30.36
1,2-Dichloropropane	< 9.24	< 9.2	< 9.2	< 3.7	< 9.2	2.1	< 1.8	< 4.6	< 9.2	< 9.2	< 9.2	< 9.2	1.0	< 3.5	< 9.2	< 34.66
1,2-Dichlorotetrafluoroethane (CFC 114)	15	37	23	16	26	10	7.6	74	92	63	44	56	49	23	30	< 52.43
1,3,5-Trimethylbenzene	< 9.83	< 9.8	< 9.8	< 3.9	< 9.8	< 0.98	< 2.0	< 4.9	< 9.8	< 9.8	< 9.8	< 9.8	< 0.98	< 7.4	< 20	< 36.87
1,3-Butadiene	< 8.85	< 8.8	< 8.8	< 3.5	< 8.8	< 0.88	< 1.8	< 4.4	< 8.8	< 8.8	< 8.8	< 8.8	< 0.88	< 3.3	< 8.8	< 33.18
1,3-Dichlorobenzene	< 12.02	< 12	< 12	< 4.8	< 12	< 1.2	< 2.4	< 6.0	< 12	< 12	< 12	< 12	< 1.2	< 4.5	< 12	< 45.09
1,4-Dichlorobenzene	< 12.02	< 12	< 12	< 4.8	< 12	< 1.2	< 2.4	< 6.0	< 12	< 12	< 12	< 12	< 1.2	< 4.5	< 12	< 45.09
2-Butanone (Methyl ethyl ketone) (MEK)	< 29.49	< 29	< 29	< 12	< 29	< 2.9	< 5.9	< 15	< 29	< 29	< 29	< 29	4.4	< 11	< 29	< 109.12
2-Hexanone	< 20.48	< 20	< 20	< 8.2	< 20	< 2	< 4.1	< 10	< 20	< 16	< 16	< 16	< 1.6	< 7.7	< 20	< 77.83
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	< 20.48	< 20	< 20	< 8.2	< 20	< 2	< 4.1	< 10	< 20	< 41	< 41	< 41	< 4.1	< 15	< 41	< 77.83
Acetone	< 118.77	< 120	< 120	< 48	< 120	< 12	< 24	< 59	< 120	< 180	< 180	< 180	< 18	< 67	< 180	< 451.34
Acetonitrile	< 16.79	< 17	< 17	< 6.7	< 17	< 1.7	< 3.4	< 8.4	< 17	< 17	< 17	< 17	< 1.7	< 6.3	< 17	< 62.12
Acrolein	< 18.34	< 18	< 18	< 7.3	< 23	< 2.3	< 4.6	< 11	< 23	< 23	< 23	< 23	< 2.3	< 8.7	< 23	< 68.79
Acrylonitrile	< 43.4	< 43	< 43	< 17	< 43	< 4.3	< 8.7	< 22	< 43	< 43	< 43	< 43	< 4.3	< 16	< 43	< 162.76
Allyl chloride (3-Chloropropene)	< 6.26	< 6.3	< 6.3	< 2.5	< 6.3	< 0.63	< 1.3	< 3.1	< 6.3	< 6.3	< 6.3	< 6.3	< 0.63	< 2.4	< 6.3	< 23.47
alpha-Methylstyrene	< -999	< 19	< 19	< 7.7	< 19	< 1.9	< 3.9	< 9.7	< 19	< 19	< 19	< 19	< 1.9	< 7.3	< 19	< -999
Benzene	< 6.39	< 6.4	< 6.4	< 2.6	< 6.4	0.69	< 1.3	< 3.2	< 6.4	8.20	< 6.4	< 6.4	2.70	3.20	< 6.4	< 23.96
Benzyl chloride	< 20.71	< 21	< 21	< 8.3	< 21	< 2.1	< 4.1	< 10	< 21	< 21	< 21	< 21	< 2.1	< 7.8	< 21	< 77.66
Bromodichloromethane	< 13.4	< 13	< 13	< 5.4	< 13	< 1.3	< 2.7	< 6.7	< 13	< 13	< 13	< 13	< 1.3	< 5.1	< 13	< 50.25
Bromoform	< 20.67	< 21	< 21	< 8.3	< 21	< 2.1	< 4.1	< 10	< 21	< 21	< 21	< 21	< 2.1	< 7.8	< 21	< 77.52
Bromomethane (Methyl bromide)	< 7.77	< 7.8	< 7.8	< 3.1	< 7.8	< 0.78	< 1.6	< 3.9	< 7.8	< 7.8	< 7.8	< 7.8	< 0.78	< 2.9	< 7.8	< 29.12
Butane	18.8	67.0	26.0	21	20	6.8	3	67	66	75	24	28	36	20	< 24	< 35.66
Carbon disulfide	< 15.57	< 16	< 16	< 6.2	< 16	< 1.6	< 3.1	< 7.8	< 16	< 12	< 12	< 12	< 1.2	< 4.7	< 12	< 59.17
Carbon tetrachloride	< 12.58	< 13	< 13	< 5.0	< 13	< 1.3	< 2.5	< 6.3	< 13	< 13	< 13	< 13	< 1.3	< 4.8	< 13	< 47.18
Chlorobenzene	< 9.21	< 9.2	< 9.2	< 3.7	< 9.2	< 0.92	< 1.8	< 4.6	< 9.2	< 9.2	< 9.2	< 9.2	< 0.92	< 3.5	< 9.2	< 34.53
Chlorodifluoromethane	< -999	28.0	9.3	7.4	16 J	4.1	2.4	45	47	70	26	21	39	15	19	< -999
Chloroethane	55.4	140.0	72.0	63	42	32	9.9	150	110	310	170	130	190	77	170	343.0
Chloroform (Trichloromethane)	12.7	14.0	12.0	11	< 9.8	12	8.3	18	< 9.8	36	12	< 9.8	5.0	6.7	< 9.8	42
Chloromethane (Methyl chloride)	< 10.33	15.0	< 10	4.9	< 10	1.8	< 2.1	< 5.2	< 10	< 21	< 21	< 21	< 2.1	< 7.8	< 21	< 39.24
cis-1,2-Dichloroethene	43.6	74	57	11	39	95	20	87	66	38	120	98	58	83	47	107.1
cis-1,3-Dichloropropene	< 9.08	< 9.1	< 9.1	< 3.6	< 9.1	< 0.91	< 1.8	< 4.5	< 9.1	< 18	< 18	< 18	< 1.8	< 6.9	< 18	< 34.04
Cyclohexane	62.0	94.0	31.0	40	< 17	14	< 3.4	26	24	40	14	< 14	11	6.1	< 14	< 65.4
Dibromochloromethane	< 17.04	< 17	< 17	< 6.8	< 17	< 1.7	< 3.4	< 8.5	< 17	< 17	< 17	< 17	< 1.7	< 6.4	< 17	< 63.89
Dibromomethane	< -999	< 28	< 28	< 11	< 28	< 2.8	< 5.7	< 14	< 28	< 28	< 28	< 28	< 2.8	< 11	< 28	< -999

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

	SVE-4 04/22/10	SVE-4 10/22/10	SVE-4 10/30/12	SVE-4 04/26/13	SVE-4 10/23/13	SVE-4 10/24/14	SVE-4 10/22/15	SVE-4 10/26/16	SVE-4 10/30/17	SVE-4 11/16/18	SVE-4 10/31/19	SVE-4 11/05/20	SVE-4 10/21/21	SVE-4 10/27/2022	SVE-4 12/21/2023	SVE-5 04/22/10
Parameter	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**	**µg/m^3**
Dichlorodifluoromethane (CFC-12)	41	110	39	53	71	17	22	99	110	110	51	25	100	25	40	84.1
Ethyl ether	< 60.63	< 61	< 61	< 24	< 61	6.9	< 12	< 30	< 61	< 61	< 61	< 61	< 6.1	< 23	< 61	< 227.36
Ethylbenzene	< 8.68	< 8.7	< 8.7	< 3.5	< 8.7	< 0.87	< 1.7	< 4.3	< 8.7	< 8.7	< 8.7	< 8.7	< 0.87	< 3.3	< 8.7	< 32.57
Hexachlorobutadiene	< 106.65	< 110	< 110	< 43	< 110	< 11	< 21	< 53	< 110	< 110	< 110	< 110	< 11	< 40	< 110	< 394.61
Hexane	25	570	33	55	< 18	6.1	< 3.5	53	53	94	27	45	22	10	< 14	< 66.97
Isopropyl benzene (Cumene)	< 19.66	< 20	< 20	< 7.9	< 20	< 2	< 3.9	< 9.8	< 20	< 20	< 20	< 20	< 2.0	< 7.4	< 20	< 73.74
m&p-Xylenes	< 8.68	< 8.7	< 8.7	< 3.5	< 8.7	< 0.87	< 1.7	< 4.3	< 8.7	< 8.7	< 8.7	< 8.7	1.3	< 3.3	< 8.7	< 32.57
Methyl tert butyl ether (MTBE)	< 36.05	< 36	< 36	< 14	< 36	< 3.6	< 7.2	< 18	< 36	< 36	< 36	< 36	< 3.6	< 14	< 36	< 133.4
Methylene chloride	28	23	< 17	< 6.9	< 17	7.9	3.7	40	24	< 35	< 35	< 35	< 3.5	< 13	< 35	240
Naphthalene	< 26.21	< 26	< 26	< 10	< 26	< 2.6	< 5.2	< 29	< 58	< 58	< 58	< 58	< 5.8	< 22	< 58	< 99.6
N-Decane	< 58.2	< 58	< 58	< 23	< 58	< 5.8	< 12	< 35	< 70	< 70	< 70	< 70	< 7.0	< 26	< 70	< 215.33
N-Dodecane	< 69.67	< 70	< 70	< 28	< 70	< 7	< 14	< 10	< 20	19	< 16	< 16	1.6	< 6.2	< 16	< 257.77
N-Heptane	< 20.49	34	< 20	21	< 20	< 2	< 4.1	< 9.8	< 20	< 20	< 20	< 20	< 2.0	< 7.4	< 20	< 77.87
Nonane	< 26.23	< 26	< 26	< 10	< 26	< 2.6	< 5.2	< 32	< 64	< 64	< 64	< 64	< 6.4	< 24	< 64	< 99.67
N-Propylbenzene	< 19.66	< 20	< 20	< 7.9	< 20	< 2	< 3.9	< 13	< 26	< 21	< 21	< 21	< 2.1	< 7.9	< 21	< 73.74
N-Undecane	< 63.93	< 64	< 64	< 26	< 64	< 6.4	< 13	< 13	< 26	< 21	< 21	< 21	< 2.1	< 7.9	< 21	< 236.54
Octane	< 18.69	< 19	< 19	< 7.5	< 19	< 1.9	< 3.7	< 4.3	< 8.7	< 8.7	< 8.7	< 8.7	< 0.87	< 3.3	< 8.7	< 70.08
o-Xylene	< 8.68	< 8.7	< 8.7	< 3.5	< 8.7	< 0.87	< 1.7	< 9.3	< 19	< 19	< 19	< 19	< 1.9	< 7.1	< 19	< 32.57
Pentane	< 29.51	55	< 30	13	< 30	4.3	< 5.9	26	< 30	< 74	< 74	< 74	15	< 28	< 74	< 109.18
Styrene	< 8.52	< 8.5	< 8.5	< 3.4	< 8.5	< 0.85	< 1.7	< 4.3	< 8.5	< 8.5	< 8.5	< 8.5	< 0.85	< 3.2	< 8.5	< 31.95
Tetrachloroethene	66	49	90	28	50	85	82	67	26	75	32	30	6.7	18	< 14	< 50.87
Toluene	< 7.53	< 7.5	< 7.5	< 3.0	< 7.5	< 0.75	< 1.5	< 3.8	< 7.5	< 38	< 38	< 38	< 3.8	< 14	< 38	< 28.22
trans-1,2-Dichloroethene	< 7.93	< 7.9	< 7.9	< 3.2	< 7.9	< 0.79	< 1.6	< 4.0	< 7.9	< 7.9	< 7.9	< 7.9	< 0.79	< 3.0	< 7.9	< 29.74
trans-1,3-Dichloropropene	< 9.08	< 9.1	< 9.1	< 3.6	< 9.1	< 0.91	< 1.8	< 4.5	< 9.1	< 9.1	< 9.1	< 9.1	< 0.91	< 3.4	< 9.1	< 34.04
Trichloroethene	16	19	12	6	< 11	10	6.4	13	< 11	12	< 11	< 11	4.6	4.1	< 11	< 40.3
Trichlorofluoromethane (CFC-11)	106.8	41	31	11	32	17	13	28	22	26	17	16	7.4	16	14	51.7
Trifluorotrichloroethane (Freon 113)	< 15.33	< 15	< 15	< 6.1	< 15	< 1.5	< 3.1	< 7.7	< 15	< 15	< 15	< 15	< 1.5	< 5.8	< 15	< 57.48
Vinyl acetate	< 35.21	< 35	< 35	< 14	< 35	< 3.5	< 7.0	< 18	< 35	< 35	< 35	< 35	< 3.5	< 13	< 35	< 130.28
Vinyl chloride	12.8	120	27	33	18	15	2.3	69	53	97	31	23	39	13	16	46
Total VOCs	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	SVE-5 10/30/12 µg/m^3	SVE-5 04/26/13 µg/m^3	SVE-5 10/23/13 µg/m^3	SVE-5 10/24/14 µg/m^3	SVE-6 09/23/08 µg/m^3	SVE-6 10/01/08 µg/m^3	SVE-6 10/15/08 µg/m^3	SVE-6 11/13/08 µg/m^3	SVE-6 04/24/09 µg/m^3	SVE-6 10/20/09 µg/m^3	SVE-6 04/29/11 µg/m^3	SVE-6 10/26/11 µg/m^3	SVE-6 10/30/12 µg/m^3	SVE-6 10/22/15 µg/m^3	SVE-6 10/26/16 µg/m^3	SVE-6 10/30/17 µg/m^3
1,1,1-Trichloroethane	1,800	1300	960	420	37,000	40,000	46,000	21,000	9,000	130	1,300	830	200	580	700	1100
1,1,2,2-Tetrachloroethane	< 14	< 27	< 14	< 1.4	< 1200	< 550	< 440	< 96	< 88	< 1.4	< 14	< 14	< 2.7	< 4.6	< 9.2	< 14 U
1,1,2-Trichloroethane	< 11	< 22	< 11	< 1.5	< 960	< 440	< 350	< 76	< 70	< 1.1	< 11	< 11	< 2.2	< 3.6	< 7.3	< 11 U
1,1-Dichloroethane	1,200	1800	540	240	90,000	65,000	49,000	15,000	3,500	58.0	550	330	100.0	200	600	680
1,1-Dichloroethene	330.0	350	200	110	4,400	7,700	5,100	3,100	830	19	250	120	36	130	68	160
1,2,4-Trichlorobenzene	< 74	< 150	< 74	< 7.4	< 6500	< 3000	< 2400	< 520	< 470	< 7.4	< 74	< 74	< 15	< 25	< 49	< 74 U
1,2,4-Trimethylbenzene	< 9.8	< 20	< 9.8	< 0.98	< 860	< 390	< 310	< 69	< 63	< 0.98	< 9.8	< 9.8	< 2.0	< 3.3	< 6.6	< 9.8 U
1,2-Dibromoethane (Ethylene dibromide)	< 15	< 31	< 15	< 1.5	< 1300	< 610	< 490	< 110	< 98	< 1.5	< 15	< 15	< 3.1	< 5.1	< 10	< 15 U
1,2-Dichlorobenzene	< 12	< 24	< 12	< 1.2	< 1100	< 480	< 380	< 84	< 77	< 1.2	< 12	< 12	< 2.4	< 4.0	< 8.0	< 12 U
1,2-Dichloroethane	< 8.1	< 16	< 8.1	0.83	< 710	< 320	< 260	69	< 52	< 0.81	< 8.1	< 8.1	< 1.6	< 2.7	< 5.4	< 8.1 U
1,2-Dichloropropane	< 9.2	< 18	< 9.2	2.4	< 810	< 370	< 300	130	< 59	< 0.92	< 9.2	< 9.2	< 1.8	< 3.1	< 6.2	< 9.2 U
1,2-Dichlorotetrafluoroethane (CFC 114)	25.0	< 28	< 14	< 1.4	< 1200	< 560	< 450	< 98	< 89	3.8	< 14	< 14	< 2.8	6.2	110	51
1,3,5-Trimethylbenzene	< 9.8	< 20	< 9.8	< 0.98	< 860	< 390	< 310	< 69	< 63	< 0.98	< 9.8	< 9.8	< 2.0	< 3.3	< 6.6	< 9.8 U
1,3-Butadiene	< 8.8	< 18	< 8.8	< 0.88	< 780	< 350	< 280	< 62	< 57	< 0.88	< 8.8	< 8.8	< 1.8	< 2.9	< 5.9	< 8.8 U
1,3-Dichlorobenzene	< 12	< 24	< 12	< 1.2	< 1100	< 480	< 380	< 84	< 77	< 1.2	< 12	< 12	< 2.4	< 4.0	< 8.0	< 12 U
1,4-Dichlorobenzene	< 12	< 24	< 12	< 1.2	< 1100	< 480	< 380	< 84	< 77	< 1.2	< 12	< 12	< 2.4	< 4.0	< 8.0	< 12 U
2-Butanone (Methyl ethyl ketone) (MEK)	< 29	< 59	< 29	5.3	< 2600	2,500	5,400	4,700	3,800	7	< 29	< 29	< 5.9	< 9.8	< 20	< 29 U
2-Hexanone	< 20	< 41	< 20	< 2	< 1800	< 820	< 660	< 140	< 130	< 2.0	< 20	< 20	< 4.1	< 6.8	< 14	< 20 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	< 20	< 41	< 20	2.4	< 1800	< 820	1,500	3,000	480	< 2.0	< 20	< 20	< 4.1	< 6.8	< 14	< 20 U
Acetone	< 120	< 240	< 120	23	< 10000	< 4700	11,000	8,100	14,000	35	< 120	< 120	< 24	< 40	< 79	< 120 U
Acetonitrile	< 17	< 34	< 17	< 1.7	< 1500	< 670	< 540	< 120	< 110	2.30	< 17	< 17	< 3.4	< 5.6	< 11	< 17 U
Acrolein	< 18	< 37	< 23	< 2.3	< 1600	< 730	< 590	< 130	< 120	< 1.8	< 18	< 18	< 3.7	< 7.6	< 15	< 23 U
Acrylonitrile	< 43	< 87	< 43	< 4.3	< 3800	< 1700	< 1400	< 300	< 280	< 4.3	< 43	< 43	< 8.7	< 14	< 29	< 43 U
Allyl chloride (3-Chloropropene)	< 6.3	< 13	< 6.3	< 0.63	< 550	< 250	< 200	< 44	< 40	< 0.63	< 6.3	< 6.3	< 1.3	< 2.1	< 4.2	< 6.3 U
alpha-Methylstyrene	< 19	< 39	< 19	< 1.9	< 1700	< 770	< 620	< 140	< 120	< 1.9	< 19	< 19	< 3.9	< 6.4	< 13	< 19 U
Benzene	< 6.4	< 13	< 6.4	< 0.64	660	310	250	68	< 41	< 0.64	< 6.4	< 6.4	< 1.3	< 2.1	< 4.3	< 6.4 U
Benzyl chloride	< 21	< 41	< 21	< 2.1	< 1800	< 830	< 660	< 140	< 130	< 2.1	< 21	< 21	< 4.1	< 6.9	< 14	< 21 U
Bromodichloromethane	< 13	< 27	< 13	< 1.3	< 1200	< 530	< 430	< 94	< 86	< 1.3	< 13	< 13	< 2.7	< 4.5	< 8.9	< 13 U
Bromoform	< 21	< 41	< 21	< 2.1	< 1800	< 820	< 660	< 140	< 130	< 2.1	< 21	< 21	< 4.1	< 6.9	< 14	< 21 U
Bromomethane (Methyl bromide)	< 7.8	< 16	< 7.8	< 0.78	< 680	< 310	< 250	< 54	< 50	< 0.78	< 7.8	< 7.8	< 1.6	< 2.6	< 5.2	< 7.8 U
Butane	< 9.5	< 19	< 9.5	3.2	970	< 380	< 300	< 67	< 61	5	23	11	4	< 3.2	24	< 9.5 U
Carbon disulfide	< 16	36	< 16	< 1.6	< 1400	< 620	< 500	250	< 100	< 1.6	< 16	< 16	< 3.1	< 5.2	< 10	< 16 U
Carbon tetrachloride	< 13	< 25	< 13	< 1.3	< 1100	< 500	< 400	< 88	< 81	< 1.3	< 13	< 13	< 2.5	< 4.2	< 8.4	< 13 U
Chlorobenzene	< 9.2	< 18	< 9.2	< 0.92	1,200	< 370	< 290	< 64	< 59	< 0.92	< 9.2	< 9.2	< 1.8	< 3.1	< 6.1	< 9.2 U
Chlorodifluoromethane	< 7.1	16	< 7.1	2	5,200	1,400	320	150	< 45	2	< 7.1	9	< 1.4	< 2.4	33	11
Chloroethane	250.0	1300	84	26	68,000	29,000	6,700	1,100	140	3	17	6	2	2.5	< 3.5	7.8
Chloroform (Trichloromethane)	60	54	46	29	< 860	< 390	< 310	240	87	2	31	21	9	41	23	37
Chloromethane (Methyl chloride)	23.0	55	15	2.5	< 910	< 410	< 330	< 72	< 66	1	< 10	< 10	< 2.1	< 3.4	< 6.9	< 10 U
cis-1,2-Dichloroethene	56.0	94	15	10	9,000	8,100	6,700	2,700	390	2.8	28.0	16.0	5	11	< 5.3	9
cis-1,3-Dichloropropene	< 9.1	< 18	< 9.1	< 0.91	< 800	< 360	< 290	< 64	< 58	< 0.91	< 9.1	< 9.1	< 1.8	< 3.0	< 6.1	< 9.1 U
Cyclohexane	< 17	< 34	< 17	< 1.7	3,800	1,100	< 550	140	< 110	< 1.7	< 17	< 17	< 3.4	< 5.7	< 11	< 17 U
Dibromochloromethane	< 17	< 34	< 17	< 1.7	< 1500	< 680	< 550	< 120	< 110	< 1.7	< 17	< 17	< 3.4	< 5.7	< 11	< 17 U
Dibromomethane	< 28	< 57	< 28	< 2.8	< 2500	< 1100	< 910	< 200	< 180	< 2.8	< 28	< 28	< 5.7	< 9.5	< 19	< 28 U

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	SVE-5 10/30/12 µg/m^3	SVE-5 04/26/13 µg/m^3	SVE-5 10/23/13 µg/m^3	SVE-5 10/24/14 µg/m^3	SVE-6 09/23/08 µg/m^3	SVE-6 10/01/08 µg/m^3	SVE-6 10/15/08 µg/m^3	SVE-6 11/13/08 µg/m^3	SVE-6 04/24/09 µg/m^3	SVE-6 10/20/09 µg/m^3	SVE-6 04/29/11 µg/m^3	SVE-6 10/26/11 µg/m^3	SVE-6 10/30/12 µg/m^3	SVE-6 10/22/15 µg/m^3	SVE-6 10/26/16 µg/m^3	SVE-6 10/30/17 µg/m^3
Dichlorodifluoromethane (CFC-12)	59.0	52	51	13	4,000	2,600	1,900	3,300	660	21.0	70.0	46.0	16.0	84	380	140
Ethyl ether	< 61	< 120	< 61	10	< 5300	< 2400	< 1900	840	< 390	< 6.1	< 61	< 61	< 12	< 20	< 40	< 61 U
Ethylbenzene	< 8.7	< 17	< 8.7	< 0.87	7,000	460	1,200	770	290	< 0.87	< 8.7	< 8.7	< 1.7	< 2.9	< 5.8	< 8.7 U
Hexachlorobutadiene	< 110	< 210	< 110	< 11	< 9400	< 4300	< 3400	< 750	< 680	< 11	< 110	< 110	< 21	< 36	< 71	< 110 U
Hexane	< 18	< 35	< 18	< 1.8	1,600	< 700	< 560	< 120	< 110	3.4	< 18	< 18	< 3.5	< 5.9	< 12	< 18 U
Isopropyl benzene (Cumene)	< 20	< 39	< 20	< 2	< 1700	< 780	< 630	< 140	< 130	< 2.0	< 20	< 20	< 3.9	< 6.6	< 13	< 20 U
m&p-Xylenes	< 8.7	< 17	< 8.7	< 0.87	13,000	1,000	3,600	2,800	970	< 0.87	< 8.7	< 8.7	< 1.7	< 2.9	< 5.8	< 8.7 U
Methyl tert butyl ether (MTBE)	< 36	< 72	< 36	< 3.6	< 3200	< 1400	< 1200	< 250	< 230	< 3.6	< 36	< 36	< 7.2	< 12	< 24	< 36 U
Methylene chloride	120.0	150	32	9.8	15,000	14,000	13,000	6,900	970	7.7	68.0	27.0	13	7.8	44	< 17 U
Naphthalene	< 26	< 52	< 26	< 2.6	< 2300	< 1000	< 840	< 180	< 170	< 2.6	< 26	< 26	< 5.2	< 8.7	< 39	< 58 U
N-Decane	< 58	< 120	< 58	< 5.8	< 5100	< 2300	< 1900	< 410	< 370	< 5.8	< 58	< 58	< 12	< 19	< 46	< 70 U
N-Dodecane	< 70	< 140	< 70	< 7	< 6100	< 2800	< 2200	< 490	< 450	< 7.0	< 70	< 70	< 14	< 23	< 14	< 20 U
N-Heptane	< 20	< 41	< 20	< 2	9,500	970	< 660	160	170	< 2.0	< 20	< 20	< 4.1	< 6.8	< 13	< 20 U
Nonane	< 26	< 52	< 26	< 2.6	< 2300	< 1000	< 840	190	< 170	< 2.6	< 26	< 26	< 5.2	< 8.7	< 43	< 64 U
N-Propylbenzene	< 20	< 39	< 20	< 2	< 1700	< 780	< 630	< 140	< 130	< 2.0	< 20	< 20	< 3.9	< 6.6	< 17	< 26 U
N-Undecane	< 64	< 130	< 64	< 6.4	< 5600	< 2600	< 2000	< 450	< 410	< 6.4	< 64	< 64	< 13	< 21	< 17	< 26 U
Octane	< 19	< 37	< 19	< 1.9	1,700	< 750	< 600	140	< 120	< 1.9	< 19	< 19	< 3.7	< 6.2	< 5.8	< 8.7 U
o-Xylene	< 8.7	< 17	< 8.7	< 0.87	2,900	< 350	950	730	120	< 0.87	< 8.7	< 8.7	< 1.7	< 2.9	< 12	< 19 U
Pentane	< 30	< 59	< 30	< 3	< 2600	< 1200	< 940	< 210	< 190	3.7	42.0	< 30	< 5.9	< 9.8	< 20	< 30 U
Styrene	< 8.5	< 17	< 8.5	< 0.85	< 750	< 340	< 270	< 60	< 55	< 0.85	< 8.5	< 8.5	< 1.7	< 2.8	< 5.7	< 8.5 U
Tetrachloroethene	52.0	77	16	32	2,300	690	2,000	1,600	470	1.8	43.0	45.0	9	82	66	86
Toluene	< 7.5	25	< 7.5	< 0.75	44,000	11,000	17,000	6,800	2,400	3.5	< 7.5	< 7.5	5	< 2.5	< 5.0	< 7.5 U
trans-1,2-Dichloroethene	< 7.9	< 16	< 7.9	< 0.79	< 700	< 320	< 250	< 56	< 51	< 0.79	< 7.9	< 7.9	< 1.6	< 2.6	< 5.3	< 7.9 U
trans-1,3-Dichloropropene	< 9.1	< 18	< 9.1	< 0.91	< 800	< 360	< 290	< 64	< 58	< 0.91	< 9.1	< 9.1	< 1.8	< 3.0	< 6.1	< 9.1 U
Trichloroethene	12	< 21	< 11	4	< 940	< 430	430	240	< 69	1.1	15.0	< 11	4	10	10	13
Trichlorofluoromethane (CFC-11)	33	< 22	27	8.3	< 990	800	920	1,400	990	7.1	28.0	18.0	6	14	15	20
Trifluorotrichloroethane (Freon 113)	< 15	< 31	< 15	< 1.5	< 1300	< 610	< 490	< 110	< 98	< 1.5	< 15	< 15	< 3.1	< 5.1	< 10	< 15 U
Vinyl acetate	< 35	< 70	< 35	< 3.5	< 3100	< 1400	< 1100	< 250	< 230	< 3.5	< 35	< 35	< 7.0	< 21	< 23	< 35 U
Vinyl chloride	10	45	8.1	1.7	14,000	4,900	960	160	91	2.1	< 5.1	< 5.1	< 1.0	< 1.7	18	5.3
Total VOCs	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	SVE-6 11/16/18 µg/m^3	SVE-6 11/05/20 µg/m^3	SVE-6 10/21/21 µg/m^3	SVE-6 10/27/2022 µg/m^3	SVE-6 12/21/2023 µg/m^3	SVE-7 10/01/08 µg/m^3	SVE-7 10/15/08 µg/m^3	SVE-7 11/13/08 µg/m^3	SVE-7 04/24/09 µg/m^3	SVE-7 10/20/09 µg/m^3	SVE-7 10/22/10 µg/m^3	SVE-7 04/29/11 µg/m^3	SVE-7 10/26/11 µg/m^3	SVE-7 10/22/15 µg/m^3	SVE-7 10/26/16 µg/m^3	SVE-7 11/16/18 µg/m^3
1,1,1-Trichloroethane	940	850	630	590	730	38,000	17,000	10,000	3,400	1.90	400	250	160	260	270	520
1,1,2,2-Tetrachloroethane	< 14	< 14	< 1.4	< 11	< 14	< 840	< 430	< 74	< 14	< 1.4	< 3.4	< 2.7	< 14	< 5.5	< 6.9	< 14
1,1,2-Trichloroethane	< 11	< 11	< 1.1	< 8.7	< 11	< 670	< 340	98	16	< 1.1	< 2.7	< 2.2	< 11	< 4.4	< 5.5	< 11
1,1-Dichloroethane	330	540	360	320	320	100,000	37,000	12,000	2,900	1	210	130	90	180	360	930
1,1-Dichloroethene	160	150	140	130	120	6,300	2,000	1,300	460	< 0.79	41	39	23	41	34	76
1,2,4-Trichlorobenzene	< 74	< 74	< 7.4	< 59	< 74	< 4500	< 2300	< 400	< 74	< 7.4	< 19	< 15	< 74	< 30	< 37	< 74
1,2,4-Trimethylbenzene	< 9.8	< 9.8	< 0.98	< 7.9	< 9.8	< 600	< 300	< 53	< 9.8	< 0.98	< 2.5	< 2.0	< 9.8	< 3.9	< 4.9	< 9.8
1,2-Dibromoethane (Ethylene dibromide)	< 15	< 15	< 1.5	< 12	< 15	< 940	< 480	< 83	< 15	< 1.5	< 3.8	< 3.1	< 15	< 6.1	< 7.7	< 15
1,2-Dichlorobenzene	< 24	< 24	< 2.4	< 19	< 24	< 740	< 370	< 65	< 12	< 1.2	< 3.0	< 2.4	< 12	< 4.8	< 6.0	< 24
1,2-Dichloroethane	< 8.1	< 8.1	< 0.81	< 6.5	< 8.1	< 500	< 250	73	26	< 0.81	< 2.0	< 1.6	< 8.1	< 3.2	< 4.0	< 8.1
1,2-Dichloropropane	< 9.2	< 9.2	< 0.92	< 7.4	< 9.2	< 570	< 290	97	24	< 0.92	< 2.3	< 1.8	< 9.2	< 3.7	< 4.6	< 9.2
1,2-Dichlorotetrafluoroethane (CFC 114)	31	29	8.5	< 11	21	< 860	< 430	< 75	< 14	< 1.4	< 3.5	< 2.8	< 14	15	64	73
1,3,5-Trimethylbenzene	< 9.8	< 9.8	< 0.98	< 16	< 20	< 600	< 300	< 53	< 9.8	< 0.98	< 2.5	< 2.0	< 9.8	< 3.9	< 4.9	< 9.8
1,3-Butadiene	< 8.8	< 8.8	< 0.88	< 7.1	< 8.8	< 540	< 270	< 48	< 8.8	< 0.88	< 2.2	< 1.8	< 8.8	< 3.5	< 4.4	< 8.8
1,3-Dichlorobenzene	< 12	< 12	< 1.2	< 9.6	< 12	< 740	< 370	< 65	< 12	< 1.2	< 3.0	< 2.4	< 12	< 4.8	< 6.0	< 12
1,4-Dichlorobenzene	< 12	< 12	< 1.2	< 9.6	< 12	< 740	< 370	< 65	< 12	< 1.2	< 3.0	< 2.4	< 12	< 4.8	< 6.0	< 12
2-Butanone (Methyl ethyl ketone) (MEK)	< 29	< 29	3.4	< 24	< 29	8,200	3,400	2,000	960	< 2.9	33	8	< 29	< 12	< 15	< 29
2-Hexanone	< 16	< 16	< 1.6	< 16	< 20	< 1300	< 630	< 110	< 20	< 2.0	< 4.9	< 4.1	< 20	< 8.2	< 10	< 16
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	< 41	< 41	< 4.1	< 33	< 41	< 1300	< 630	590	120	< 2.0	< 4.9	< 4.1	< 20	< 8.2	< 10	< 41
Acetone	< 180	< 180	< 18	< 140	< 180	8,800	4,400	1,900	1,100	< 12	86.00	54.00	< 120	48	< 59	< 180
Acetonitrile	< 17	< 17	< 1.7	< 13	< 17	< 1000	< 520	< 91	< 17	< 1.7	< 4.2	< 3.4	< 17	< 6.7	< 8.4	< 17
Acrolein	< 23	< 23	< 2.3	< 18	< 23	< 1100	< 570	< 99	< 18	< 1.8	< 4.6	< 3.7	< 18	< 9.2	< 11	< 23
Acrylonitrile	< 43	< 43	< 4.3	< 35	< 43	< 2700	< 1300	< 230	< 43	< 4.3	< 11	< 8.7	< 43	< 17	< 22	< 43
Allyl chloride (3-Chloropropene)	< 6.3	< 6.3	< 0.63	< 5.0	< 6.3	< 380	< 190	< 34	< 6.3	< 0.63	< 1.6	< 1.3	< 6.3	< 2.5	< 3.1	< 6.3
alpha-Methylstyrene	< 19	< 19	< 1.9	< 15	< 19	< 1200	< 600	< 100	< 19	< 1.9	< 4.8	< 3.9	< 19	< 7.7	< 9.7	< 19
Benzene	< 6.4	< 6.4	1.0	< 5.1	< 6.4	1,400	300	72	10	< 0.64	< 1.6	< 1.3	< 6.4	< 2.6	4.2	< 6.4
Benzyl chloride	< 21	< 21	< 2.1	< 17	< 21	< 1300	< 640	< 110	< 21	< 2.1	< 5.2	< 4.1	< 21	< 8.3	< 10	< 21
Bromodichloromethane	< 13	< 13	< 1.3	< 11	< 13	< 820	< 410	< 72	< 13	< 1.3	< 3.4	< 2.7	< 13	< 5.4	< 6.7	< 13
Bromoform	< 21	< 21	< 2.1	< 17	< 21	< 1300	< 640	< 110	< 21	< 2.1	< 5.2	< 4.1	< 21	< 8.3	< 10	< 21
Bromomethane (Methyl bromide)	< 7.8	< 7.8	< 0.78	< 6.2	< 7.8	< 480	< 240	< 42	< 7.8	< 0.78	< 1.9	< 1.6	< 7.8	< 3.1	< 3.9	< 7.8
Butane	< 24	< 24	2.4	< 19	< 24	< 580	< 290	< 51	27	2	18	3	< 9.5	17	110	100
Carbon disulfide	< 12	< 12	< 1.2	< 10	< 12	< 950	630	380	47	< 1.6	9	< 3.1	< 16	< 6.2	< 7.8	< 12
Carbon tetrachloride	< 13	< 13	< 1.3	< 10	< 13	< 770	< 390	< 68	< 13	< 1.3	< 3.1	< 2.5	< 13	< 5.0	< 6.3	< 13
Chlorobenzene	< 9.2	< 9.2	< 0.92	< 7.4	< 9.2	< 560	< 290	< 50	< 9.2	< 0.92	4	< 1.8	< 9.2	< 3.7	< 4.6	< 9.2
Chlorodifluoromethane	12	< 7.1	2.2	< 5.7	< 7.1	2,300	440	91	12	1	2.8	2.1	8.5	5.8	51	48
Chloroethane	< 5.3	22	8.5	28.0	< 5.3	23,000	4,700	1,300	240	< 0.53	16.0	2.5	< 5.3	24	37	61
Chloroform (Trichloromethane)	38	37	27	41	40	< 600	< 300	96	53	< 0.98	9.2	7.4	< 9.8	20	15	40
Chloromethane (Methyl chloride)	< 21	< 21	< 2.1	< 17	< 21	< 630	< 320	< 56	< 10	1	2.6	< 2.1	< 10	< 4.1	< 5.2	< 21
cis-1,2-Dichloroethene	< 7.9	8	9.8	8.3	< 7.9	23,000	7,700	2,400	260	< 0.79	17.0	8.0	< 7.9	30	110	140
cis-1,3-Dichloropropene	< 18	< 18	< 1.8	< 15	< 18	< 560	< 280	< 49	< 9.1	< 0.91	< 2.3	< 1.8	< 9.1	< 3.6	< 4.5	< 18
Cyclohexane	< 14	< 14	2.6	< 11	< 14	2,300	< 530	290	94	< 1.7	21.0	< 3.4	< 17	16	29	44
Dibromochloromethane	< 17	< 17	< 1.7	< 14	< 17	< 1000	< 530	< 92	< 17	< 1.7	< 4.3	< 3.4	< 17	< 6.8	< 8.5	< 17
Dibromomethane	< 28	< 28	< 2.8	< 23	< 28	< 1700	< 880	< 150	< 28	< 2.8	< 7.1	< 5.7	< 28	< 11	< 14	< 28

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

	SVE-6 11/16/18	SVE-6 11/05/20	SVE-6 10/21/21	SVE-6 10/27/2022	SVE-6 12/21/2023	SVE-7 10/01/08	SVE-7 10/15/08	SVE-7 11/13/08	SVE-7 04/24/09	SVE-7 10/20/09	SVE-7 10/22/10	SVE-7 04/29/11	SVE-7 10/26/11	SVE-7 10/22/15	SVE-7 10/26/16	SVE-7 11/16/18
Parameter	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3	µg/m^3
Dichlorodifluoromethane (CFC-12)	67	25	37	120	53	1,900	520	300	66	3.30	21	7	< 9.9	38	68	100
Ethyl ether	< 61	< 61	< 6.1	< 49	< 61	< 3700	< 1900	520	380	< 6.1	< 15	< 12	< 61	< 24	< 30	< 61
Ethylbenzene	< 8.7	< 8.7	< 0.87	< 6.9	< 8.7	5,300	1,400	620	< 8.7	< 0.87	53.0	< 1.7	< 8.7	< 3.5	< 4.3	< 8.7
Hexachlorobutadiene	< 110	< 110	< 11	< 85	< 110	< 6500	< 3300	< 580	< 110	< 11	< 27	< 21	< 110	< 43	< 53	< 110
Hexane	< 14	< 14	2.2	< 11	< 14	1,300	< 550	180	72	5	11.0	< 3.5	< 18	< 7.0	25	27
Isopropyl benzene (Cumene)	< 20	< 20	< 2.0	< 16	< 20	< 1200	< 610	< 110	< 20	< 2.0	< 4.9	< 3.9	< 20	< 7.9	< 9.8	< 20
m&p-Xylenes	< 8.7	< 8.7	1.2	< 6.9	< 8.7	12,000	3,300	1,700	13	< 0.87	82.0	< 1.7	< 8.7	< 3.5	< 4.3	< 8.7
Methyl tert butyl ether (MTBE)	< 36	< 36	< 3.6	< 29	< 36	< 2200	< 1100	< 190	< 36	< 3.6	< 9.0	< 7.2	< 36	< 14	< 18	< 36
Methylene chloride	< 35	< 35	< 3.5	< 28	< 35	12,000	6,600	3,600	370	< 1.7	6.2	4.6	< 17	9.6	20	< 35
Naphthalene	< 58	< 58	< 5.8	< 47	< 58	< 1600	< 810	< 140	< 26	< 2.6	< 6.3	< 5.2	< 26	< 10	< 29	< 58
N-Decane	< 70	< 70	< 7.0	< 56	< 70	< 3600	< 1800	< 310	< 58	< 5.8	< 15	< 12	< 58	< 23	< 35	< 70
N-Dodecane	< 16	< 16	< 1.6	< 13	< 16	< 4300	< 2200	< 380	< 70	< 7.0	< 17	< 14	< 70	< 28	< 10	18.00
N-Heptane	< 20	< 20	< 2.0	< 16	< 20	3,100	< 630	200	52	< 2.0	13.0	< 4.1	< 20	< 8.2	< 9.8	< 20
Nonane	< 64	< 64	< 6.4	< 51	< 64	< 1600	< 810	< 140	< 26	< 2.6	26.0	< 5.2	< 26	< 10	< 32	< 64
N-Propylbenzene	< 21	< 21	< 2.1	< 17	< 21	< 1200	< 610	< 110	< 20	< 2.0	< 4.9	< 3.9	< 20	< 7.9	< 13	< 21
N-Undecane	< 21	< 21	< 2.1	< 17	< 21	< 3900	< 2000	< 350	< 64	< 6.4	< 16	< 13	< 64	< 26	< 13	< 21
Octane	< 8.7	< 8.7	< 0.87	< 6.9	< 8.7	< 1100	< 580	< 100	< 19	< 1.9	14.0	< 3.7	< 19	< 7.5	< 4.3	< 8.7
o-Xylene	< 19	< 19	< 1.9	< 15	< 19	1,800	680	420	< 8.7	< 0.87	14.0	< 1.7	< 8.7	< 3.5	< 9.3	< 19
Pentane	< 74	< 74	< 7.4	< 59	< 74	< 1800	< 910	< 160	< 30	< 3.0	16.0	< 5.9	< 30	< 12	41	< 74
Styrene	< 8.5	< 8.5	< 0.85	< 6.8	< 8.5	< 520	< 260	< 46	< 8.5	< 0.85	< 2.1	< 1.7	< 8.5	< 3.4	< 4.3	< 8.5
Tetrachloroethene	79	68	7.8	51	43	7,700	2,200	1,300	180	< 1.4	110	23	19	120	100	160
Toluene	< 38	< 38	< 3.8	< 30	< 38	84,000	20,000	5,900	250	< 0.75	23.0	< 1.5	< 7.5	< 3.0	< 3.8	< 38
trans-1,2-Dichloroethene	< 7.9	< 7.9	< 0.79	< 6.3	< 7.9	< 490	< 250	< 43	< 7.9	< 0.79	< 2.0	< 1.6	< 7.9	< 3.2	< 4.0	< 7.9
trans-1,3-Dichloropropene	< 9.1	< 9.1	< 0.91	< 7.3	< 9.1	< 560	< 280	< 49	< 9.1	< 0.91	< 2.3	< 1.8	< 9.1	< 3.6	< 4.5	< 9.1
Trichloroethene	13	11	5.0	9.8	< 11	1,900	360	160	35	< 1.1	16.0	6.3	< 11	14	18	34
Trichlorofluoromethane (CFC-11)	22	17	14	13	14	< 690	< 350	160	57	2	11	4	< 11	28	35	41
Trifluorotrichloroethane (Freon 113)	< 15	< 15	< 1.5	< 12	< 15	< 940	< 470	< 83	< 15	< 1.5	< 3.8	< 3.1	< 15	< 6.1	< 7.7	< 15
Vinyl acetate	< 35	< 35	< 3.5	< 28	< 35	< 2200	< 1100	< 190	< 35	< 3.5	< 8.8	< 7.0	< 35	< 14	< 18	< 35
Vinyl chloride	< 10	< 10	< 1.0	< 8.2	< 10	13,000	1,700	380	50	< 0.51	4	< 1.0	< 5.1	24	340	640
Total VOCs	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	SVE-7 10/31/19 µg/m^3	SVE-7 11/05/20 µg/m^3	SVE-7 10/21/21 µg/m^3	SVE-7 10/27/2022 µg/m^3	SVE-7 12/21/2023 µg/m^3	SVE-8 04/22/10 µg/m^3	SVE-8 04/27/12 µg/m^3	SVE-8 10/30/12 µg/m^3	SVE-8 10/24/14 µg/m^3	SVE-9 04/22/10 µg/m^3	SVE-10 09/23/08 µg/m^3	SVE-10 10/01/08 µg/m^3	SVE-10 10/15/08 µg/m^3	SVE-10 11/13/08 µg/m^3	SVE-10 04/24/09 µg/m^3	SVE-10 10/20/09 µg/m^3
1,1,1-Trichloroethane	470	380	330	280	290	19,642	860	360	88	158	7,100	4,900	2,600	4,200	1,800	83
1,1,2,2-Tetrachloroethane	< 14	< 14	< 1.4	< 6.9	< 14	< 274.6	< 14	< 14	< 1.4	< 1.37	< 580	< 130	< 33	< 72	< 25	< 1.4
1,1,2-Trichloroethane	< 11	< 11	< 1.1	< 5.5	< 11	< 218.24	< 11	< 11	< 1.5	< 1.09	< 460	< 100	< 26	< 57	< 20	< 1.1
1,1-Dichloroethane	920	660	480	250	790	9,714	790	430	86	109.3	12,000	5,100	2,500	2,900	1,400	75.0
1,1-Dichloroethene	84	66	52	44	36	555	67	49	15	15	1,400	850	510	440	160	7
1,2,4-Trichlorobenzene	< 74	< 74	< 7.4	< 37	< 74	< 1484.25	< 74	< 74	< 7.4	< 7.42	< 3100	< 700	< 180	< 390	< 130	< 7.4
1,2,4-Trimethylbenzene	< 9.8	< 9.8	< 0.98	< 4.9	< 9.8	< 196.63	< 9.8	< 9.8	< 0.98	< 0.98	800	< 93	< 24	< 52	< 18	< 0.98
1,2-Dibromoethane (Ethylene dibromide)	< 15	< 15	< 1.5	< 7.7	< 15	< 307.34	< 15	< 15	< 1.5	< 1.54	< 640	< 150	< 37	< 81	< 28	< 1.5
1,2-Dichlorobenzene	< 24	< 24	< 2.4	< 12	< 24	< 240.49	< 12	< 12	< 1.2	< 1.2	< 500	< 110	< 29	< 63	< 22	< 1.2
1,2-Dichloroethane	< 8.1	< 8.1	< 0.81	< 4.0	< 8.1	< 161.9	< 8.1	< 8.1	< 0.81	< 0.81	< 340	< 76	< 20	< 42	< 15	< 0.81
1,2-Dichloropropane	< 9.2	< 9.2	< 0.92	< 4.6	< 9.2	< 184.85	< 9.2	< 9.2	< 0.92	1	< 390	90	< 22	< 48	< 17	1
1,2-Dichlorotetrafluoroethane (CFC 114)	35	32	18	22	34	< 279.62	< 14	15	< 1.4	2.8	< 590	< 130	< 34	< 73	28	3.0
1,3,5-Trimethylbenzene	< 9.8	< 9.8	< 0.98	< 9.8	< 20	< 196.63	< 9.8	< 9.8	< 0.98	< 0.98	460	< 93	< 24	< 52	< 18	< 0.98
1,3-Butadiene	< 8.8	< 8.8	< 0.88	< 4.4	< 8.8	< 179.19	< 8.8	< 8.8	< 0.88	< 0.88	< 370	< 84	< 21	< 46	< 16	< 0.88
1,3-Dichlorobenzene	< 12	< 12	< 1.2	< 6.0	< 12	< 240.49	< 12	< 12	< 1.2	< 1.2	< 500	< 110	< 29	< 63	< 22	< 1.2
1,4-Dichlorobenzene	< 12	< 12	< 1.2	< 6.0	< 12	< 240.49	< 12	< 12	< 1.2	< 1.2	< 500	< 110	< 29	< 63	< 22	< 1.2
2-Butanone (Methyl ethyl ketone) (MEK)	< 29	< 29	3.0	< 15	< 29	1,858	< 29	< 29	< 2.9	8.3	7,500	4,800	2,900	5,100	930	21.00
2-Hexanone	< 16	< 16	< 1.6	< 10	< 20	< 409.65	< 20	< 20	< 2	< 2.05	< 860	< 190	< 50	< 110	< 37	< 2.0
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	< 41	< 41	< 4.1	< 20	< 41	1,352	52	< 20	2	5.74	890	< 190	81	170	< 37	< 2.0
Acetone	< 180	< 180	< 18	< 89	< 180	3,563	< 120	< 120	13 J	21.6	6,400	3,600	2,900	4,000	1,100	46
Acetonitrile	< 17	< 17	< 1.7	< 8.4	< 17	< 335.79	< 17	< 17	< 1.7	< 1.68	< 700	< 160	< 41	< 88	< 31	2.30
Acrolein	< 23	< 23	< 2.3	< 11	< 23	< 366.85	< 18	< 18	< 2.3	< 1.83	< 770	< 170	< 45	< 96	< 33	< 1.8
Acrylonitrile	< 43	< 43	< 4.3	< 22	< 43	< 868.06	< 43	< 43	< 4.3	< 4.34	< 1800	< 410	< 110	< 230	< 79	< 4.3
Allyl chloride (3-Chloropropene)	< 6.3	< 6.3	< 0.63	< 3.1	< 6.3	< 125.19	< 6.3	< 6.3	< 0.63	< 0.63	< 260	< 59	< 15	< 33	< 11	< 0.63
alpha-Methylstyrene	< 19	< 19	< 1.9	< 9.7	< 19	< -999	< 19	< 19	< 1.9	< -999	< 810	< 180	< 47	< 100	< 35	< 1.9
Benzene	< 6.4	< 6.4	0.89	< 3.2	< 6.4	< 127.79	< 6.4	< 6.4	< 0.64	< 0.64	1,300	250	39	44	14	1.2
Benzyl chloride	< 21	< 21	< 2.1	< 10	< 21	< 419.34	< 21	< 21	< 2.1	< 2.07	< 870	< 200	< 50	< 110	< 38	< 2.1
Bromodichloromethane	< 13	< 13	< 1.3	< 6.7	< 13	< 268.02	< 13	< 13	< 1.3	< 1.34	< 560	< 130	< 33	< 70	< 24	< 1.3
Bromoform	< 21	< 21	< 2.1	< 10	< 21	< 413.46	< 21	< 21	< 2.1	< 2.07	< 870	< 200	< 50	< 110	< 38	< 2.1
Bromomethane (Methyl bromide)	< 7.8	< 7.8	< 0.78	< 3.9	< 7.8	< 155.32	< 7.8	< 7.8	< 0.78	< 0.78	< 330	< 73	< 19	< 41	< 14	< 0.78
Butane	55	28	9.7	< 12	37	< 192.54	< 9.5	< 9.5	12	1.9	1,300	140	58	61	49	9
Carbon disulfide	< 12	< 12	< 1.2	< 6.2	< 12	< 311.41	< 16	< 16	< 1.6	2.1	< 650	270	190	230	35	2.00
Carbon tetrachloride	< 13	< 13	< 1.3	< 6.3	< 13	< 251.65	< 13	< 13	< 1.3	< 1.26	< 530	< 120	< 31	< 66	< 23	< 1.3
Chlorobenzene	< 9.2	< 9.2	< 0.92	< 4.6	< 9.2	< 184.15	< 9.2	< 9.2	< 0.92	< 0.92	450	< 87	< 22	< 48	< 17	< 0.92
Chlorodifluoromethane	26	20	5.8	4.6	17	< -999	< 7.1	< 7.1	3.2	-999.0	5,600	550	140	70	21	2.9
Chloroethane	35	54	33	9.8	89	422	130	89	6.9	2.0	3,000	800	390	180	56	6
Chloroform (Trichloromethane)	60	44	29	37	27	< 195.3	10	11	5.6	1.7	< 410	< 92	35	75	39	2
Chloromethane (Methyl chloride)	< 21	< 21	< 2.1	< 10	< 21	< 206.5	< 10	< 10	1.7	1.1	< 430	< 97	< 25	< 54	< 19	1
cis-1,2-Dichloroethene	66	50	17	7.8	22	436	46	16	3.5	14.3	26,000	8,000	2,600	3,700	890	26.0
cis-1,3-Dichloropropene	< 18	< 18	< 1.8	< 9.1	< 18	< 181.55	< 9.1	< 9.1	< 0.91	< 0.91	< 380	< 86	< 22	< 48	< 17	< 0.91
Cyclohexane	15	< 14	3.4	< 6.9	< 14	< 344.21	< 17	< 17	< 1.7	2	9,300	750	160	220	110	11.0
Dibromochloromethane	< 17	< 17	< 1.7	< 8.5	< 17	< 340.74	< 17	< 17	< 1.7	< 1.7	< 720	< 160	< 41	< 89	< 31	< 1.7
Dibromomethane	< 28	< 28	< 2.8	< 14	< 28	< -999	< 28	< 28	< 2.8	< -999	< 1200	< 270	< 69	< 150	< 52	< 2.8

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	SVE-7 10/31/19 µg/m^3	SVE-7 11/05/20 µg/m^3	SVE-7 10/21/21 µg/m^3	SVE-7 10/27/2022 µg/m^3	SVE-7 12/21/2023 µg/m^3	SVE-8 04/22/10 µg/m^3	SVE-8 04/27/12 µg/m^3	SVE-8 10/30/12 µg/m^3	SVE-8 10/24/14 µg/m^3	SVE-9 04/22/10 µg/m^3	SVE-10 09/23/08 µg/m^3	SVE-10 10/01/08 µg/m^3	SVE-10 10/15/08 µg/m^3	SVE-10 11/13/08 µg/m^3	SVE-10 04/24/09 µg/m^3	SVE-10 10/20/09 µg/m^3
Dichlorodifluoromethane (CFC-12)	59	35	22	< 4.9	50	< 197.81	23	30	7.7	10.4	3,100	470	290	260	82	16.0
Ethyl ether	< 61	< 61	< 6.1	< 30	< 61	< 1212.6	< 61	< 61	< 6.1	6.7	3,600	2,400	390	360	170	22.0
Ethylbenzene	< 8.7	< 8.7	< 0.87	< 4.3	< 8.7	< 173.69	< 8.7	< 8.7	< 0.87	< 0.87	4,200	230	56	110	< 16	1.5
Hexachlorobutadiene	< 110	< 110	< 11	< 53	< 110	< 2133.01	< 110	< 110	< 11	< 10.67	< 4500	< 1000	< 260	< 560	< 190	< 11
Hexane	15	< 14	1.7	< 7.0	< 14	< 352.47	< 18	< 18	2.3	< 1.76	4,400	380	110	100	57	6.8
Isopropyl benzene (Cumene)	< 20	< 20	< 2.0	< 9.8	< 20	< 398.18	< 20	< 20	< 2	< 1.97	< 830	< 190	< 48	< 100	< 36	< 2.0
m&p-Xylenes	< 8.7	< 8.7	1.0	< 4.3	< 8.7	< 173.69	< 8.7	< 8.7	< 0.87	< 0.87	6,200	390	110	250	20	2.4
Methyl tert butyl ether (MTBE)	< 36	< 36	< 3.6	< 18	< 36	< 721.06	< 36	< 36	< 3.6	< 3.61	< 1500	< 340	< 88	< 190	< 66	< 3.6
Methylene chloride	< 35	< 35	< 3.5	< 17	< 35	556	37	29	17	5.9	1,700	700	400	600	180	6.9
Naphthalene	< 58	< 58	< 5.8	< 29	< 58	< 524.21	< 26	< 26	< 2.6	< 2.62	< 1100	< 250	< 64	< 140	< 48	< 2.6
N-Decane	< 70	< 70	< 7.0	< 35	< 70	< 1163.93	< 58	< 58	< 5.8	< 5.82	< 2400	< 550	< 140	< 310	< 110	< 5.8
N-Dodecane	< 16	< 16	< 1.6	< 8.2	< 16	< 1393.37	< 70	< 70	< 7	< 6.97	< 2900	< 660	< 170	< 370	< 130	< 7.0
N-Heptane	< 20	< 20	< 2.0	< 9.8	< 20	3,689	150.0	< 20	< 2	9.4	5,700	450	63	< 110	38	8.9
Nonane	< 64	< 64	< 6.4	< 32	< 64	< 524.56	< 26	< 26	< 2.6	< 2.62	3,200	< 250	< 64	< 140	< 48	< 2.6
N-Propylbenzene	< 21	< 21	< 2.1	< 10	< 21	< 398.18	< 20	< 20	< 2	< 1.97	< 830	< 190	< 48	< 100	< 36	< 2.0
N-Undecane	< 21	< 21	< 2.1	< 10	< 21	< 1278.61	< 64	< 64	< 6.4	< 6.39	< 2700	< 600	< 160	< 340	< 120	< 6.4
Octane	< 8.7	< 8.7	< 0.87	< 4.3	< 8.7	< 378.43	< 19	< 19	< 1.9	< 1.87	3,600	180	< 45	< 98	< 34	< 1.9
o-Xylene	< 19	< 19	< 1.9	< 9.3	< 19	< 173.69	< 8.7	< 8.7	< 0.87	< 0.87	1,700	< 82	34	92	< 16	< 0.87
Pentane	< 74	< 74	< 7.4	< 37	< 74	< 590.18	< 30	< 30	2.9	< 2.95	< 1200	< 280	< 72	< 150	54	6.1
Styrene	< 8.5	< 8.5	< 0.85	< 4.3	< 8.5	< 170.39	< 8.5	< 8.5	< 0.85	< 0.85	< 360	< 80	< 21	< 45	< 15	< 0.85
Tetrachloroethene	120	91	21	94	48	< 271.3	22	28	8.5	6.1	5,700	1,400	540	1,400	170	5.3
Toluene	< 38	< 38	< 3.8	< 19	< 38	1,091	20.0	< 7.5	1.2	3.8	9,100	1,800	610	970	130	9.1
trans-1,2-Dichloroethene	< 7.9	< 7.9	< 0.79	< 4.0	< 7.9	< 158.59	< 7.9	< 7.9	< 0.79	< 0.79	370	100	47	< 42	< 14	< 0.79
trans-1,3-Dichloropropene	< 9.1	< 9.1	< 0.91	< 4.5	< 9.1	< 181.55	< 9.1	< 9.1	< 0.91	< 0.91	< 380	< 86	< 22	< 48	< 17	< 0.91
Trichloroethene	21	13	8.1	10	< 11	< 214.95	< 11	< 11	1.5	2.5	1,200	450	120	250	50	3.2
Trichlorofluoromethane (CFC-11)	24	26	25	22	22	< 224.74	< 11	< 11	4.7	6	< 470	220	190	200	85	20.0
Trifluorotrichloroethane (Freon 113)	< 15	< 15	< 1.5	< 7.7	< 15	< 306.54	< 15	< 15	< 1.5	< 1.53	< 640	< 140	< 37	< 80	< 28	< 1.5
Vinyl acetate	< 35	< 35	< 3.5	< 18	< 35	< 704.21	< 35	< 35	< 3.5	< 3.52	< 1500	< 330	< 85	< 180	< 64	< 3.5
Vinyl chloride	170	94	21	< 5.1	130	146	19	7	0.52	< 0.51	25,000	2,700	660	310	95	11.0
Total VOCs	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	SVE-10 10/22/10 µg/m^3	SVE-10 04/29/11 µg/m^3	SVE-10 10/26/11 µg/m^3	SVE-10 10/30/17 µg/m^3	SVE-11 04/27/12 µg/m^3	SVE-12 09/23/08 µg/m^3	SVE-12 10/01/08 µg/m^3	SVE-12 10/15/08 µg/m^3	SVE-12 11/13/08 µg/m^3	SVE-12 04/24/09 µg/m^3	SVE-12 10/20/09 µg/m^3	SVE-12 10/22/10 µg/m^3	SVE-12 04/29/11 µg/m^3	SVE-12 10/26/11 µg/m^3	SVE-12 10/30/12 µg/m^3	SVE-12 10/23/13 µg/m^3
1,1,1-Trichloroethane	180	210	79	< 11	180	51,000	42,000	53,000	29,000	9,600	95	1,200	1,600	1,100	410	72
1,1,2,2-Tetrachloroethane	< 2.7	< 2.7	< 14	< 14	< 14	< 2500	< 990	< 830	< 320	< 95	< 1.4	< 14	< 27	< 14	< 14	< 14
1,1,2-Trichloroethane	< 2.2	3	< 11	< 11	< 11	< 2000	< 790	< 660	< 250	< 75	< 1.1	< 11	< 22	< 11	< 11	< 11
1,1-Dichloroethane	150.0	170.0	68.0	< 8.1	330	140,000	130,000	100,000	35,000	15,000	160.0	1,500	1,900	1,200	400	76
1,1-Dichloroethene	13	18	< 7.9	< 7.9	25	17,000	9,400	6,200	4,300	1,100	17	200	330	160	60	13
1,2,4-Trichlorobenzene	< 15	< 15	< 74	< 74	< 74	< 14000	< 5300	< 4500	< 1700	< 510	< 7.4	< 74	< 150	< 74	< 74	< 74
1,2,4-Trimethylbenzene	< 2.0	< 2.0	< 9.8	< 9.8	< 9.8	< 1800	< 710	< 600	< 230	< 68	< 0.98	< 9.8	< 20	< 9.8	< 9.8	< 9.8
1,2-Dibromoethane (Ethylene dibromide)	< 3.1	< 3.1	< 15	< 15	< 15	< 2800	< 1100	< 930	< 350	< 110	< 1.5	< 15	< 31	< 15	< 15	< 15
1,2-Dichlorobenzene	< 2.4	< 2.4	< 12	< 12	< 12	< 2200	< 870	< 730	< 280	< 83	< 1.2	< 12	< 24	< 12	< 12	< 12
1,2-Dichloroethane	< 1.6	2	< 8.1	< 8.1	< 8.1	< 1500	< 580	< 490	< 190	< 56	< 0.81	< 8.1	< 16	< 8.1	< 8.1	< 8.1
1,2-Dichloropropane	4	< 1.8	< 9.2	< 9.2	< 9.2	< 1700	750	610	210	110	< 0.92	14	< 18	< 9.2	< 9.2	< 9.2
1,2-Dichlorotetrafluoroethane (CFC 114)	21.0	5.9	< 14	< 14	23.0	< 2600	< 1000	< 850	< 320	< 97	3.7	37	< 28	< 14	< 14	17
1,3,5-Trimethylbenzene	< 2.0	< 2.0	< 9.8	< 9.8	< 9.8	< 1800	< 710	< 600	< 230	< 68	< 0.98	< 9.8	< 20	< 9.8	< 9.8	< 9.8
1,3-Butadiene	< 1.8	< 1.8	< 8.8	< 8.8	< 8.8	< 1600	< 640	< 540	< 200	< 61	< 0.88	< 8.8	< 18	< 8.8	< 8.8	< 8.8
1,3-Dichlorobenzene	< 2.4	< 2.4	< 12	< 12	< 12	< 2200	< 870	< 730	< 280	< 83	< 1.2	< 12	< 24	< 12	< 12	< 12
1,4-Dichlorobenzene	< 2.4	< 2.4	< 12	< 12	< 12	< 2200	< 870	< 730	< 280	< 83	< 1.2	< 12	< 24	< 12	< 12	< 12
2-Butanone (Methyl ethyl ketone) (MEK)	< 5.9	< 5.9	< 29	< 29	< 29	< 5400	7,900	10,000	5,100	1,500	16	150	110	< 29	< 29	< 29
2-Hexanone	< 4.1	< 4.1	< 20	< 20	< 20	< 3800	< 1500	< 1200	< 470	< 140	< 2.0	< 20	< 41	< 20	< 20	< 20
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	< 4.1	< 4.1	< 20	< 20	< 20	< 3800	< 1500	3,800	1,600	770	2.2	47	74	< 20	< 20	< 20
Acetone	< 24	< 24	< 120	< 120	< 120	< 22000	< 8600	8,700	5,500	2,400	63	230	< 240	< 120	< 120	< 120
Acetonitrile	< 3.4	< 3.4	< 17	< 17	< 17	< 3100	< 1200	< 1000	< 390	< 120	2.70	< 17	< 34	< 17	< 17	< 17
Acrolein	< 3.7	< 3.7	< 18	< 23	< 18	< 3400	< 1300	< 1100	< 420	< 130	< 1.8	< 18	< 37	< 18	< 18	< 23
Acrylonitrile	< 8.7	< 8.7	< 43	< 43	< 43	< 8000	< 3100	< 2600	< 1000	< 300	< 4.3	< 43	< 87	< 43	< 43	< 43
Allyl chloride (3-Chloropropene)	< 1.3	< 1.3	< 6.3	< 6.3	< 6.3	< 1200	< 450	< 380	< 140	< 43	< 0.63	< 6.3	< 13	< 6.3	< 6.3	< 6.3
alpha-Methylstyrene	< 3.9	< 3.9	< 19	< 19	< 19	< 3600	< 1400	< 1200	< 440	< 130	< 1.9	< 19	< 39	< 19	< 19	< 19
Benzene	5	< 1.3	< 6.4	< 6.4	8	1,300	1,100	490	< 150	< 44	< 0.64	< 6.4	< 13	< 6.4	< 6.4	< 6.4
Benzyl chloride	< 4.1	< 4.1	< 21	< 21	< 21	< 3800	< 1500	< 1300	< 480	< 140	< 2.1	< 21	< 41	< 21	< 21	< 21
Bromodichloromethane	< 2.7	< 2.7	< 13	< 13	< 13	< 2500	< 960	< 810	< 310	< 93	< 1.3	< 13	< 27	< 13	< 13	< 13
Bromoform	< 4.1	< 4.1	< 21	< 21	< 21	< 3800	< 1500	< 1300	< 480	< 140	< 2.1	< 21	< 41	< 21	< 21	< 21
Bromomethane (Methyl bromide)	< 1.6	< 1.6	< 7.8	< 7.8	< 7.8	< 1400	< 560	< 470	< 180	< 54	< 0.78	< 7.8	< 16	< 7.8	< 7.8	< 7.8
Butane	71	10	30	< 9.5	56	< 1800	< 680	< 580	< 220	72	4	67	23	10	< 9.5	< 9.5
Carbon disulfide	29.0	7.4	< 16	< 16	< 16	< 2900	< 1100	< 940	810	340	4	91	64	27	< 16	< 16
Carbon tetrachloride	< 2.5	< 2.5	< 13	< 13	< 13	< 2300	< 910	< 760	< 290	< 87	< 1.3	< 13	< 25	< 13	< 13	< 13
Chlorobenzene	< 1.8	< 1.8	< 9.2	< 9.2	< 9.2	< 1700	< 660	< 560	< 210	< 64	< 0.92	< 9.2	< 18	< 9.2	< 9.2	< 9.2
Chlorodifluoromethane	45.0	8.9	23.0	< 7.1	60	1,900	740	< 430	< 160	< 49	2.9	60	40	8	< 7.1	< 7.1
Chloroethane	14	7	6	< 5.3	250	4,800	3,000	1,400	360	160	6	67	65	11	11	11
Chloroform (Trichloromethane)	8.5	12.0	< 9.8	< 9.8	< 9.8	< 1800	< 700	< 590	360	160	2	46	82	72	32	< 9.8
Chloromethane (Methyl chloride)	6.30	< 2.1	< 10	< 10	< 10	< 1900	< 740	< 630	< 240	< 71	2	34.0	35.0	14.0	< 10	< 10
cis-1,2-Dichloroethene	68	91.0	22	< 7.9	24	23,000	26,000	17,000	4,500	4,900	67	1,100	900	120	67	9
cis-1,3-Dichloropropene	< 1.8	< 1.8	< 9.1	< 9.1	< 9.1	< 1700	< 650	< 550	< 210	< 63	< 0.91	< 9.1	< 18	< 9.1	< 9.1	< 9.1
Cyclohexane	81.0	17.0	31.0	< 17	100.0	3,500	1,400	< 1000	< 400	260	2.60	61	44	< 17	< 17	< 17
Dibromochloromethane	< 3.4	< 3.4	< 17	< 17	< 17	< 3100	< 1200	< 1000	< 390	< 120	< 1.7	< 17	< 34	< 17	< 17	< 17
Dibromomethane	< 5.7	< 5.7	< 28	< 28	< 28	< 5200	< 2000	< 1700	< 650	< 200	< 2.8	< 28	< 57	< 28	< 28	< 28

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	SVE-10 10/22/10 µg/m^3	SVE-10 04/29/11 µg/m^3	SVE-10 10/26/11 µg/m^3	SVE-10 10/30/17 µg/m^3	SVE-11 04/27/12 µg/m^3	SVE-12 09/23/08 µg/m^3	SVE-12 10/01/08 µg/m^3	SVE-12 10/15/08 µg/m^3	SVE-12 11/13/08 µg/m^3	SVE-12 04/24/09 µg/m^3	SVE-12 10/20/09 µg/m^3	SVE-12 10/22/10 µg/m^3	SVE-12 04/29/11 µg/m^3	SVE-12 10/26/11 µg/m^3	SVE-12 10/30/12 µg/m^3	SVE-12 10/23/13 µg/m^3
Dichlorodifluoromethane (CFC-12)	72	32.0	31	< 9.9	120.0	3,000	2,300	1,700	1,100	1,400	32.0	410	140	90	49	30
Ethyl ether	27.0	30.0	< 61	< 61	< 61	< 11000	< 4400	< 3700	< 1400	510	9	84.0	< 120	< 61	< 61	< 61
Ethylbenzene	7	< 1.7	< 8.7	< 8.7	< 8.7	2,600	1,600	1,200	< 200	< 60	< 0.87	12	< 17	< 8.7	< 8.7	< 8.7
Hexachlorobutadiene	< 21	< 21	< 110	< 110	< 110	< 20000	< 7700	< 6500	< 2500	< 740	< 11	< 110	< 210	< 110	< 110	< 110
Hexane	50	8	< 18	< 18	70	< 3200	< 1300	< 1100	< 410	< 120	1.8	30	< 35	< 18	< 18	< 18
Isopropyl benzene (Cumene)	< 3.9	< 3.9	< 20	< 20	< 20	< 3600	< 1400	< 1200	< 450	< 140	< 2.0	< 20	< 39	< 20	< 20	< 20
m&p-Xylenes	10	< 1.7	< 8.7	< 8.7	< 8.7	4,600	4,100	3,000	260	65	< 0.87	42	32	< 8.7	< 8.7	< 8.7
Methyl tert butyl ether (MTBE)	< 7.2	< 7.2	< 36	< 36	< 36	< 6600	< 2600	< 2200	< 830	< 250	< 3.6	< 36	< 72	< 36	< 36	< 36
Methylene chloride	10	8	< 17	< 17	< 17	34,000	20,000	13,000	5,500	1,300	8.9	120	150	68	22	< 17
Naphthalene	< 5.2	< 5.2	< 26	< 58	< 26	< 4800	< 1900	< 1600	< 600	< 180	< 2.6	< 26	< 52	< 26	< 26	< 26
N-Decane	< 12	< 12	< 58	< 70	< 58	< 11000	< 4200	< 3500	< 1300	< 400	< 5.8	< 58	< 120	< 58	< 58	< 58
N-Dodecane	< 14	< 14	< 70	< 20	< 70	< 13000	< 5000	< 4200	< 1600	< 480	< 7.0	< 70	< 140	< 70	< 70	< 70
N-Heptane	27	< 4.1	< 20	< 20	130	< 3800	< 1500	< 1200	< 470	320	5.9	50	< 41	< 20	< 20	< 20
Nonane	< 5.2	< 5.2	< 26	< 64	< 26	< 4800	< 1900	< 1600	< 600	< 180	< 2.6	< 26	< 52	< 26	< 26	< 26
N-Propylbenzene	< 3.9	< 3.9	< 20	< 26	< 20	< 3600	< 1400	< 1200	< 450	< 140	< 2.0	< 20	< 39	< 20	< 20	< 20
N-Undecane	< 13	< 13	< 64	< 26	< 64	< 12000	< 4600	< 3900	< 1500	< 440	< 6.4	< 64	< 130	< 64	< 64	< 64
Octane	7	< 3.7	< 19	< 8.7	< 19	< 3400	< 1300	< 1100	< 430	< 130	< 1.9	< 19	< 37	< 19	< 19	< 19
o-Xylene	2	< 1.7	< 8.7	< 19	< 8.7	< 1600	970	860	< 200	< 60	< 0.87	9	< 17	< 8.7	< 8.7	< 8.7
Pentane	34	8	< 30	< 30	39	< 5400	< 2100	< 1800	< 680	< 200	3.0	46	< 59	< 30	< 30	< 30
Styrene	< 1.7	< 1.7	< 8.5	< 8.5	< 8.5	< 1600	< 610	< 520	< 200	< 59	< 0.85	< 8.5	< 17	< 8.5	< 8.5	< 8.5
Tetrachloroethene	39	89	29	< 14	< 14	7,200	5,900	5,900	1,300	530	2.2	68	130	33	15	< 14
Toluene	37	< 1.5	< 7.5	< 7.5	9	27,000	20,000	10,000	1,300	320	2.4	490	55	< 7.5	< 7.5	< 7.5
trans-1,2-Dichloroethene	< 1.6	< 1.6	< 7.9	< 7.9	< 7.9	< 1500	< 570	< 480	< 180	< 55	< 0.79	10	< 16	< 7.9	< 7.9	< 7.9
trans-1,3-Dichloropropene	< 1.8	< 1.8	< 9.1	< 9.1	< 9.1	< 1700	< 650	< 550	< 210	< 63	< 0.91	< 9.1	< 18	< 9.1	< 9.1	< 9.1
Trichloroethene	18	17	< 11	< 11	< 11	2,500	2,000	1,300	280	930	5.6	140	130	< 11	< 11	< 11
Trichlorofluoromethane (CFC-11)	76.0	38.0	25.0	< 11	25.0	< 2100	960	1,100	660	510	12	76.0	59.0	30.0	19.0	11.0
Trifluorotrichloroethane (Freon 113)	< 3.1	< 3.1	< 15	< 15	< 15	< 2800	< 1100	< 930	< 350	< 110	< 1.5	< 15	< 31	< 15	< 15	< 15
Vinyl acetate	< 7.0	< 7.0	< 35	< 35	< 35	< 6500	< 2500	< 2100	< 810	< 240	< 3.5	< 35	< 70	< 35	< 35	< 35
Vinyl chloride	77.0	7.7	21.0	< 5.1	220.0	8,700	2,600	660	< 120	46	3	62	32	< 5.1	18	100
Total VOCs	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	SVE-12 10/24/14 µg/m^3	SVE-12 10/22/15 µg/m^3	SVE-12 10/26/16 µg/m^3	SVE-12 11/16/18 µg/m^3	SVE-12 10/31/19 µg/m^3	SVE-12 11/05/20 µg/m^3	SVE-12 10/27/2022 µg/m^3	SVE-12 12/21/2023 µg/m^3	SVE-13 04/27/12 µg/m^3	SVE-13 10/31/19 µg/m^3	SVE-14 04/27/12 µg/m^3	SVE-14 10/22/15 µg/m^3	SVE-14 10/26/16 µg/m^3	SVE-14 10/30/17 µg/m^3	SVE-14 11/16/18 µg/m^3	SVE-14 10/31/19 µg/m^3
1,1,1-Trichloroethane	130	99	130	580	490	470	330	240	130	550	160	63	130	180	200	220
1,1,2,2-Tetrachloroethane	< 1.4	< 5.5	< 9.2	< 14	< 14	< 14	< 6.9	< 14	< 14	14 U	< 14	< 5.5	< 3.4	< 14	< 14 U	< 14
1,1,2-Trichloroethane	< 1.5	< 4.4	< 7.3	< 11	< 11	< 11	< 5.5	< 11	< 11	11 U	< 11	< 4.4	< 2.7	< 11	< 11 U	< 11
1,1-Dichloroethane	150	96	140	350	340	310	190	130	130	550	100	31	59	56	53	51
1,1-Dichloroethene	26	18	21	88	120	100	82	62	< 7.9	8.5	22	7.8	15	22	22	36
1,2,4-Trichlorobenzene	< 7.4	< 30	< 49	< 74	< 74	< 74	< 37	< 74	< 74	74 U	< 74	< 30	< 19	< 74	< 74 U	< 74
1,2,4-Trimethylbenzene	< 0.98	< 3.9	< 6.6	< 9.8	< 9.8	< 9.8	< 4.9	< 9.8	< 9.8	9.8 U	< 9.8	< 3.9	< 2.5	< 9.8	< 9.8 U	< 9.8
1,2-Dibromoethane (Ethylene dibromide)	< 1.5	< 6.1	< 10	< 15	< 15	< 15	< 7.7	< 15	< 15	15 U	< 15	< 6.1	< 3.8	< 15	< 15 U	< 15
1,2-Dichlorobenzene	< 1.2	< 4.8	< 8.0	< 24	< 24	< 24	< 12	< 24	< 12	24 U	< 12	< 4.8	< 3.0	< 12	< 24 U	< 24
1,2-Dichloroethane	< 0.81	< 3.2	< 5.4	< 8.1	< 8.1	< 8.1	< 4.0	< 8.1	< 8.1	8.1 U	< 8.1	< 3.2	< 2.0	< 8.1	< 8.1 U	< 8.1
1,2-Dichloropropane	1.9	< 3.7	< 6.2	< 9.2	< 9.2	< 9.2	< 4.6	< 9.2	< 9.2	9.2 U	< 9.2	< 3.7	< 2.3	< 9.2	< 9.2 U	< 9.2
1,2-Dichlorotetrafluoroethane (CFC 114)	7.2	< 5.6	16	35	< 14	< 14	8.1	< 14	< 14	14 U	28	250	35	54	54	30
1,3,5-Trimethylbenzene	< 0.98	< 3.9	< 6.6	< 9.8	< 9.8	< 9.8	< 9.8	< 20	< 9.8	9.8 U	< 9.8	< 3.9	< 2.5	< 9.8	< 9.8 U	< 9.8
1,3-Butadiene	< 0.88	< 3.5	< 5.9	< 8.8	< 8.8	< 8.8	< 4.4	< 8.8	< 8.8	8.8 U	< 8.8	< 3.5	< 2.2	< 8.8	< 8.8 U	< 8.8
1,3-Dichlorobenzene	< 1.2	< 4.8	< 8.0	< 12	< 12	< 12	< 6.0	< 12	< 12	12 U	< 12	< 4.8	< 3.0	< 12	< 12 U	< 12
1,4-Dichlorobenzene	< 1.2	< 4.8	< 8.0	< 12	< 12	< 12	< 6.0	< 12	< 12	12 U	< 12	< 4.8	< 3.0	< 12	< 12 U	< 12
2-Butanone (Methyl ethyl ketone) (MEK)	< 2.9	< 12	< 20	< 29	< 29	< 29	< 15	< 29	< 29	29 U	< 29	< 12	< 7.4	< 29	< 29 U	< 29
2-Hexanone	< 2	< 8.2	< 14	< 16	< 16	< 16	< 10	< 20	< 20	16 U	< 20	< 8.2	< 5.1	< 20	< 16 U	< 16
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	< 2	< 8.2	< 14	< 41	< 41	< 41	< 20	< 41	< 20	41 U	< 20	< 8.2	6.8	< 20	< 41 U	< 41
Acetone	14 J	< 48	< 79	< 180	< 180	< 180	< 89	< 180	< 120	180 U	< 120	< 48	< 30	< 120	< 180 U	< 180
Acetonitrile	< 1.7	< 6.7	< 11	< 17	< 17	< 17	< 8.4	< 17	< 17	17 U	< 17	< 6.7	< 4.2	< 17	< 17 U	< 17
Acrolein	< 2.3	< 9.2	< 15	< 23	< 23	< 23	< 11	< 23	< 18	23 U	< 18	< 9.2	< 5.7	< 23	< 23 U	< 23
Acrylonitrile	< 4.3	< 17	< 29	< 43	< 43	< 43	< 22	< 43	< 43	43 U	< 43	< 17	< 11	< 43	< 43 U	< 43
Allyl chloride (3-Chloropropene)	< 0.63	< 2.5	< 4.2	< 6.3	< 6.3	< 6.3	< 3.1	< 6.3	< 6.3	6.3 U	< 6.3	< 2.5	< 1.6	< 6.3	< 6.3 U	< 6.3
alpha-Methylstyrene	< 1.9	< 7.7	< 13	< 19	< 19	< 19	< 9.7	< 19	< 19	19 U	< 19	< 7.7	< 4.8	< 19	< 19 U	< 19
Benzene	0.68	< 2.6	< 4.3	< 6.4	< 6.4	< 6.4	< 3.2	< 6.4	< 6.4	6.4 U	< 6.4	2.6	11	7	8.9	< 6.4
Benzyl chloride	< 2.1	< 8.3	< 14	< 21	< 21	< 21	< 10	< 21	< 21	21 U	< 21	< 8.3	< 5.2	< 21	< 21 U	< 21
Bromodichloromethane	< 1.3	< 5.4	< 8.9	< 13	< 13	< 13	< 6.7	< 13	< 13	13 U	< 13	< 5.4	< 3.4	< 13	< 13 U	< 13
Bromoform	< 2.1	< 8.3	< 14	< 21	< 21	< 21	< 10	< 21	< 21	21 U	< 21	< 8.3	< 5.2	< 21	< 21 U	< 21
Bromomethane (Methyl bromide)	< 0.78	< 3.1	< 5.2	< 7.8	< 7.8	< 7.8	< 3.9	< 7.8	< 7.8	7.8 U	< 7.8	< 3.1	< 1.9	< 7.8	< 7.8 U	< 7.8
Butane	4.5	3.8	24	45	< 24	< 24	< 12	< 24	< 9.5	24 U	37	12	130	88	120	28
Carbon disulfide	< 1.6	< 6.2	< 10	< 12	< 12	< 12	< 6.2	< 12	< 16	12 U	< 16	< 6.2	< 3.9	< 16	< 12 U	< 12
Carbon tetrachloride	< 1.3	< 5.0	< 8.4	< 13	< 13	< 13	< 6.3	< 13	< 13	13 U	< 13	< 5.0	< 3.1	< 13	< 13 U	< 13
Chlorobenzene	< 0.92	< 3.7	< 6.1	< 9.2	< 9.2	< 9.2	< 4.6	< 9.2	< 9.2	9.2 U	< 9.2	6.1	11	< 9.2	12	< 9.2
Chlorodifluoromethane	3.5	< 2.8	14	32	7.4	< 7.1	< 3.5	< 7.1	< 7.1	8.1	23	9.4	110	82	130	39
Chloroethane	10	7.3	37	43	13	< 5.3	4	< 5.3	9	6.6	9	7.8	53	54	110	14
Chloroform (Trichloromethane)	22	24	26	110	130	120	92	64	< 9.8	9.8 U	24	32	68	83	110	140
Chloromethane (Methyl chloride)	2.5	< 4.1	< 6.9	< 21	< 21	< 21	< 10	< 21	< 10	21 U	< 10	< 4.1	< 2.6	< 10	< 21 U	< 21
cis-1,2-Dichloroethene	14	19	26	36	13	12	6.2	< 7.9	< 7.9	7.9 U	< 7.9	< 3.2	4.8	< 7.9	< 7.9 U	< 7.9
cis-1,3-Dichloropropene	< 0.91	< 3.6	< 6.1	< 18	< 18	< 18	< 9.1	< 18	< 9.1	18 U	< 9.1	< 3.6	< 2.3	< 9.1	< 18 U	< 18
Cyclohexane	3.7	< 6.9	19	27	< 14	< 14	< 6.9	< 14	< 17	24	26	14	38	< 17	36	< 14
Dibromochloromethane	< 1.7	< 6.8	< 11	< 17	< 17	< 17	< 8.5	< 17	< 17	17 U	< 17	< 6.8	< 4.3	< 17	< 17 U	< 17
Dibromomethane	< 2.8	< 11	< 19	< 28	< 28	< 28	< 14	< 28	< 28	28 U	< 28	< 11	< 7.1	< 28	< 28 U	< 28

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	SVE-12 10/24/14 µg/m^3	SVE-12 10/22/15 µg/m^3	SVE-12 10/26/16 µg/m^3	SVE-12 11/16/18 µg/m^3	SVE-12 10/31/19 µg/m^3	SVE-12 11/05/20 µg/m^3	SVE-12 10/27/2022 µg/m^3	SVE-12 12/21/2023 µg/m^3	SVE-13 04/27/12 µg/m^3	SVE-13 10/31/19 µg/m^3	SVE-14 04/27/12 µg/m^3	SVE-14 10/22/15 µg/m^3	SVE-14 10/26/16 µg/m^3	SVE-14 10/30/17 µg/m^3	SVE-14 11/16/18 µg/m^3	SVE-14 10/31/19 µg/m^3
Dichlorodifluoromethane (CFC-12)	26	23	42	95	65	45	43	44	15	27	130	150	160	670	470	170
Ethyl ether	< 6.1	< 24	< 40	< 61	< 61	< 61	< 30	< 61	< 61	61 U	< 61	< 24	< 15	< 61	< 61 U	< 61
Ethylbenzene	5.6	< 3.5	< 5.8	< 8.7	< 8.7	< 8.7	< 4.3	< 8.7	< 8.7	8.7 U	< 8.7	< 3.5	< 2.2	< 8.7	< 8.7 U	< 8.7
Hexachlorobutadiene	< 11	< 43	< 71	< 110	< 110	< 110	< 53	< 110	< 110	110 U	< 110	< 43	< 27	< 110	< 110 U	< 110
Hexane	1.8	< 7.0	< 12	18	< 14	< 14	< 7.0	< 14	< 18	14 U	38	< 7.0	9.8	< 18	31	< 14
Isopropyl benzene (Cumene)	< 2	< 7.9	< 13	< 20	< 20	< 20	< 9.8	< 20	< 20	20 U	< 20	< 7.9	< 4.9	< 20	< 20 U	< 20
m&p-Xylenes	3	< 3.5	< 5.8	< 8.7	< 8.7	< 8.7	< 4.3	< 8.7	< 8.7	8.7 U	< 8.7	< 3.5	< 2.2	< 8.7	< 8.7 U	< 8.7
Methyl tert butyl ether (MTBE)	< 3.6	< 14	< 24	< 36	< 36	< 36	< 18	< 36	< 36	36 U	< 36	< 14	< 9.0	< 36	< 36 U	< 36
Methylene chloride	4	7.7	28	< 35	< 35	< 35	< 17	< 35	< 17	35 U	18	< 6.9	21	< 17	41	< 35
Naphthalene	< 2.6	< 10	< 39	< 58	< 58	< 58	< 29	< 58	< 26	58 U	< 26	< 10	< 15	< 58	< 58 U	< 58
N-Decane	< 5.8	< 23	< 46	< 70	< 70	< 70	< 35	< 70	< 58	70 U	< 58	< 23	< 17	< 70	< 70 U	< 70
N-Dodecane	< 7	< 28	17	25	< 16	< 16	< 8.2	< 16	< 70	16 U	< 70	< 28	< 5.1	< 20	19	< 16
N-Heptane	3.6	< 8.2	< 13	< 20	< 20	< 20	< 9.8	< 20	< 20	20 U	< 20	< 8.2	< 4.9	< 20	< 20 U	< 20
Nonane	4.4	< 10	< 43	< 64	< 64	< 64	< 32	< 64	< 26	64 U	< 26	< 10	< 16	< 64	< 64 U	< 64
N-Propylbenzene	< 2	< 7.9	< 17	< 21	< 21	< 21	< 10	< 21	< 20	21 U	< 20	< 7.9	< 6.6	< 26	< 21 U	< 21
N-Undecane	< 6.4	< 26	< 17	< 21	< 21	< 21	< 10	< 21	< 64	21 U	< 64	< 26	< 6.6	< 26	< 21 U	< 21
Octane	1.9	< 7.5	< 5.8	< 8.7	< 8.7	< 8.7	< 4.3	< 8.7	< 19	8.7 U	< 19	< 75	< 2.2	< 8.7	< 8.7 U	< 8.7
o-Xylene	1.4	< 3.5	< 12	< 19	< 19	< 19	< 9.3	< 19	< 8.7	19 U	< 8.7	< 3.5	< 4.7	< 19	< 19 U	< 19
Pentane	< 3	< 12	< 20	< 74	< 74	< 74	< 37	< 74	< 30	74 U	32	< 12	45	31	< 74 U	< 74
Styrene	< 0.85	< 3.4	< 5.7	< 8.5	< 8.5	< 8.5	< 4.3	< 8.5	< 8.5	8.5 U	< 8.5	< 3.4	< 2.1	< 8.5	< 8.5 U	< 8.5
Tetrachloroethene	11	10	13	50	28	29	20	< 14	< 14	14 U	< 14	13	23	22	28	37
Toluene	2.2	< 3.0	< 5.0	< 38	< 38	< 38	< 19	< 38	< 7.5	38 U	< 7.5	< 3.0	< 1.9	< 7.5	< 38 U	< 38
trans-1,2-Dichloroethene	< 0.79	< 3.2	< 5.3	< 7.9	< 7.9	< 7.9	< 4.0	< 7.9	< 7.9	7.9 U	< 7.9	< 3.2	< 2.0	< 7.9	< 7.9 U	< 7.9
trans-1,3-Dichloropropene	< 0.91	< 3.6	< 6.1	< 9.1	< 9.1	< 9.1	< 4.5	< 9.1	< 9.1	9.1 U	< 9.1	< 3.6	< 2.3	< 9.1	< 9.1 U	< 9.1
Trichloroethene	2.8	< 4.3	< 7.2	11.00	< 11	< 11	< 5.4	< 11	< 11	11 U	< 11	< 4.3	5.9	< 11	< 11 U	< 11
Trichlorofluoromethane (CFC-11)	6.7	6.0	15	21	16	20	18	14	< 11	43	130.0	65	80	230	130	180
Trifluorotrichloroethane (Freon 113)	< 1.5	< 6.1	< 10	< 15	< 15	< 15	< 7.7	< 15	< 15	15 U	< 15	< 6.1	< 3.8	< 15	< 15 U	< 15
Vinyl acetate	< 3.5	< 14	< 23	< 35	< 35	< 35	< 18	< 35	< 35	35 U	< 35	< 14	< 8.8	< 35	< 35 U	< 35
Vinyl chloride	76	82	340	700	270	68	71	120	< 5.1	10 U	35.0	6.3	84	58	66	19
Total VOCs	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	SVE-14 11/05/20 µg/m^3	SVE-14 10/21/21 µg/m^3	SVE-14 10/27/2022 µg/m^3	SVE-14 12/21/2023 µg/m^3	SVE-15 04/27/12 µg/m^3	SVE-15 04/26/13 µg/m^3	SVE-16 09/23/08 µg/m^3	SVE-16 10/01/08 µg/m^3	SVE-16 10/15/08 µg/m^3	SVE-16 11/13/08 µg/m^3	SVE-16 04/24/09 µg/m^3	SVE-16 10/20/09 µg/m^3	SVE-16 04/29/11 µg/m^3	SVE-16 10/26/11 µg/m^3	SVE-17 10/22/10 µg/m^3	SVE-18 04/27/12 µg/m^3	SVE-19 04/27/12 µg/m^3
1,1,1-Trichloroethane	140	140	140	110	330	20	6,300	4,200	13,000	2,100	470	85	220	73	340	77	14
1,1,2,2-Tetrachloroethane	< 14	< 1.4	< 4.6	< 14	< 14	< 1.4	< 82	< 82	< 83	< 14	< 12	< 1.4	< 1.4	< 14	< 3.4	< 14	< 14
1,1,2-Trichloroethane	< 11	< 1.1	< 3.6	< 11	< 11	< 1.1	81	< 65	< 66	24	< 9.9	< 1.1	< 1.1	< 11	< 2.7	< 11	< 11
1,1-Dichloroethane	33	41	28	20	320	14	8,800	4,500	5,800	1,200	170	22.0	49.0	15.0	110	< 8.1	< 8.1
1,1-Dichloroethene	23	19	19	15	60	< 0.79	1,100	550	2,400	220	46	9	25	11	43	9	< 7.9
1,2,4-Trichlorobenzene	< 74	< 7.4	< 25	< 74	< 74	< 7.4	< 450	< 440	< 450	< 74	< 67	< 7.4	< 7.4	< 74	< 19	< 74	< 74
1,2,4-Trimethylbenzene	< 9.8	< 0.98	< 3.3	< 9.8	< 9.8	< 0.98	120	< 59	< 60	< 9.8	< 8.9	< 0.98	< 0.98	< 9.8	< 2.5	< 9.8	< 9.8
1,2-Dibromoethane (Ethylene dibromide)	< 15	< 1.5	< 5.1	< 15	< 15	< 1.5	< 92	< 92	< 93	< 15	< 14	< 1.5	< 1.5	< 15	< 3.8	< 15	< 15
1,2-Dichlorobenzene	< 24	< 2.4	< 8.0	< 24	< 12	< 1.2	< 72	< 72	< 73	< 12	< 11	< 1.2	< 1.2	< 12	< 3.0	< 12	< 12
1,2-Dichloroethane	< 8.1	< 0.81	< 2.7	< 8.1	< 8.1	< 0.81	< 49	< 48	< 49	< 8.1	< 7.4	< 0.81	< 0.81	< 8.1	< 2.0	< 8.1	< 8.1
1,2-Dichloropropane	< 9.2	< 0.92	< 3.1	< 9.2	< 9.2	< 0.92	100	< 55	< 56	12	< 8.4	< 0.92	2	< 9.2	< 2.3	< 9.2	< 9.2
1,2-Dichlorotetrafluoroethane (CFC 114)	30	140	18	30	< 14	< 1.4	290	< 84	< 85	< 14	< 13	3	38	< 14	14.0	< 14	< 14
1,3,5-Trimethylbenzene	< 9.8	< 0.98	< 6.6	< 20	< 9.8	< 0.98	130	< 59	< 60	< 9.8	< 8.9	< 0.98	< 0.98	< 9.8	< 2.5	< 9.8	< 9.8
1,3-Butadiene	< 8.8	< 0.88	< 2.9	< 8.8	< 8.8	< 0.88	< 53	< 53	< 54	< 8.8	< 8.0	< 0.88	< 0.88	< 8.8	< 2.2	< 8.8	< 8.8
1,3-Dichlorobenzene	< 12	< 1.2	< 4.0	< 12	< 12	< 1.2	< 72	< 72	< 73	< 12	< 11	< 1.2	< 1.2	< 12	< 3.0	< 12	< 12
1,4-Dichlorobenzene	< 12	< 1.2	< 4.0	< 12	< 12	< 1.2	< 72	< 72	< 73	< 12	< 11	< 1.2	< 1.2	< 12	< 3.0	< 12	< 12
2-Butanone (Methyl ethyl ketone) (MEK)	< 29	< 2.9	< 9.8	< 29	< 29	< 2.9	1,500	510	< 180	320	70	3	< 2.9	< 29	< 7.4	< 29	< 29
2-Hexanone	< 16	< 1.6	< 6.8	< 20	< 20	< 2.0	< 120	< 120	< 120	< 20	< 19	< 2.0	< 2.0	< 20	< 4.9	< 20	< 20
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	< 41	< 4.1	< 14	< 41	< 20	< 2.0	230	< 120	< 120	< 20	< 19	< 2.0	< 2.0	< 20	< 4.9	< 20	< 20
Acetone	< 180	< 18	< 59	< 180	< 120	< 12	1,100	< 710	< 720	380	< 110	17	12	< 120	< 29	< 120	< 120
Acetonitrile	< 17	< 1.7	< 5.6	< 17	< 17	< 1.7	< 100	< 100	< 100	< 17	< 15	< 1.7	< 1.7	< 17	< 4.2	< 17	< 17
Acrolein	< 23	< 2.3	< 7.6	< 23	< 18	< 1.8	< 110	< 110	< 110	< 18	< 17	< 1.8	< 1.8	< 18	< 4.6	< 18	< 18
Acrylonitrile	< 43	< 4.3	< 14	< 43	< 43	< 4.3	< 260	< 260	< 260	< 43	< 39	< 4.3	< 4.3	< 43	< 11	< 43	< 43
Allyl chloride (3-Chloropropene)	< 6.3	< 0.63	< 2.1	< 6.3	< 6.3	< 0.63	< 38	< 37	< 38	< 6.3	< 5.7	< 0.63	< 0.63	< 6.3	< 1.6	< 6.3	< 6.3
alpha-Methylstyrene	< 19	< 1.9	< 6.4	< 19	< 19	< 1.9	< 120	< 120	< 120	< 19	< 18	< 1.9	< 1.9	< 19	< 4.8	< 19	< 19
Benzene	< 6.4	2.2	< 2.1	< 6.4	< 6.4	< 0.64	350	62	< 39	6	< 5.8	< 0.64	4.8	< 6.4	< 1.6	< 6.4	< 6.4
Benzyl chloride	< 21	< 2.1	< 6.9	< 21	< 21	< 2.1	< 120	< 120	< 130	< 21	< 19	< 2.1	< 2.1	< 21	< 5.2	< 21	< 21
Bromodichloromethane	< 13	< 1.3	< 4.5	< 13	< 13	< 1.3	< 80	< 80	< 81	< 13	< 12	< 1.3	< 1.3	< 13	< 3.4	< 13	< 13
Bromoform	< 21	< 2.1	< 6.9	< 21	< 21	< 2.1	< 120	< 120	< 130	< 21	< 19	< 2.1	< 2.1	< 21	< 5.2	< 21	< 21
Bromomethane (Methyl bromide)	< 7.8	< 0.78	< 2.6	< 7.8	< 7.8	< 0.78	< 47	< 46	< 47	< 7.8	< 7.1	< 0.78	< 0.78	< 7.8	< 1.9	< 7.8	< 7.8
Butane	25	23	12	57	< 9.5	2	1,200	260	< 58	41	18	5	11	14	12.0	< 9.5	< 9.5
Carbon disulfide	< 12	< 1.2	< 4.2	< 12	< 16	< 1.6	< 93	98	< 95	81	15	2	4	< 16	< 3.7	< 16	< 16
Carbon tetrachloride	< 13	< 1.3	< 4.2	< 13	< 13	< 1.3	< 75	< 75	< 77	< 13	< 11	< 1.3	< 1.3	< 13	< 3.1	< 13	< 13
Chlorobenzene	< 9.2	< 0.92	< 3.1	< 9.2	< 9.2	< 0.92	300	< 55	< 56	< 9.2	< 8.4	< 0.92	< 0.92	< 9.2	< 2.3	< 9.2	< 9.2
Chlorodifluoromethane	43	32	13	120	< 7.1	0.83	3,900	510	< 43	31	< 6.4	3.10	6.5	9.00	10.0	< 7.1	< 7.1
Chloroethane	8.4	6.1	< 1.8	14	< 5.3	< 0.53	1,900	230	40	13	< 4.8	< 0.53	4	< 5.3	4.3	< 5.3	< 5.3
Chloroform (Trichloromethane)	81	66	73	68	17	1.1	160	100	240	81	23	4	21	10	19.0	< 9.8	< 9.8
Chloromethane (Methyl chloride)	< 21	< 2.1	< 6.9	< 21	< 10	< 1.0	< 62	< 62	< 63	< 10	< 9.4	1	< 1.0	< 10	< 2.5	< 10	< 10
cis-1,2-Dichloroethene	< 7.9	2.7	< 2.6	< 7.9	21	< 0.79	340	150	57	27	< 7.2	2	4	< 7.9	< 2.0	< 7.9	< 7.9
cis-1,3-Dichloropropene	< 18	< 1.8	< 6.1	< 18	< 9.1	< 0.91	< 54	< 54	< 55	< 9.1	< 8.3	< 0.91	< 0.91	< 9.1	< 2.3	< 9.1	< 9.1
Cyclohexane	< 14	4.2	< 4.6	< 14	< 17	< 1.7	1,400	140	< 100	36	< 16	2.30	17.0	< 17	11.0	< 17	< 17
Dibromochloromethane	< 17	< 1.7	< 5.7	< 17	< 17	< 1.7	< 100	< 100	< 100	< 17	< 15	< 1.7	< 1.7	< 17	< 4.3	< 17	< 17
Dibromomethane	< 28	< 2.8	< 9.5	< 28	< 28	< 2.8	< 170	< 170	< 170	< 28	< 26	< 2.8	< 2.8	< 28	< 7.1	< 28	< 28

Table 4.2

SVE/LFG System VOC Results (µg/m^3)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Parameter	SVE-14 11/05/20 µg/m^3	SVE-14 10/21/21 µg/m^3	SVE-14 10/27/2022 µg/m^3	SVE-14 12/21/2023 µg/m^3	SVE-15 04/27/12 µg/m^3	SVE-15 04/26/13 µg/m^3	SVE-16 09/23/08 µg/m^3	SVE-16 10/01/08 µg/m^3	SVE-16 10/15/08 µg/m^3	SVE-16 11/13/08 µg/m^3	SVE-16 04/24/09 µg/m^3	SVE-16 10/20/09 µg/m^3	SVE-16 04/29/11 µg/m^3	SVE-16 10/26/11 µg/m^3	SVE-17 10/22/10 µg/m^3	SVE-18 04/27/12 µg/m^3	SVE-19 04/27/12 µg/m^3
Dichlorodifluoromethane (CFC-12)	63	160	280	320	50	2.5	1,600	860	1,000	130	51	40.0	110	82	91.0	110	25.0
Ethyl ether	< 61	< 6.1	< 20	< 61	< 61	< 6.1	600	< 360	< 370	100	< 55	< 6.1	11.0	< 61	< 15	< 61	< 61
Ethylbenzene	< 8.7	< 0.87	< 2.9	< 8.7	< 8.7	< 0.87	2,500	180	< 53	27	< 7.9	< 0.87	3	< 8.7	< 2.2	< 8.7	< 8.7
Hexachlorobutadiene	< 110	< 11	< 36	< 110	< 110	< 11	< 640	< 640	< 650	< 110	< 97	< 11	< 11	< 110	< 27	< 110	< 110
Hexane	< 14	1.8	< 4.7	< 14	< 18	< 1.8	1,800	170	< 110	37	20	6	36	< 18	< 4.2	< 18	< 18
Isopropyl benzene (Cumene)	< 20	< 2.0	< 6.6	< 20	< 20	< 2.0	170	< 120	< 120	< 20	< 18	< 2.0	< 2.0	< 20	< 4.9	< 20	< 20
m&p-Xylenes	< 8.7	0.95	< 2.9	< 8.7	< 8.7	< 0.87	1,900	320	< 53	83	< 7.9	< 0.87	10	< 8.7	< 2.2	< 8.7	< 8.7
Methyl tert butyl ether (MTBE)	< 36	< 3.6	< 12	< 36	< 36	< 3.6	< 220	< 220	< 220	< 36	< 33	< 3.6	< 3.6	< 36	< 9.0	< 36	< 36
Methylene chloride	< 35	< 3.5	< 12	< 35	< 17	< 1.7	430	150	130	41	< 16	2	3	< 17	5.30	< 17	< 17
Naphthalene	< 58	< 5.8	< 19	< 58	< 26	< 2.6	< 160	< 160	< 160	< 26	< 24	< 2.6	< 2.6	< 26	< 6.3	< 26	< 26
N-Decane	< 70	< 7.0	< 23	< 70	< 58	< 5.8	370	< 350	< 350	< 58	< 53	< 5.8	< 5.8	< 58	< 15	< 58	< 58
N-Dodecane	< 16	< 1.6	< 5.5	< 16	< 70	< 7.0	< 420	< 420	< 420	< 70	< 63	< 7.0	< 7.0	< 70	< 17	< 70	< 70
N-Heptane	< 20	< 2.0	< 6.6	< 20	< 20	< 2.0	1,300	< 120	< 120	31	< 19	4	16	< 20	< 4.9	< 20	< 20
Nonane	< 64	< 6.4	< 21	< 64	< 26	< 2.6	1,000	< 160	< 160	31	< 24	< 2.6	9	< 26	< 6.3	< 26	< 26
N-Propylbenzene	< 21	< 2.1	< 7.0	< 21	< 20	< 2.0	< 120	< 120	< 120	< 20	< 18	< 2.0	< 2.0	< 20	< 4.9	< 20	< 20
N-Undecane	< 21	< 2.1	< 7.0	< 21	< 64	< 6.4	< 380	< 380	< 390	< 64	< 58	< 6.4	< 6.4	< 64	< 16	< 64	< 64
Octane	< 8.7	< 0.87	< 2.9	< 8.7	< 19	< 1.9	780	< 110	< 110	27	< 17	< 1.9	12	< 19	< 4.7	< 19	< 19
o-Xylene	< 19	< 1.9	< 6.2	< 19	< 8.7	< 0.87	380	56	< 53	29	< 7.9	< 0.87	3	< 8.7	< 2.2	< 8.7	< 8.7
Pentane	< 74	10	< 25	< 74	< 30	< 3.0	590	< 180	< 180	30	< 27	< 3.0	8	< 30	< 7.4	< 30	< 30
Styrene	< 8.5	< 0.85	< 2.8	< 8.5	< 8.5	< 0.85	< 51	< 51	< 52	< 8.5	< 7.7	< 0.85	< 0.85	< 8.5	< 2.1	< 8.5	< 8.5
Tetrachloroethene	16	12	32	15	< 14	6.1	730	200	500	120	< 12	3	15	< 14	11.00	< 14	< 14
Toluene	< 38	< 3.8	< 13	< 38	< 7.5	< 0.75	1,800	620	< 46	140	< 6.9	2	4	< 7.5	9.30	< 7.5	< 7.5
trans-1,2-Dichloroethene	< 7.9	< 0.79	< 2.6	< 7.9	< 7.9	< 0.79	< 48	< 47	< 48	< 7.9	< 7.2	< 0.79	< 0.79	< 7.9	< 2.0	< 7.9	< 7.9
trans-1,3-Dichloropropene	< 9.1	< 0.91	< 3.0	< 9.1	< 9.1	< 0.91	< 54	< 54	< 55	< 9.1	< 8.3	< 0.91	< 0.91	< 9.1	< 2.3	< 9.1	< 9.1
Trichloroethene	< 11	2.9	< 3.6	< 11	< 11	2	200	< 64	< 65	22	< 9.8	< 1.1	4	< 11	< 2.7	< 11	< 11
Trichlorofluoromethane (CFC-11)	240	190	230	180	45.0	1.4	190	740	830	160	57	53	130	71	44	160	14
Trifluorotrichloroethane (Freon 113)	< 15	< 1.5	< 5.1	< 15	< 15	< 1.5	< 92	< 92	< 93	< 15	< 14	< 1.5	< 1.5	< 15	< 3.8	< 15	< 15
Vinyl acetate	< 35	< 3.5	< 12	< 35	< 35	< 3.5	< 210	< 210	< 210	< 35	< 32	< 3.5	< 3.5	< 35	< 8.8	< 35	< 35
Vinyl chloride	17	9.8	4	23	< 5.1	< 0.51	1,400	350	< 31	26	< 4.6	< 0.51	5	< 5.1	2	< 5.1	< 5.1
Total VOCs	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**	**NA**

Notes:
[1] - Summa Canister was taken with only SVE wells operating
For analands not detected, half the detection limit (µg/m^3) is used in calculating Total VOCs.
NA - Not applicable.

Table 4.3

Mass Loading Calculations - December 21, 2023
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Analand [1]	CAS #	Blower Discharge Concentration [2] µg/m^3	Blower Discharge Concentration [3] (mg/m^3)	Blower Discharge Flow Rate [4] (cfm)	Calculated Blower Discharge Mass (lbs/hr)	Calculated Blower Discharge Mass (lbs/yr) [5]	WDNR NR 445.07 Emission Thresholds 25 - 40' stack height (lbs/hr)	WDNR NR 445.07 Emission Thresholds 25 - 40' stack height (lbs/yr)
1,1-Dichloroethane	75-34-3	130	0.130	570	0.0003	2.4	84.5	-
1,1,1-Trichloroethane	71-55-6	160	0.160	570	0.0003	3.0	-	-
1,1,2-Trichloroethane	79-00-5	< 11	0.006	570	0.0000	0.1	11.4	-
1,1-Dichloroethene	75-35-4	16	0.016	570	0.0000	0.3	4.14	-
1,2,4-Trimethylbenzene	95-63-6	< 9.8	0.005	570	0.0000	0.1	25.6	-
1,2-Dichlorobenzene	95-50-1	< 24	0.012	570	0.0000	0.2	31.4	-
1,2-Dichloro-1,1,2,2-tetrafluoroethane	76-14-2	110	0.110	570	0.0002	2.1	-	-
1,2-Dichloroethane	107-06-2	< 8.1	0.004	570	0.0000	0.1	8.45	281
1,2-Dichloropropane	78-87-5	< 9.2	0.005	570	0.0000	0.1	72.3	2,920
1,3,5-Trimethylbenzene	108-67-8	< 20	0.010	570	0.0000	0.2	25.6	-
1,4-Dichlorobenzene	106-46-7	< 12	0.006	570	0.0000	0.1	664	584,000
2-Butanone (MEK)	78-93-3	< 54	0.027	570	0.0001	0.5	-	-
2-Hexanone	591-78-6	< 20	0.010	570	0.0000	0.2	4.27	-
Acetone	67-64-1	< 180	0.090	570	0.0002	1.7	-	-
Acetonitrile	75-05-8	< 17	0.009	570	0.0000	0.2	14	-
Benzene	71-43-2	< 6.4	0.003	570	0.0000	0.1	-	936
Carbon disulfide	75-15-0	< 12	0.006	570	0.0000	0.1	6.5	511,000
Chlorobenzene	108-90-7	< 9.2	0.005	570	0.0000	0.1	9.61	-
Chlorodifluoromethane	75-45-6	21	0.021	570	0.0000	0.4	-	36,500,000
Chloroethane	75-00-3	22	0.022	570	0.0000	0.4	55.1	7,300,000
Chloroform	67-66-3	36	0.036	570	0.0001	0.7	10.2	317
Chloromethane	74-87-3	< 19	0.010	570	0.0000	0.2	21.5	-
cis-1,2-Dichloroethene	156-59-2	< 7.9	0.004	570	0.0000	0.1	166	-
Cyclohexane	110-82-7	< 14	0.007	570	0.0000	0.1	-	-
Dichlorodifluoromethane	75-71-8	370	0.370	570	0.0008	6.9	-	-
Ethylbenzene	100-41-4	< 8.7	0.004	570	0.0000	0.1	90.6	730,000
Ethyl Ether	60-29-7	< 61	0.031	570	0.0001	0.6	-	-
Isopropylbenzene (Cumene)	98-82-8	< 36	0.018	570	0.0000	0.3	51.3	-
Methyl isobutyl ketone	108-10-1	< 37	0.019	570	0.0000	0.3	42.7	-
Methylene chloride	75-09-2	< 35	0.018	570	0.0000	0.3	36.2	15,532
N-Butane	106-97-8	250	0.250	570	0.0005	4.7	-	-
N-Decane	124-18-5	< 70	0.035	570	0.0001	0.7	-	-

Table 4.3

Mass Loading Calculations - December 21, 2023
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Analand [1]	CAS #	Blower Discharge Concentration [2] µg/m^3	Blower Discharge Concentration [3] (mg/m^3)	Blower Discharge Flow Rate [4] (cfm)	Calculated Blower Discharge Mass (lbs/hr)	Calculated Blower Discharge Mass (lbs/yr) [5]	WDNR NR 445.07 Emission Thresholds 25 - 40' stack height (lbs/hr)	WDNR NR 445.07 Emission Thresholds 25 - 40' stack height (lbs/yr)
N-heptane	142-82-5	< 20	0.010	570	0.0000	0.2	-	-
N-hexane	110-54-3	88	0.088	570	0.0002	1.6	36.8	146,000
N-Octane	111-65-9	53	0.053	570	0.0001	1.0	-	-
Nonane	111-84-2	< 64	0.032	570	0.0001	0.6	-	-
Pentane	2672-01-7	< 74	0.037	570	0.0001	0.7	-	-
Tetrachloroethene	127-18-4	22	0.022	570	0.0000	0.4	35.4	1,237
Toluene	108-88-3	< 38	0.019	570	0.0000	0.4	39.3	292,000
trans-1,2-Dichloroethene	156-60-5	< 7.9	0.004	570	0.0000	0.1	166	-
Trichloroethene	79-01-6	< 11	0.006	570	0.0000	0.1	56.1	3,650
Trichlorofluoromethane	75-69-4	100	0.100	570	0.0002	1.9	-	-
Undecane	1120-21-4	< 120	0.060	570	0.0001	1.1	-	-
Vinyl chloride	75-01-4	27	0.027	570	0.0001	0.5	830	73,000
Xylenes, m,p	1330-20-7	88	0.088	570	0.0002	1.6	90.6	-
Xylenes, o	95-47-6	16	0.016	570	0.0000	0.3	90.6	-
Xylenes, Total	1330-20-7	104	0.104	570	0.0002	1.9	90.6	-

Notes:

[1] Historically detected analands regulated under WDNR NR445.

[2] The blower discharge sample collected on December 21, 2023 was used for calculations because it had the greatest total VOC concentration.

[3] For analands not detected, half the detection limit (µg/m^3) is used to calculate the concentration in µg/m^3.

[4] The maximum flowrate for 2023.

[5] Calculation assumes continuous operation throughout the year.

- - No regulatory limit.

Table 4.4

SVE/LFG System
Total VOC Mass Removal
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Date	Blower Meter Reading	Time Period	Total VOC Concentration µg/m^3	Flow Rate CFM	Total VOC Mass Removed lbs.
09/23/08		Day 1	194,930	1,250	22
09/25/08		Day 2	205,020	1,250	23
10/01/08		Days 3-8	145,510	1,275	100
10/07/08		Week 2	115,070	1,300	81
10/15/08		Week 3	78,800	1,280	73
10/30/08		Weeks 4-5	68,360	1,100	101
11/13/08	1,229.9	Weeks 6-7	40,581	1,100	56
12/13/08	1,705.1	3rd Month	40,581	1,100	79
04/24/09	3,964.0	2nd Quarter 2009	20,243	1,290	214
07/23/09	2,160.0	3rd Quarter 2009	7,023	1,120	64
10/20/09	2,136.0	4th Quarter 2009	1,427	1,290	15
01/29/10	2,953.0	1st Quarter 2010	6,651	1,280	77
04/22/10	4,562.9	2nd Quarter 2010	4,453	1,290	35
07/23/10	6,590.5	3rd Quarter 2010	4,175	1,180	37
10/22/10	7,573.2	4th Quarter 2010	5,629	1,250	26
01/24/11	9,478.3	1st Quarter 2011	4,521	1,200	39
04/29/11	10,931.3	2nd Quarter 2011	3,145	1,080	18
07/22/11	12,495.8	3rd Quarter 2011	2,633	1,250	19
10/26/11	14,482.5	4th Quarter 2011	2,369	1,250	22
01/26/12	1,808.2	1st Quarter 2012	2,821	1,220	23
04/27/12	1,566.7	2nd Quarter 2012	2,149	1,200	15
07/25/12	1,479.8	3rd Quarter 2012	3,116	1,310	23
10/30/12	1,414.8	4th Quarter 2012	1,102	1,250	7.3
01/03/13	1,558.2	1st Quarter 2013	2,202	1,200	15
04/26/13	931.8	2nd Quarter 2013	338	1,270	1.5
07/25/13	2,165.2	3rd Quarter 2013	1,454	1,250	15
10/23/13	1,984.0	4th Quarter 2013	1,296	1,250	12

Table 4.4

SVE/LFG System
Total VOC Mass Removal
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Date	Blower Meter Reading	Time Period	Total VOC Concentration µg/m^3	Flow Rate CFM	Total VOC Mass Removed lbs.
12/31/14	3,664.7	2014 [1]	2,522	1,832	63
12/31/15	6,506.4	2015 [1]	823	1,786	36
12/31/16	4,809.3	2016 [1]	1,286	471	11
12/31/17	3,950.9	2017 [1]	1,695	584	15
12/31/18	2,567.3	2018 [1]	1,974	420	8
12/31/19	3,768.4	2019 [1]	1,985	499	14
12/31/20	3,669.5	2020 [1]	1,635	456	10
12/31/21	3,799.2	2021 [1]	986	502	7
12/31/22	4,455.5	2022 [1]	959	520	8
12/31/23	3,614.7	2023 [1]	981	477	6
				Total	1,392

Notes:
[1] - Average flow rate and average total VOC concentration used to calculate pounds removed.
- Blower ran intermittently from November 25, 2008 to December 13, 2008 due to excess condensate water.
- Blower was shut down from December 13, 2008, thru January 19, 2009, to devise condensate water collection system and clean well screens.
- Blower was shutdown from November 21, 2012 to December 21, 2012 in order to evaluate the effects on the quantity of VOC removal.
- Blower was shutdown from January 10, 2014 to May 13, 2014 in order to evaluate the effects on the quantity of VOC removal.
- With approval from the WDNR on 10/21/15, System modifications occurred on 10/29/15. Modifications included operating the system on a part time schedule (16 hrs/day) and operating only SVE wells SVE-4, SVE-6, SVE-7, SVE-12, SVE-13, and SVE-14. These wells are monitoried on a monthly basis. All other SVE wells will be monitored on a semi-annual basis (April and October) and will be "turned on" on an as needed basis. Extraction from the LFG wells was also modified in order to focus gas extraction in the vicinity of the GP-2 nest.

Table 4.5

SVE/LFG System
1,1,1-Trichloroethane Mass Removal
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Date	Time Period	1,1,1-TCA Concentration $\mu g/m^3$	Flow Rate CFM	Total 1,1,1-TCA Mass Removed lbs.
09/23/08	Day 1	17,000	1,250	1.9
09/25/08	Day 2	28,000	1,250	3.1
10/01/08	Days 3-8	27,000	1,275	19
10/07/08	Week 2	29,000	1,300	20
10/15/08	Week 3	18,000	1,280	17
10/30/08	Weeks 4-5	15,000	1,100	22
11/13/08	Weeks 6-7	11,000	1,100	15
12/13/08	3rd Month	11,000	1,100	22
04/24/09	2nd Quarter 2009	5,700	1,290	60
07/23/09	3rd Quarter 2009	2,000	1,120	18
10/20/09	4th Quarter 2009	380	1,290	3.9
01/29/10	1st Quarter 2010	1,300	1,280	15
04/22/10	2nd Quarter 2010	1,500	1,290	12
07/23/10	3rd Quarter 2010	1,400	1,180	13
10/22/10	4th Quarter 2010	1,000	1,250	4.6
01/24/11	1st Quarter 2011	1,500	1,200	13
04/29/11	2nd Quarter 2011	940	1,080	5.5
07/22/11	3rd Quarter 2011	830	1,250	6.1
10/26/11	4th Quarter 2011	650	1,250	6.0
01/26/12	1st Quarter 2012	760	1,220	6.3
04/27/12	2nd Quarter 2012	790	1,200	5.6
07/25/12	3rd Quarter 2012	940	1,310	6.8
10/30/12	4th Quarter 2012	350	1,250	2.3
01/03/13	1st Quarter 2013	420	1,200	2.9
04/26/13	2nd Quarter 2013	15	1,270	0.1
07/25/13	3rd Quarter 2013	300	1,250	3.0
10/23/13	4th Quarter 2013	200	1,250	1.9

Table 4.5

SVE/LFG System
1,1,1-Trichloroethane Mass Removal
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Date	Time Period	1,1,1-TCA Concentration µg/m^3	Flow Rate CFM	Total 1,1,1-TCA Mass Removed lbs.
12/31/14	2014 [1]	458	1,832	12
12/31/15	2015 [1]	228	1,786	9.9
12/31/16	2016 [1]	268	471	2.3
12/31/17	2017 [1]	348	584	3.0
12/31/18	2018 [1]	318	420	1.3
12/31/19	2019 [1]	340	499	2.4
12/31/20	2020 [1]	260	456	1.6
12/31/21	2021 [1]	188	502	1.3
12/31/22	2022 [1]	220	520	1.9
12/31/23	2023 [1]	160	477	1.0
			Total	341

Notes:
[1] - Average flow rate and average 1,1,1-Trichloroethane concentration used to calculate pounds removed.
- Blower ran intermittently from November 25, 2008 to December 13, 2008 due to excess condensate water.
- Blower was shut down from December 13, 2008, thru January 19, 2009, to devise condensate water collection system and clean well screens.
- Blower was shutdown from November 21, 2012 to December 21, 2012 in order to evaluate the effects on the quantity of VOC removal.
- Blower was shutdown from January 10, 2014 to May 13, 2014 in order to evaluate the effects on the quantity of VOC removal.
- With approval from the WDNR on 10/21/15, System modifications occurred on 10/29/15. Modifications included operating the system on a part time schedule (16 hrs/day) and operating only SVE wells SVE-4, SVE-6, SVE-7, SVE-12, SVE-13, and SVE-14. These wells are monitoried on a monthly basis. All other SVE wells will be monitored on a semi-annual basis (April and October) and will be "turned on" on an as needed basis. Extraction from the LFG wells was also modified in order to focus gas extraction in the vicinity of the GP-2 nest.

Table 4.6

SVE/LFG System
1,1,-Dichloroethane Mass Removal
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Date	Time Period	1,1-DCA Concentration $\mu g/m^3$	Flow Rate CFM	1,1-DCA Mass Removed lbs.
09/23/08	Day 1	51,000	1,250	5.7
09/25/08	Day 2	59,000	1,250	6.6
10/01/08	Days 3-8	42,000	1,275	29
10/07/08	Week 2	32,000	1,300	22
10/15/08	Week 3	20,000	1,280	18
10/30/08	Weeks 4-5	16,000	1,100	24
11/13/08	Weeks 6-7	8,600	1,100	12
12/13/08	3rd Month	8,600	1,100	17
04/24/09	2nd Quarter 2009	3,900	1,290	41
07/23/09	3rd Quarter 2009	1,100	1,120	10
10/20/09	4th Quarter 2009	220	1,290	2.3
01/29/10	1st Quarter 2010	920	1,280	11
04/22/10	2nd Quarter 2010	850	1,290	6.6
07/23/10	3rd Quarter 2010	790	1,180	7.1
10/22/10	4th Quarter 2010	680	1,250	3.1
01/24/11	1st Quarter 2011	940	1,200	8.0
04/29/11	2nd Quarter 2011	550	1,080	3.2
07/22/11	3rd Quarter 2011	600	1,250	4.4
10/26/11	4th Quarter 2011	370	1,250	3.4
01/26/12	1st Quarter 2012	350	1,220	2.9
04/27/12	2nd Quarter 2012	370	1,200	2.6
07/25/12	3rd Quarter 2012	550	1,310	4.0
10/30/12	4th Quarter 2012	190	1,250	1.3
01/03/13	1st Quarter 2013	290	1,200	2.0
04/26/13	2nd Quarter 2013	12	1,270	0.1
07/25/13	3rd Quarter 2013	180	1,250	1.8
10/23/13	4th Quarter 2013	120	1,250	1.1

Table 4.6

SVE/LFG System
1,1,-Dichloroethane Mass Removal
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Date	Time Period	1,1-DCA Concentration µg/m^3	Flow Rate CFM	1,1-DCA Mass Removed lbs.
12/31/14	2014 [1]	468	1,832	12
12/31/15	2015 [1]	140	1,786	6.1
12/31/16	2016 [1]	205	471	1.7
12/31/17	2017 [1]	263	584	2.3
12/31/18	2018 [1]	260	420	1.0
12/31/19	2019 [1]	253	499	1.8
12/31/20	2020 [1]	193	456	1.2
12/31/21	2021 [1]	134	502	1.0
12/31/22	2022 [1]	120	520	1.0
12/31/23	2023 [1]	106	477	0.7
			Total	279

Notes:
[1] - Average flow rate and average 1,1-Dichloroethane concentration used to calculate pounds removed.
- Blower ran intermittently from November 25, 2008 to December 13, 2008 due to excess condensate water.
- Blower was shut down from December 13, 2008, thru January 19, 2009, to devise condensate water collection system and clean well screens.
- Blower was shutdown from November 21, 2012 to December 21, 2012 in order to evaluate the effects on the quantity of VOC removal.
- Blower was shutdown from January 10, 2014 to May 13, 2014 in order to evaluate the effects on the quantity of VOC removal.
- With approval from the WDNR on 10/21/15, System modifications occurred on 10/29/15. Modifications included operating the system on a part time schedule (16 hrs/day) and operating only SVE wells SVE-4, SVE-6, SVE-7, SVE-12, SVE-13, and SVE-14. These wells are monitoried on a monthly basis. All other SVE wells will be monitored on a semi-annual basis (April and October) and will be "turned on" on an as needed basis. Extraction from the LFG wells was also modified in order to focus gas extraction in the vicinity of the GP-2 nest.

Table 4.7

SVE/LFG System
1,1,-Dichloroethene Mass Removal
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Date	Time Period	1,1-DCE Concentration µg/m^3	Flow Rate CFM	1,1-DCE Mass Removed lbs.
09/23/08	Day 1	3,300	1,250	0.4
09/25/08	Day 2	3,900	1,250	0.4
10/01/08	Days 3-8	4,700	1,275	3.2
10/07/08	Week 2	3,800	1,300	2.7
10/15/08	Week 3	1,900	1,280	1.7
10/30/08	Weeks 4-5	1,700	1,100	2.5
11/13/08	Weeks 6-7	1,400	1,100	1.9
12/13/08	3rd Month	1,400	1,100	2.7
04/24/09	2nd Quarter 2009	570	1,290	6.0
07/23/09	3rd Quarter 2009	180	1,120	1.6
10/20/09	4th Quarter 2009	29	1,290	0.3
01/29/10	1st Quarter 2010	180	1,280	2.1
04/22/10	2nd Quarter 2010	150	1,290	1.2
07/23/10	3rd Quarter 2010	140	1,180	1.3
10/22/10	4th Quarter 2010	110	1,250	0.5
01/24/11	1st Quarter 2011	190	1,200	1.6
04/29/11	2nd Quarter 2011	180	1,080	1.1
07/22/11	3rd Quarter 2011	150	1,250	1.1
10/26/11	4th Quarter 2011	70	1,250	0.7
01/26/12	1st Quarter 2012	76	1,220	0.6
04/27/12	2nd Quarter 2012	83	1,200	0.6
07/25/12	3rd Quarter 2012	100	1,310	0.7
10/30/12	4th Quarter 2012	43	1,250	0.3
01/03/13	1st Quarter 2013	61	1,200	0.4
04/26/13	2nd Quarter 2013	2	1,270	0.0
07/25/13	3rd Quarter 2013	38	1,250	0.4
10/23/13	4th Quarter 2013	25	1,250	0.2

Table 4.7

SVE/LFG System
1,1,-Dichloroethene Mass Removal
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Date	Time Period	1,1-DCE Concentration µg/m^3	Flow Rate CFM	1,1-DCE Mass Removed lbs.
12/31/14	2014 [1]	58	1,832	1.5
12/31/15	2015 [1]	29	1,786	1.3
12/31/16	2016 [1]	22	471	0.2
12/31/17	2017 [1]	33	584	0.3
12/31/18	2018 [1]	44	420	0.2
12/31/19	2019 [1]	44	499	0.3
12/31/20	2020 [1]	35	456	0.2
12/31/21	2021 [1]	38	502	0.3
12/31/22	2022 [1]	30	520	0.3
12/31/23	2023 [1]	21	477	0.1
			Total	40.9

Notes:

[1] - Average flow rate and average 1,1-Dichloroethene concentration used to calculate pounds removed.

- Blower ran intermittently from November 25, 2008 to December 13, 2008 due to excess condensate water.
- Blower was shut down from December 13, 2008, thru January 19, 2009, to devise condensate water collection system and clean well screens.
- Blower was shutdown from November 21, 2012 to December 21, 2012 in order to evaluate the effects on the quantity of VOC removal.
- Blower was shutdown from January 10, 2014 to May 13, 2014 in order to evaluate the effects on the quantity of VOC removal.
- With approval from the WDNR on 10/21/15, System modifications occurred on 10/29/15. Modifications included operating the system on a part time schedule (16 hrs/day) and operating only SVE wells SVE-4, SVE-6, SVE-7, SVE-12, SVE-13, and SVE-14. These wells are monitoried on a monthly basis. All other SVE wells will be monitored on a semi-annual basis (April and October) and will be "turned on" on an as needed basis. Extraction from the LFG wells was also modified in order to focus gas extraction in the vicinity of the GP-2 nest.

Table 4.8

SVE/LFG System
Tetrachloroethene Mass Removal
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Date	Time Period	Tetrachloroethene Concentration $\mu g/m^3$	Flow Rate CFM	Tetrachloroethene Mass Removed lbs.
09/23/08	Day 1	3,000	1,250	0.3
09/25/08	Day 2	3,700	1,250	0.4
10/01/08	Days 3-8	2,500	1,275	1.7
10/07/08	Week 2	2,100	1,300	1.5
10/15/08	Week 3	1,900	1,280	1.7
10/30/08	Weeks 4-5	1,800	1,100	2.7
11/13/08	Weeks 6-7	1,000	1,100	1.4
12/13/08	3rd Month	1,000	1,100	2.0
04/24/09	2nd Quarter 2009	760	1,290	8.0
07/23/09	3rd Quarter 2009	320	1,120	2.9
10/20/09	4th Quarter 2009	49	1,290	0.5
01/29/10	1st Quarter 2010	300	1,280	3.5
04/22/10	2nd Quarter 2010	176	1,290	1.4
07/23/10	3rd Quarter 2010	190	1,180	1.7
10/22/10	4th Quarter 2010	190	1,250	0.9
01/24/11	1st Quarter 2011	190	1,200	1.6
04/29/11	2nd Quarter 2011	160	1,080	0.9
07/22/11	3rd Quarter 2011	270	1,250	2.0
10/26/11	4th Quarter 2011	170	1,250	1.6
01/26/12	1st Quarter 2012	95	1,220	0.8
04/27/12	2nd Quarter 2012	110	1,200	0.8
07/25/12	3rd Quarter 2012	250	1,310	1.8
10/30/12	4th Quarter 2012	66	1,250	0.4
01/03/13	1st Quarter 2013	110	1,200	0.8
04/26/13	2nd Quarter 2013	1.9	1,270	0.0
07/25/13	3rd Quarter 2013	74	1,250	0.8
10/23/13	4th Quarter 2013	16	1,250	0.1

Table 4.8

SVE/LFG System
Tetrachloroethene Mass Removal
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Date	Time Period	Tetrachloroethene Concentration µg/m^3	Flow Rate CFM	Tetrachloroethene Mass Removed lbs.
12/31/14	2014 [1]	135	1,832	3.4
12/31/15	2015 [1]	66	1,786	2.9
12/31/16	2016 [1]	85	471	0.7
12/31/17	2017 [1]	116	584	1.0
12/31/18	2018 [1]	97	420	0.4
12/31/19	2019 [1]	108	499	0.8
12/31/20	2020 [1]	79	456	0.5
12/31/21	2021 [1]	70	502	0.5
12/31/22	2022 [1]	68	520	0.6
12/31/23	2023 [1]	39	477	0.3
			Total	53.2

Notes:

[1] - Average flow rate and average 1,1-Dichloroethene concentration used to calculate pounds removed.

- Blower ran intermittently from November 25, 2008 to December 13, 2008 due to excess condensate water.
- Blower was shut down from December 13, 2008, thru January 19, 2009, to devise condensate water collection system and clean well screens.
- Blower was shutdown from November 21, 2012 to December 21, 2012 in order to evaluate the effects on the quantity of VOC removal.
- Blower was shutdown from January 10, 2014 to May 13, 2014 in order to evaluate the effects on the quantity of VOC removal.
- With approval from the WDNR on 10/21/15, System modifications occurred on 10/29/15. Modifications included operating the system on a part time schedule (16 hrs/day) and operating only SVE wells SVE-4, SVE-6, SVE-7, SVE-12, SVE-13, and SVE-14. These wells are monitoried on a monthly basis. All other SVE wells will be monitored on a semi-annual basis (April and October) and will be "turned on" on an as needed basis. Extraction from the LFG wells was also modified in order to focus gas extraction in the vicinity of the GP-2 nest.

Appendices

Appendix A

Historical Groundwater Elevation Summary

Appendix A

Historical Groundwater Elevation Summary
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Monitoring Wells	Top of Casing Elevation	December 2003	August 2005	September 2005	April 2007	July 2007	May 2008	August 2008	November 2008	February 2009	May 2009	August 2009	November 2009	January 2010	May 2010	November 2010	May 2011	November 2011	May 2012	November 2012	May 2013
MW-1	1044.71	908.39	903.70	NA	901.86	901.55	900.79	901.42	901.81	901.89	902.00	901.49	900.91	DRY	DRY	DRY	DRY	DRY	DRY	900.87	DRY
MW-1A	1044.00	907.99	903.18	NA	901.46	901.19	900.30	900.94	901.19	901.54	901.48	900.93	900.37	899.96	899.75	897.69	898.60	899.82	900.65	900.49	900.04
MW-1B	1044.86	908.02	902.18	NA	902.74	901.20	900.20	901.01	901.35	901.26	901.53	901.00	900.41	899.99	899.79	899.37	898.64	899.84	900.67	900.51	900.09
MW-2R	1058.23	NA	NA	906.73	905.24	905.03	904.02	904.66	904.85	905.40	905.33	904.77	904.14	903.73	903.43	902.15	902.06	903.33	904.42	904.23	903.70
MW-2A	1058.62	912.34	907.53	907.14	905.64	905.32	904.41	905.01	905.36	905.71	905.66	905.12	904.53	904.05	903.81	902.56	902.41	903.72	904.76	904.62	904.01
MW-2B	1058.59	912.32	907.54	907.11	905.63	905.31	904.38	904.97	905.35	905.68	905.62	905.08	904.47	903.05	903.81	902.49	902.39	903.67	904.73	904.57	904.00
MW-3	1019.14	919.16	917.69	NA	917.04	917.52	917.74	919.19	919.39	918.21	918.38	918.11	917.69	917.27	917.79	918.32	919.19	917.75	918.06	917.43	918.43
MW-4	1072.50	920.62	916.48	NA	914.53	914.29	913.25	914.02	914.24	914.68	914.60	914.05	913.45	NA	912.57	911.05	911.04	912.52	913.71	913.50	912.91
MW-5	1022.91	926.02	921.46	NA	919.43	919.20	918.18	918.82	919.11	919.50	919.55	918.99	918.39	NA	917.47	915.96	916.07	917.40	918.64	918.40	917.63
MW-6	1042.48	921.98	917.27	NA	915.39	914.96	914.10	914.87	915.03	915.24	915.39	914.73	914.10	NA	913.12	911.79	912.03	913.40	914.36	914.18	913.63
MW-8	1049.91	916.63	912.51	NA	910.64	910.37	909.33	909.80	910.30	910.62	910.63	910.10	909.50	908.91	908.72	907.29	907.08	908.54	909.76	909.59	908.94
MW-8A	1049.67	916.68	912.51	NA	910.85	910.34	909.31	909.79	910.27	910.64	910.62	910.08	909.49	908.90	908.70	907.27	907.06	908.52	909.77	909.55	908.95
MW-9	1026.90	912.63	907.91	NA	906.10	905.62	904.95	906.59	906.41	906.52	906.35	905.49	904.67	903.99	903.85	902.58	903.70	904.76	905.31	905.08	904.58
MW-9A	1026.03	911.89	907.14	NA	905.46	905.00	904.33	905.11	905.25	905.48	905.51	904.82	904.18	903.66	903.47	902.22	902.64	903.74	904.49	904.37	904.01
MW-10	1029.08	NA	885.40	885.35	883.94	884.05	883.02	883.46	883.98	883.64	883.38	883.28	883.27	882.65	882.38	881.58	881.87	882.88	883.54	883.36	882.56
MW-10A	1028.94	NA	885.63	885.58	884.17	884.13	883.42	884.20	884.18	884.22	884.17	883.71	883.18	883.02	882.93	882.09	882.22	883.24	883.45	883.29	882.94
MW-10B	1028.79	NA	885.18	885.09	877.68	883.61	882.98	883.47	883.74	883.79	883.69	883.27	882.84	882.59	882.59	881.69	881.88	882.82	883.02	882.82	882.52
MW-11	872.37	NA	862.32	862.34	862.42	862.16	863.36	862.52	862.39	862.41	862.32	862.12	862.34	862.49	862.08	862.25	862.14	862.14	862.66	861.50	865.61
MW-11A	871.83	NA	861.21	861.25	861.70	861.09	862.21	861.44	861.29	861.32	861.24	861.02	861.22	861.37	860.97	861.16	862.22	861.03	861.50	861.46	864.41
MW-12	880.06	NA	868.76	868.74	868.86	868.12	869.44	868.92	868.20	867.98	868.62	867.82	868.09	867.65	868.17	868.31	869.25	867.75	868.65	867.45	869.48
MW-12A	879.67	NA	868.09	867.99	867.69	867.26	868.17	868.04	867.41	867.23	867.39	866.76	866.87	866.71	867.67	866.96	868.05	866.92	867.19	866.49	868.66
MW-13	1033.70	NA	911.02	910.90	909.33	908.85	908.25	909.13	909.20	909.15	909.39	908.59	907.88	907.39	907.02	905.87	906.78	905.82	908.20	907.85	908.13
MW-13A	1033.57	NA	911.01	910.88	909.25	908.79	908.17	909.00	909.08	909.14	909.28	908.51	907.75	907.31	906.98	905.82	906.59	907.76	908.18	907.84	907.98
MW-14	1028.94	NA	906.80	906.31	903.49	904.28	903.34	903.75	904.29	904.47	904.53	904.07	903.53	903.05	902.69	901.46	901.17	902.67	903.63	903.37	902.85
MW-14A	1027.84	NA	906.13	906.01	900.49	904.02	903.02	903.43	903.92	904.28	904.17	903.71	903.14	901.95	902.49	901.14	900.89	902.23	903.34	903.00	902.56
MW-15	880.76	NA	858.44	858.50	859.31	858.00	860.06	858.52	858.28	858.63	858.51	857.89	858.25	858.42	858.05	858.51	859.57	858.17	859.07	857.89	859.89
MW-15A	879.52	NA	861.37	861.30	861.64	860.77	862.04	861.20	860.94	861.15	861.00	860.50	860.67	860.75	860.49	860.71	861.57	860.69	861.18	860.41	861.81
MW-16	1039.90	NA	NA	NA	NA	NA	897.82	898.40	898.72	898.91	898.88	898.30	897.74	897.31	897.14	896.01	896.20	897.38	898.00	897.80	897.51
MW-16A	1040.08	NA	NA	NA	NA	NA	897.82	898.38	898.75	898.94	898.88	898.37	897.75	897.44	897.10	896.08	896.23	897.37	898.02	897.80	897.51
MW-17	907.23	NA	NA	NA	NA	NA	870.55	870.86	870.65	870.52	870.63	870.03	869.84	869.72	869.43	869.42	870.06	870.21	870.03	869.76	870.26
MW-17A	907.44	NA	NA	NA	NA	NA	870.64	870.85	870.66	870.51	870.40	870.01	869.83	869.67	869.54	869.32	869.96	870.08	869.90	869.63	867.41
MW-18	897.73	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	864.35	864.22	864.24	861.03	859.72	861.51	860.12	860.68
MW-19**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.07
MW-19A**	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	38.05
Apple River*	870.68	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	860.12	859.99	861.04	864.97	864.25	864.46	864.01	865.12

Appendix B

Data Quality Validation Memorandums and Laboratory Reports

Data Verification Report

January 17, 2024

To	Tom Hobday, GHD	**Project No.**	048038-70-05
Copy To	Johan Hedblom, GHD	**Email**	grant.anderson@ghd.com
From	Grant Anderson/lg/10	**Contact No.**	612-524-6836
Project Name	New Richmond Landfill		
Subject	Analytical Results and Data Verification Soil Gas Sampling Events New Richmond Landfill Site New Richmond, Wisconsin March, June and December 2023		

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

1. Introduction

This document details a data verification of analytical results for soil gas samples collected in support of the soil gas monitoring program at the New Richmond Landfill Site during March, June and December 2023. Samples were submitted to Eurofins Knoxville located in Knoxville, Tennessee. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard GHD Services, Inc. (GHD) report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data and laboratory control samples (LCS).

The QA/QC criteria by which these data have been assessed are outlined in the analytical methods referenced in Table 3 and applicable guidance from the documents entitled:

1. “Quality Assurance Project Plan (QAPP), New Richmond Landfill, WDNR License #2492"; April 2008, Conestoga Rovers & Associates, Report 7
2. "USEPA Contract Laboratory Program National Functional Guidelines for Organic Data Review," October 1999, United States Environmental Protection Agency (USEPA) 540/R 99/008

Item 2. will subsequently be referred to as the "Guidelines" in this report.

2. Sample Holding Time and Preservation

The sample holding time criteria for the analyses are summarized in Table 3. Sample chain of custody documents and analytical reports were used to determine sample holding times. All samples were analyzed within the required holding times.

All sample canisters were received at the laboratory in good condition and within acceptable canister pressure range.

3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

Laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

4. Laboratory Control Sample Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

LCS were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

The LCS contained all compounds of interest. LCS recoveries were assessed per the "Guidelines". All LCS recoveries were within the laboratory control limits or yielded recoveries above the control limits that did not result in qualification of non-detect data, demonstrating acceptable analytical accuracy.

5. Analyte Reporting

The laboratory reported soil gas results down to the laboratory's reporting limit (RL). Non-detect results were presented as non-detect at the RL in Table 2.

6. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable without qualification.

Regards,

Grant Anderson
Digital Intelligence-Data Management-Chemist

Table 1

Sample Collection and Analysis Summary
Soil Gas Sampling Events
New Richmond Landfill Site
New Richmond, Wisconsin
March, June and December 2023

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters
G-230320-001	Blower Discharge	air	03/20/2023	16:21:00	VOC (TO-15)
G-230622-B2-001	Blower Discharge	air	06/22/2023	11:46:00	VOC (TO-15)
G231221-BZ-001	SVE-14	air	12/21/2023	15:21:00	VOC (TO-15)
G231221-BZ-002	SVE-12	air	12/21/2023	15:29:00	VOC (TO-15)
G231221-BZ-003	SVE-6	air	12/21/2023	15:31:00	VOC (TO-15)
G231221-BZ-004	SVE-4	air	12/21/2023	15:39:00	VOC (TO-15)
G231221-BZ-005	SVE-7	air	12/21/2023	15:46:00	VOC (TO-15)
G231221-BZ-006	Blower Discharge	air	12/21/2023	15:51:00	VOC (TO-15)

Note:
VOC - Volatile Organic Compounds

Table 2

Validated Analytical Results Summary
Soil Gas Sampling Events
New Richmond Landfill Site
New Richmond, Wisconsin
March, June and December 2023

Location ID:		Blower Discharge	Blower Discharge	Blower Discharge	SVE-4	SVE-6	SVE-7	SVE-12	SVE-14
Sample Name:		G-230320-001	G-230622-BZ-001	G231221-BZ-006	G231221-BZ-004	G231221-BZ-003	G231221-BZ-005	G231221-BZ-002	G231221-BZ-001
Sample Date:		03/20/2023	06/22/2023	12/21/2023	12/21/2023	12/21/2023	12/21/2023	12/21/2023	12/21/2023
Parameters	**Unit**								
Volatile Organic Compounds									
1,1,1-Trichloroethane	ppbv	36	23	29	27	130	53	45	20
1,1,2,2-Tetrachloroethane	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1,2-Trichloroethane	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,1-Dichloroethane	ppbv	26	19	32	40	80	190	32	4.9
1,1-Dichloroethene	ppbv	6.5	5.5	4.1	5.9	29	9.1	16	3.8
1,2,4-Trichlorobenzene	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	10 U	10 U	10 U
1,2,4-Trimethylbenzene	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dibromoethane (Ethylene dibromide)	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichlorobenzene	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
1,2-Dichloroethane	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichloropropane	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,2-Dichlorotetrafluoroethane (CFC 114)	ppbv	2.8	1.0	2.7	4.3	3.1	4.9	2.0 U	4.3
1,3,5-Trimethylbenzene	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
1,3-Butadiene	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
1,3-Dichlorobenzene	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
1,4-Dichlorobenzene	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	ppbv	4.0 U	5.0	10 U	10 U	10 U	10 U	10 U	10 U
2-Hexanone	ppbv	2.0 U	0.88 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	10 U	10 U	10 U
Acetone	ppbv	30 U	18	75 U	75 U	75 U	75 U	75 U	75 U
Acetonitrile	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	10 U	10 U	10 U
Acrolein	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	10 U	10 U	10 U
Acrylonitrile	ppbv	8.0 U	3.5 U	20 U	20 U	20 U	20 U	20 U	20 U
Allyl chloride	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
alpha-Methylstyrene	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Benzene	ppbv	0.80 U	2.2	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Benzyl chloride	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Bromodichloromethane	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromoform	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Bromomethane (Methyl bromide)	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Butane	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	16	10 U	24
Carbon disulfide	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Carbon tetrachloride	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorobenzene	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Chlorodifluoromethane	ppbv	1.8	0.88	5.8	5.3	2.0 U	4.9	2.0 U	33
Chloroethane	ppbv	2.5	6.2	8.5	66	2.0 U	34	2.0 U	5.4
Chloroform (Trichloromethane)	ppbv	6.0	4.3	4.2	2.0 U	8.2	5.6	13	14
Chloromethane (Methyl chloride)	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	10 U	10 U	10 U
cis-1,2-Dichloroethene	ppbv	1.6	2.5	2.0 U	12	2.0 U	5.4	2.0 U	2.0 U
cis-1,3-Dichloropropene	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Cyclohexane	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Dibromochloromethane	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Dibromomethane	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Dichlorodifluoromethane (CFC-12)	ppbv	17	4.4	16	8.1	11	10	8.8	64

Table 2

Validated Analytical Results Summary
Soil Gas Sampling Events
New Richmond Landfill Site
New Richmond, Wisconsin
March, June and December 2023

Location ID:		Blower Discharge	Blower Discharge	Blower Discharge	SVE-4	SVE-6	SVE-7	SVE-12	SVE-14
Sample Name:		G-230320-001	G-230622-BZ-001	G231221-BZ-006	G231221-BZ-004	G231221-BZ-003	G231221-BZ-005	G231221-BZ-002	G231221-BZ-001
Sample Date:		03/20/2023	06/22/2023	12/21/2023	12/21/2023	12/21/2023	12/21/2023	12/21/2023	12/21/2023
Parameters	**Unit**								
Ethyl ether	ppbv	8.0 U	3.5 U	20 U	20 U	20 U	20 U	20 U	20 U
Ethylbenzene	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Hexachlorobutadiene	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	10 U	10 U	10 U
Hexane	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Isopropyl benzene	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
m&p-Xylenes	ppbv	0.80 U	0.39	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Methyl tert butyl ether (MTBE)	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	10 U	10 U	10 U
Methylene chloride	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Decane	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Dodecane	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	10 U	10 U	10 U
N-Heptane	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
N-Propylbenzene	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
N-Undecane	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	10 U	10 U	10 U
Naphthalene	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Nonane	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
o-Xylene	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Octane	ppbv	1.6 U	0.70 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U	4.0 U
Pentane	ppbv	10 U	4.4 U	25 U	25 U	25 U	25 U	25 U	25 U
Styrene	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Tetrachloroethene	ppbv	12	2.5	3.3	2.0 U	6.3	7.1	2.0 U	2.1
Toluene	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	10 U	10 U	10 U
trans-1,2-Dichloroethene	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
trans-1,3-Dichloropropene	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichloroethene	ppbv	0.94	0.49	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Trichlorofluoromethane (CFC-11)	ppbv	12	9.3	15	2.5	2.6	3.9	2.5	32
Trifluorotrichloroethane (CFC-113)	ppbv	0.80 U	0.35 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Vinyl acetate	ppbv	4.0 U	1.8 U	10 U	10 U	10 U	10 U	10 U	10 U
Vinyl chloride	ppbv	4.4	3.0	11	6.3	4.0 U	49	46	8.9
1,1,1-Trichloroethane	µg/m3	190	130	160	150	730	290	240	110
1,1,2,2-Tetrachloroethane	µg/m3	5.5 U	2.4 U	14 U	14 U	14 U	14 U	14 U	14 U
1,1,2-Trichloroethane	µg/m3	4.4 U	1.9 U	11 U	11 U	11 U	11 U	11 U	11 U
1,1-Dichloroethane	µg/m3	110	77	130	160	320	790	130	20
1,1-Dichloroethene	µg/m3	26	22	16	23	120	36	62	15
1,2,4-Trichlorobenzene	µg/m3	30 U	13 U	74 U	74 U	74 U	74 U	74 U	74 U
1,2,4-Trimethylbenzene	µg/m3	3.9 U	1.7 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U	9.8 U
1,2-Dibromoethane (Ethylene dibromide)	µg/m3	6.1 U	2.7 U	15 U	15 U	15 U	15 U	15 U	15 U
1,2-Dichlorobenzene	µg/m3	9.6 U	4.2 U	24 U	24 U	24 U	24 U	24 U	24 U
1,2-Dichloroethane	µg/m3	3.2 U	1.4 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U	8.1 U
1,2-Dichloropropane	µg/m3	3.7 U	1.6 U	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U
1,2-Dichlorotetrafluoroethane (CFC 114)	µg/m3	20	7.1	19	30	21	34	14 U	30
1,3,5-Trimethylbenzene	µg/m3	7.9 U	3.5 U	20 U	20 U	20 U	20 U	20 U	20 U
1,3-Butadiene	µg/m3	3.5 U	1.6 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U	8.8 U
1,3-Dichlorobenzene	µg/m3	4.8 U	2.1 U	12 U	12 U	12 U	12 U	12 U	12 U
1,4-Dichlorobenzene	µg/m3	4.8 U	2.1 U	12 U	12 U	12 U	12 U	12 U	12 U

Table 2

Validated Analytical Results Summary
Soil Gas Sampling Events
New Richmond Landfill Site
New Richmond, Wisconsin
March, June and December 2023

Location ID:		Blower Discharge	Blower Discharge	Blower Discharge	SVE-4	SVE-6	SVE-7	SVE-12	SVE-14
Sample Name:		G-230320-001	G-230622-BZ-001	G231221-BZ-006	G231221-BZ-004	G231221-BZ-003	G231221-BZ-005	G231221-BZ-002	G231221-BZ-001
Sample Date:		03/20/2023	06/22/2023	12/21/2023	12/21/2023	12/21/2023	12/21/2023	12/21/2023	12/21/2023
Parameters	**Unit**								
2-Butanone (Methyl ethyl ketone) (MEK)	µg/m3	12 U	15	29 U	29 U	29 U	29 U	29 U	29 U
2-Hexanone	µg/m3	8.2 U	3.6 U	20 U	20 U	20 U	20 U	20 U	20 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/m3	16 U	7.2 U	41 U	41 U	41 U	41 U	41 U	41 U
Acetone	µg/m3	71 U	42	180 U	180 U	180 U	180 U	180 U	180 U
Acetonitrile	µg/m3	6.7 U	3.0 U	17 U	17 U	17 U	17 U	17 U	17 U
Acrolein	µg/m3	9.2 U	4.0 U	23 U	23 U	23 U	23 U	23 U	23 U
Acrylonitrile	µg/m3	17 U	7.6 U	43 U	43 U	43 U	43 U	43 U	43 U
Allyl chloride	µg/m3	2.5 U	1.1 U	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U	6.3 U
alpha-Methylstyrene	µg/m3	7.7 U	3.4 U	19 U	19 U	19 U	19 U	19 U	19 U
Benzene	µg/m3	2.6 U	7.0	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U	6.4 U
Benzyl chloride	µg/m3	8.3 U	3.6 U	21 U	21 U	21 U	21 U	21 U	21 U
Bromodichloromethane	µg/m3	5.4 U	2.4 U	13 U	13 U	13 U	13 U	13 U	13 U
Bromoform	µg/m3	8.3 U	3.6 U	21 U	21 U	21 U	21 U	21 U	21 U
Bromomethane (Methyl bromide)	µg/m3	3.1 U	1.4 U	7.8 U	7.8 U	7.8 U	7.8 U	7.8 U	7.8 U
Butane	µg/m3	9.5 U	4.2 U	24 U	24 U	24 U	37	24 U	57
Carbon disulfide	µg/m3	5.0 U	2.2 U	12 U	12 U	12 U	12 U	12 U	12 U
Carbon tetrachloride	µg/m3	5.0 U	2.2 U	13 U	13 U	13 U	13 U	13 U	13 U
Chlorobenzene	µg/m3	3.7 U	1.6 U	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U	9.2 U
Chlorodifluoromethane	µg/m3	6.4	3.1	21	19	7.1 U	17	7.1 U	120
Chloroethane	µg/m3	6.6	16	22	170	5.3 U	89	5.3 U	14
Chloroform (Trichloromethane)	µg/m3	29	21	21	9.8 U	40	27	64	68
Chloromethane (Methyl chloride)	µg/m3	8.3 U	3.6 U	21 U	21 U	21 U	21 U	21 U	21 U
cis-1,2-Dichloroethene	µg/m3	6.3	10	7.9 U	47	7.9 U	22	7.9 U	7.9 U
cis-1,3-Dichloropropene	µg/m3	7.3 U	3.2 U	18 U	18 U	18 U	18 U	18 U	18 U
Cyclohexane	µg/m3	5.5 U	2.4 U	14 U	14 U	14 U	14 U	14 U	14 U
Dibromochloromethane	µg/m3	6.8 U	3.0 U	17 U	17 U	17 U	17 U	17 U	17 U
Dibromomethane	µg/m3	11 U	5.0 U	28 U	28 U	28 U	28 U	28 U	28 U
Dichlorodifluoromethane (CFC-12)	µg/m3	83	22	79	40	53	50	44	320
Ethyl ether	µg/m3	24 U	11 U	61 U	61 U	61 U	61 U	61 U	61 U
Ethylbenzene	µg/m3	3.5 U	1.5 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U
Hexachlorobutadiene	µg/m3	43 U	19 U	110 U	110 U	110 U	110 U	110 U	110 U
Hexane	µg/m3	5.6 U	2.5 U	14 U	14 U	14 U	14 U	14 U	14 U
Isopropyl benzene	µg/m3	7.9 U	3.5 U	20 U	20 U	20 U	20 U	20 U	20 U
m&p-Xylenes	µg/m3	3.5 U	1.7	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U
Methyl tert butyl ether (MTBE)	µg/m3	14 U	6.3 U	36 U	36 U	36 U	36 U	36 U	36 U
Methylene chloride	µg/m3	14 U	6.1 U	35 U	35 U	35 U	35 U	35 U	35 U
N-Decane	µg/m3	23 U	10 U	58 U	58 U	58 U	58 U	58 U	58 U
N-Dodecane	µg/m3	28 U	12 U	70 U	70 U	70 U	70 U	70 U	70 U
N-Heptane	µg/m3	6.6 U	2.9 U	16 U	16 U	16 U	16 U	16 U	16 U
N-Propylbenzene	µg/m3	7.9 U	3.5 U	20 U	20 U	20 U	20 U	20 U	20 U
N-Undecane	µg/m3	26 U	11 U	64 U	64 U	64 U	64 U	64 U	64 U
Naphthalene	µg/m3	8.4 U	3.7 U	21 U	21 U	21 U	21 U	21 U	21 U
Nonane	µg/m3	8.4 U	3.7 U	21 U	21 U	21 U	21 U	21 U	21 U
o-Xylene	µg/m3	3.5 U	1.5 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U	8.7 U
Octane	µg/m3	7.5 U	3.3 U	19 U	19 U	19 U	19 U	19 U	19 U

Table 2

Validated Analytical Results Summary
Soil Gas Sampling Events
New Richmond Landfill Site
New Richmond, Wisconsin
March, June and December 2023

Location ID:		Blower Discharge	Blower Discharge	Blower Discharge	SVE-4	SVE-6	SVE-7	SVE-12	SVE-14
Sample Name:		G-230320-001	G-230622-BZ-001	G231221-BZ-006	G231221-BZ-004	G231221-BZ-003	G231221-BZ-005	G231221-BZ-002	G231221-BZ-001
Sample Date:		03/20/2023	06/22/2023	12/21/2023	12/21/2023	12/21/2023	12/21/2023	12/21/2023	12/21/2023
Parameters	**Unit**								
Pentane	µg/m3	30 U	13 U	74 U	74 U	74 U	74 U	74 U	74 U
Styrene	µg/m3	3.4 U	1.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U	8.5 U
Tetrachloroethene	µg/m3	79	17	22	14 U	43	48	14 U	15
Toluene	µg/m3	15 U	6.6 U	38 U	38 U	38 U	38 U	38 U	38 U
trans-1,2-Dichloroethene	µg/m3	3.2 U	1.4 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U	7.9 U
trans-1,3-Dichloropropene	µg/m3	3.6 U	1.6 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U	9.1 U
Trichloroethene	µg/m3	5.0	2.6	11 U	11 U	11 U	11 U	11 U	11 U
Trichlorofluoromethane (CFC-11)	µg/m3	69	52	82	14	14	22	14	180
Trifluorotrichloroethane (CFC-113)	µg/m3	6.1 U	2.7 U	15 U	15 U	15 U	15 U	15 U	15 U
Vinyl acetate	µg/m3	14 U	6.2 U	35 U	35 U	35 U	35 U	35 U	35 U
Vinyl chloride	µg/m3	11	7.6	27	16	10 U	130	120	23

Note:
U - Not detected at the associated reporting limit

Table 3

Analytical Method
Soil Gas Sampling Events
New Richmond Landfill Site
New Richmond, Wisconsin
March, June and December 2023

Parameter	Method	Matrix	Holding Time	
			Collection to Extraction (Days)	Collection or Extraction to Analysis (Days)
Volatile Organic Compounds (VOC)	TO-15	Air	-	30

Method Reference:

TO-15 - "Compendium of Methods for the Determination of Toxic Organic Compounds in Air", EPA-625/R-96/010b, January 1999.

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Grant Anderson
GHD Services Inc.
900 Long Lake Road
Suite 200
New Brighton, Minnesota 55112

Generated 3/28/2023 4:16:43 PM

JOB DESCRIPTION

New Richmond Landfill

JOB NUMBER

140-31010-1

Eurofins Knoxville
5815 Middlebrook Pike
Knoxville TN 37921

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization

Generated
3/28/2023 4:16:43 PM

Authorized for release by
Jamie McKinney, Senior Project Manager
Jamie.McKinney@et.eurofinsus.com
(865)291-3000

Table of Contents

Definitions/Glossary

Client: GHD Services Inc.
Job ID: 140-31010-1
Project/Site: New Richmond Landfill

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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

Job ID: 140-31010-1

Laboratory: Eurofins Knoxville

Narrative

Job Narrative
140-31010-1

Comments
No additional comments.

Receipt
The sample was received on 3/22/2023 9:45 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
Methods TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by Eurofins TestAmerica Knoxville.

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.
Project/Site: New Richmond Landfill

Job ID: 140-31010-1

Client Sample ID: G-230320-001

Lab Sample ID: 140-31010-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	36		0.80		ppb v/v	1		TO-15	Total/NA
1,1-Dichloroethane	26		0.80		ppb v/v	1		TO-15	Total/NA
1,1-Dichloroethene	6.5		0.80		ppb v/v	1		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.8		0.80		ppb v/v	1		TO-15	Total/NA
Chlorodifluoromethane	1.8		0.80		ppb v/v	1		TO-15	Total/NA
Chloroethane	2.5		0.80		ppb v/v	1		TO-15	Total/NA
Chloroform	6.0		0.80		ppb v/v	1		TO-15	Total/NA
cis-1,2-Dichloroethene	1.6		0.80		ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	17		0.80		ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	12		0.80		ppb v/v	1		TO-15	Total/NA
Trichloroethene	0.94		0.80		ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	12		0.80		ppb v/v	1		TO-15	Total/NA
Vinyl chloride	4.4		1.6		ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	190		4.4		ug/m3	1		TO-15	Total/NA
1,1-Dichloroethane	110		3.2		ug/m3	1		TO-15	Total/NA
1,1-Dichloroethene	26		3.2		ug/m3	1		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	20		5.6		ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane	6.4		2.8		ug/m3	1		TO-15	Total/NA
Chloroethane	6.6		2.1		ug/m3	1		TO-15	Total/NA
Chloroform	29		3.9		ug/m3	1		TO-15	Total/NA
cis-1,2-Dichloroethene	6.3		3.2		ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	83		4.0		ug/m3	1		TO-15	Total/NA
Tetrachloroethene	79		5.4		ug/m3	1		TO-15	Total/NA
Trichloroethene	5.0		4.3		ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	69		4.5		ug/m3	1		TO-15	Total/NA
Vinyl chloride	11		4.1		ug/m3	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-31010-1

Client Sample ID: G-230320-001
Date Collected: 03/20/23 16:21
Date Received: 03/22/23 09:45
Sample Container: Summa Canister 6L

Lab Sample ID: 140-31010-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**36**		0.80		ppb v/v			03/23/23 22:35	1
1,1,2,2-Tetrachloroethane	ND		0.80		ppb v/v			03/23/23 22:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.80		ppb v/v			03/23/23 22:35	1
1,1,2-Trichloroethane	ND		0.80		ppb v/v			03/23/23 22:35	1
1,1-Dichloroethane	**26**		0.80		ppb v/v			03/23/23 22:35	1
1,1-Dichloroethene	**6.5**		0.80		ppb v/v			03/23/23 22:35	1
1,2,4-Trichlorobenzene	ND		4.0		ppb v/v			03/23/23 22:35	1
1,2,4-Trimethylbenzene	ND		0.80		ppb v/v			03/23/23 22:35	1
1,2-Dibromoethane (EDB)	ND		0.80		ppb v/v			03/23/23 22:35	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**2.8**		0.80		ppb v/v			03/23/23 22:35	1
1,2-Dichlorobenzene	ND		1.6		ppb v/v			03/23/23 22:35	1
1,2-Dichloroethane	ND		0.80		ppb v/v			03/23/23 22:35	1
1,2-Dichloropropane	ND		0.80		ppb v/v			03/23/23 22:35	1
1,3,5-Trimethylbenzene	ND		1.6		ppb v/v			03/23/23 22:35	1
1,3-Butadiene	ND		1.6		ppb v/v			03/23/23 22:35	1
1,3-Dichlorobenzene	ND		0.80		ppb v/v			03/23/23 22:35	1
1,4-Dichlorobenzene	ND		0.80		ppb v/v			03/23/23 22:35	1
2-Butanone (MEK)	ND		4.0		ppb v/v			03/23/23 22:35	1
2-Hexanone	ND		2.0		ppb v/v			03/23/23 22:35	1
3-Chloropropene	ND		0.80		ppb v/v			03/23/23 22:35	1
4-Methyl-2-pentanone (MIBK)	ND		4.0		ppb v/v			03/23/23 22:35	1
Acetone	ND		30		ppb v/v			03/23/23 22:35	1
Acetonitrile	ND		4.0		ppb v/v			03/23/23 22:35	1
Acrolein	ND		4.0		ppb v/v			03/23/23 22:35	1
Acrylonitrile	ND		8.0		ppb v/v			03/23/23 22:35	1
Alpha Methyl Styrene	ND		1.6		ppb v/v			03/23/23 22:35	1
Benzene	ND		0.80		ppb v/v			03/23/23 22:35	1
Benzyl chloride	ND		1.6		ppb v/v			03/23/23 22:35	1
Bromodichloromethane	ND		0.80		ppb v/v			03/23/23 22:35	1
Bromoform	ND		0.80		ppb v/v			03/23/23 22:35	1
Bromomethane	ND		0.80		ppb v/v			03/23/23 22:35	1
Butane	ND		4.0		ppb v/v			03/23/23 22:35	1
Carbon disulfide	ND		1.6		ppb v/v			03/23/23 22:35	1
Carbon tetrachloride	ND		0.80		ppb v/v			03/23/23 22:35	1
Chlorobenzene	ND		0.80		ppb v/v			03/23/23 22:35	1
Chlorodifluoromethane	**1.8**		0.80		ppb v/v			03/23/23 22:35	1
Chloroethane	**2.5**		0.80		ppb v/v			03/23/23 22:35	1
Chloroform	**6.0**		0.80		ppb v/v			03/23/23 22:35	1
Chloromethane	ND		4.0		ppb v/v			03/23/23 22:35	1
cis-1,2-Dichloroethene	**1.6**		0.80		ppb v/v			03/23/23 22:35	1
cis-1,3-Dichloropropene	ND		1.6		ppb v/v			03/23/23 22:35	1
Cumene	ND		1.6		ppb v/v			03/23/23 22:35	1
Cyclohexane	ND		1.6		ppb v/v			03/23/23 22:35	1
Decane	ND		4.0		ppb v/v			03/23/23 22:35	1
Dibromochloromethane	ND		0.80		ppb v/v			03/23/23 22:35	1
Dibromomethane	ND		1.6		ppb v/v			03/23/23 22:35	1
Dichlorodifluoromethane	**17**		0.80		ppb v/v			03/23/23 22:35	1
Dodecane	ND		4.0		ppb v/v			03/23/23 22:35	1

Client Sample ID: G-230320-001

Lab Sample ID: 140-31010-1

Date Collected: 03/20/23 16:21
Matrix: Air
Date Received: 03/22/23 09:45
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		8.0		ppb v/v			03/23/23 22:35	1
Ethylbenzene	ND		0.80		ppb v/v			03/23/23 22:35	1
Heptane	ND		1.6		ppb v/v			03/23/23 22:35	1
Hexachlorobutadiene	ND		4.0		ppb v/v			03/23/23 22:35	1
Hexane	ND		1.6		ppb v/v			03/23/23 22:35	1
Methyl tert-butyl ether	ND		4.0		ppb v/v			03/23/23 22:35	1
Methylene Chloride	ND		4.0		ppb v/v			03/23/23 22:35	1
m-Xylene & p-Xylene	ND		0.80		ppb v/v			03/23/23 22:35	1
Naphthalene	ND		1.6		ppb v/v			03/23/23 22:35	1
Nonane	ND		1.6		ppb v/v			03/23/23 22:35	1
Octane	ND		1.6		ppb v/v			03/23/23 22:35	1
o-Xylene	ND		0.80		ppb v/v			03/23/23 22:35	1
Pentane	ND		10		ppb v/v			03/23/23 22:35	1
Propylbenzene	ND		1.6		ppb v/v			03/23/23 22:35	1
Styrene	ND		0.80		ppb v/v			03/23/23 22:35	1
Tetrachloroethene	**12**		0.80		ppb v/v			03/23/23 22:35	1
Toluene	ND		4.0		ppb v/v			03/23/23 22:35	1
trans-1,2-Dichloroethene	ND		0.80		ppb v/v			03/23/23 22:35	1
trans-1,3-Dichloropropene	ND		0.80		ppb v/v			03/23/23 22:35	1
Trichloroethene	**0.94**		0.80		ppb v/v			03/23/23 22:35	1
Trichlorofluoromethane	**12**		0.80		ppb v/v			03/23/23 22:35	1
Undecane	ND		4.0		ppb v/v			03/23/23 22:35	1
Vinyl acetate	ND		4.0		ppb v/v			03/23/23 22:35	1
Vinyl chloride	**4.4**		1.6		ppb v/v			03/23/23 22:35	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**190**		4.4		ug/m3			03/23/23 22:35	1
1,1,2,2-Tetrachloroethane	ND		5.5		ug/m3			03/23/23 22:35	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		6.1		ug/m3			03/23/23 22:35	1
1,1,2-Trichloroethane	ND		4.4		ug/m3			03/23/23 22:35	1
1,1-Dichloroethane	**110**		3.2		ug/m3			03/23/23 22:35	1
1,1-Dichloroethene	**26**		3.2		ug/m3			03/23/23 22:35	1
1,2,4-Trichlorobenzene	ND		30		ug/m3			03/23/23 22:35	1
1,2,4-Trimethylbenzene	ND		3.9		ug/m3			03/23/23 22:35	1
1,2-Dibromoethane (EDB)	ND		6.1		ug/m3			03/23/23 22:35	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**20**		5.6		ug/m3			03/23/23 22:35	1
1,2-Dichlorobenzene	ND		9.6		ug/m3			03/23/23 22:35	1
1,2-Dichloroethane	ND		3.2		ug/m3			03/23/23 22:35	1
1,2-Dichloropropane	ND		3.7		ug/m3			03/23/23 22:35	1
1,3,5-Trimethylbenzene	ND		7.9		ug/m3			03/23/23 22:35	1
1,3-Butadiene	ND		3.5		ug/m3			03/23/23 22:35	1
1,3-Dichlorobenzene	ND		4.8		ug/m3			03/23/23 22:35	1
1,4-Dichlorobenzene	ND		4.8		ug/m3			03/23/23 22:35	1
2-Butanone (MEK)	ND		12		ug/m3			03/23/23 22:35	1
2-Hexanone	ND		8.2		ug/m3			03/23/23 22:35	1
3-Chloropropene	ND		2.5		ug/m3			03/23/23 22:35	1
4-Methyl-2-pentanone (MIBK)	ND		16		ug/m3			03/23/23 22:35	1
Acetone	ND		71		ug/m3			03/23/23 22:35	1

Client Sample ID: G-230320-001
Date Collected: 03/20/23 16:21
Date Received: 03/22/23 09:45
Sample Container: Summa Canister 6L

Lab Sample ID: 140-31010-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	ND		6.7		ug/m3			03/23/23 22:35	1
Acrolein	ND		9.2		ug/m3			03/23/23 22:35	1
Acrylonitrile	ND		17		ug/m3			03/23/23 22:35	1
Alpha Methyl Styrene	ND		7.7		ug/m3			03/23/23 22:35	1
Benzene	ND		2.6		ug/m3			03/23/23 22:35	1
Benzyl chloride	ND		8.3		ug/m3			03/23/23 22:35	1
Bromodichloromethane	ND		5.4		ug/m3			03/23/23 22:35	1
Bromoform	ND		8.3		ug/m3			03/23/23 22:35	1
Bromomethane	ND		3.1		ug/m3			03/23/23 22:35	1
Butane	ND		9.5		ug/m3			03/23/23 22:35	1
Carbon disulfide	ND		5.0		ug/m3			03/23/23 22:35	1
Carbon tetrachloride	ND		5.0		ug/m3			03/23/23 22:35	1
Chlorobenzene	ND		3.7		ug/m3			03/23/23 22:35	1
Chlorodifluoromethane	**6.4**		2.8		ug/m3			03/23/23 22:35	1
Chloroethane	**6.6**		2.1		ug/m3			03/23/23 22:35	1
Chloroform	**29**		3.9		ug/m3			03/23/23 22:35	1
Chloromethane	ND		8.3		ug/m3			03/23/23 22:35	1
cis-1,2-Dichloroethene	**6.3**		3.2		ug/m3			03/23/23 22:35	1
cis-1,3-Dichloropropene	ND		7.3		ug/m3			03/23/23 22:35	1
Cumene	ND		7.9		ug/m3			03/23/23 22:35	1
Cyclohexane	ND		5.5		ug/m3			03/23/23 22:35	1
Decane	ND		23		ug/m3			03/23/23 22:35	1
Dibromochloromethane	ND		6.8		ug/m3			03/23/23 22:35	1
Dibromomethane	ND		11		ug/m3			03/23/23 22:35	1
Dichlorodifluoromethane	**83**		4.0		ug/m3			03/23/23 22:35	1
Dodecane	ND		28		ug/m3			03/23/23 22:35	1
Ethyl ether	ND		24		ug/m3			03/23/23 22:35	1
Ethylbenzene	ND		3.5		ug/m3			03/23/23 22:35	1
Heptane	ND		6.6		ug/m3			03/23/23 22:35	1
Hexachlorobutadiene	ND		43		ug/m3			03/23/23 22:35	1
Hexane	ND		5.6		ug/m3			03/23/23 22:35	1
Methyl tert-butyl ether	ND		14		ug/m3			03/23/23 22:35	1
Methylene Chloride	ND		14		ug/m3			03/23/23 22:35	1
m-Xylene & p-Xylene	ND		3.5		ug/m3			03/23/23 22:35	1
Naphthalene	ND		8.4		ug/m3			03/23/23 22:35	1
Nonane	ND		8.4		ug/m3			03/23/23 22:35	1
Octane	ND		7.5		ug/m3			03/23/23 22:35	1
o-Xylene	ND		3.5		ug/m3			03/23/23 22:35	1
Pentane	ND		30		ug/m3			03/23/23 22:35	1
Propylbenzene	ND		7.9		ug/m3			03/23/23 22:35	1
Styrene	ND		3.4		ug/m3			03/23/23 22:35	1
Tetrachloroethene	**79**		5.4		ug/m3			03/23/23 22:35	1
Toluene	ND		15		ug/m3			03/23/23 22:35	1
trans-1,2-Dichloroethene	ND		3.2		ug/m3			03/23/23 22:35	1
trans-1,3-Dichloropropene	ND		3.6		ug/m3			03/23/23 22:35	1
Trichloroethene	**5.0**		4.3		ug/m3			03/23/23 22:35	1
Trichlorofluoromethane	**69**		4.5		ug/m3			03/23/23 22:35	1
Undecane	ND		26		ug/m3			03/23/23 22:35	1

Client: GHD Services Inc.
Job ID: 140-31010-1
Project/Site: New Richmond Landfill

Client Sample ID: G-230320-001
Lab Sample ID: 140-31010-1
Date Collected: 03/20/23 16:21
Matrix: Air
Date Received: 03/22/23 09:45
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		14		ug/m3			03/23/23 22:35	1
Vinyl chloride	**11**		4.1		ug/m3			03/23/23 22:35	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*109*		*60 - 140*		*03/23/23 22:35*	*1*

Default Detection Limits

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-31010-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.20	0.072	ppb v/v
1,1,1-Trichloroethane	1.1	0.39	ug/m3
1,1,2,2-Tetrachloroethane	0.20	0.035	ppb v/v
1,1,2,2-Tetrachloroethane	1.4	0.24	ug/m3
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	0.024	ppb v/v
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	0.18	ug/m3
1,1,2-Trichloroethane	0.20	0.038	ppb v/v
1,1,2-Trichloroethane	1.1	0.21	ug/m3
1,1-Dichloroethane	0.20	0.027	ppb v/v
1,1-Dichloroethane	0.81	0.11	ug/m3
1,1-Dichloroethene	0.20	0.032	ppb v/v
1,1-Dichloroethene	0.79	0.13	ug/m3
1,2,4-Trichlorobenzene	1.0	0.089	ppb v/v
1,2,4-Trichlorobenzene	7.4	0.66	ug/m3
1,2,4-Trimethylbenzene	0.20	0.050	ppb v/v
1,2,4-Trimethylbenzene	0.98	0.25	ug/m3
1,2-Dibromoethane (EDB)	0.20	0.031	ppb v/v
1,2-Dibromoethane (EDB)	1.5	0.24	ug/m3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.20	0.030	ppb v/v
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.4	0.21	ug/m3
1,2-Dichlorobenzene	0.40	0.078	ppb v/v
1,2-Dichlorobenzene	2.4	0.47	ug/m3
1,2-Dichloroethane	0.20	0.025	ppb v/v
1,2-Dichloroethane	0.81	0.10	ug/m3
1,2-Dichloropropane	0.20	0.025	ppb v/v
1,2-Dichloropropane	0.92	0.12	ug/m3
1,3,5-Trimethylbenzene	0.40	0.16	ppb v/v
1,3,5-Trimethylbenzene	2.0	0.79	ug/m3
1,3-Butadiene	0.40	0.048	ppb v/v
1,3-Butadiene	0.88	0.11	ug/m3
1,3-Dichlorobenzene	0.20	0.040	ppb v/v
1,3-Dichlorobenzene	1.2	0.24	ug/m3
1,4-Dichlorobenzene	0.20	0.040	ppb v/v
1,4-Dichlorobenzene	1.2	0.24	ug/m3
2-Butanone (MEK)	1.0	0.18	ppb v/v
2-Butanone (MEK)	2.9	0.53	ug/m3
2-Hexanone	0.50	0.14	ppb v/v
2-Hexanone	2.0	0.57	ug/m3
3-Chloropropene	0.20	0.10	ppb v/v
3-Chloropropene	0.63	0.31	ug/m3
4-Methyl-2-pentanone (MIBK)	1.0	0.14	ppb v/v
4-Methyl-2-pentanone (MIBK)	4.1	0.57	ug/m3
Acetone	7.5	1.4	ppb v/v
Acetone	18	3.3	ug/m3
Acetonitrile	1.0	0.38	ppb v/v
Acetonitrile	1.7	0.64	ug/m3
Acrolein	1.0	0.25	ppb v/v
Acrolein	2.3	0.57	ug/m3
Acrylonitrile	2.0	0.27	ppb v/v
Acrylonitrile	4.3	0.59	ug/m3
Alpha Methyl Styrene	0.40	0.093	ppb v/v
Alpha Methyl Styrene	1.9	0.45	ug/m3
Benzene	0.20	0.033	ppb v/v

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	RL	MDL	Units
Benzene	0.64	0.11	ug/m3
Benzyl chloride	0.40	0.095	ppb v/v
Benzyl chloride	2.1	0.49	ug/m3
Bromodichloromethane	0.20	0.044	ppb v/v
Bromodichloromethane	1.3	0.29	ug/m3
Bromoform	0.20	0.066	ppb v/v
Bromoform	2.1	0.68	ug/m3
Bromomethane	0.20	0.055	ppb v/v
Bromomethane	0.78	0.21	ug/m3
Butane	1.0	0.21	ppb v/v
Butane	2.4	0.50	ug/m3
Carbon disulfide	0.40	0.087	ppb v/v
Carbon disulfide	1.2	0.27	ug/m3
Carbon tetrachloride	0.20	0.032	ppb v/v
Carbon tetrachloride	1.3	0.20	ug/m3
Chlorobenzene	0.20	0.056	ppb v/v
Chlorobenzene	0.92	0.26	ug/m3
Chlorodifluoromethane	0.20	0.055	ppb v/v
Chlorodifluoromethane	0.71	0.19	ug/m3
Chloroethane	0.20	0.079	ppb v/v
Chloroethane	0.53	0.21	ug/m3
Chloroform	0.20	0.036	ppb v/v
Chloroform	0.98	0.18	ug/m3
Chloromethane	1.0	0.16	ppb v/v
Chloromethane	2.1	0.33	ug/m3
cis-1,2-Dichloroethene	0.20	0.025	ppb v/v
cis-1,2-Dichloroethene	0.79	0.099	ug/m3
cis-1,3-Dichloropropene	0.40	0.048	ppb v/v
cis-1,3-Dichloropropene	1.8	0.22	ug/m3
Cumene	0.40	0.043	ppb v/v
Cumene	2.0	0.21	ug/m3
Cyclohexane	0.40	0.093	ppb v/v
Cyclohexane	1.4	0.32	ug/m3
Decane	1.0	0.095	ppb v/v
Decane	5.8	0.55	ug/m3
Dibromochloromethane	0.20	0.034	ppb v/v
Dibromochloromethane	1.7	0.29	ug/m3
Dibromomethane	0.40	0.030	ppb v/v
Dibromomethane	2.8	0.21	ug/m3
Dichlorodifluoromethane	0.20	0.035	ppb v/v
Dichlorodifluoromethane	0.99	0.17	ug/m3
Dodecane	1.0	0.32	ppb v/v
Dodecane	7.0	2.2	ug/m3
Ethyl ether	2.0	0.085	ppb v/v
Ethyl ether	6.1	0.26	ug/m3
Ethylbenzene	0.20	0.033	ppb v/v
Ethylbenzene	0.87	0.14	ug/m3
Heptane	0.40	0.035	ppb v/v
Heptane	1.6	0.14	ug/m3
Hexachlorobutadiene	1.0	0.080	ppb v/v
Hexachlorobutadiene	11	0.85	ug/m3
Hexane	0.40	0.063	ppb v/v
Hexane	1.4	0.22	ug/m3

Default Detection Limits

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-31010-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	RL	MDL	Units
Methyl tert-butyl ether	1.0	0.13	ppb v/v
Methyl tert-butyl ether	3.6	0.47	ug/m3
Methylene Chloride	1.0	0.34	ppb v/v
Methylene Chloride	3.5	1.2	ug/m3
m-Xylene & p-Xylene	0.20	0.073	ppb v/v
m-Xylene & p-Xylene	0.87	0.32	ug/m3
Naphthalene	0.40	0.10	ppb v/v
Naphthalene	2.1	0.52	ug/m3
Nonane	0.40	0.11	ppb v/v
Nonane	2.1	0.58	ug/m3
Octane	0.40	0.11	ppb v/v
Octane	1.9	0.51	ug/m3
o-Xylene	0.20	0.038	ppb v/v
o-Xylene	0.87	0.17	ug/m3
Pentane	2.5	0.24	ppb v/v
Pentane	7.4	0.71	ug/m3
Propylbenzene	0.40	0.048	ppb v/v
Propylbenzene	2.0	0.24	ug/m3
Styrene	0.20	0.060	ppb v/v
Styrene	0.85	0.26	ug/m3
Tetrachloroethene	0.20	0.029	ppb v/v
Tetrachloroethene	1.4	0.20	ug/m3
Toluene	1.0	0.057	ppb v/v
Toluene	3.8	0.21	ug/m3
trans-1,2-Dichloroethene	0.20	0.033	ppb v/v
trans-1,2-Dichloroethene	0.79	0.13	ug/m3
trans-1,3-Dichloropropene	0.20	0.049	ppb v/v
trans-1,3-Dichloropropene	0.91	0.22	ug/m3
Trichloroethene	0.20	0.033	ppb v/v
Trichloroethene	1.1	0.18	ug/m3
Trichlorofluoromethane	0.20	0.028	ppb v/v
Trichlorofluoromethane	1.1	0.16	ug/m3
Undecane	1.0	0.12	ppb v/v
Undecane	6.4	0.77	ug/m3
Vinyl acetate	1.0	0.070	ppb v/v
Vinyl acetate	3.5	0.25	ug/m3
Vinyl chloride	0.40	0.065	ppb v/v
Vinyl chloride	1.0	0.17	ug/m3

Surrogate Summary

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-31010-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB								
Lab Sample ID	Client Sample ID	(60-140)								
140-31010-1	G-230320-001	109								
LCS 140-71474/1002	Lab Control Sample	118								
MB 140-71474/5	Method Blank	106								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-31010-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 140-71474/5
Matrix: Air
Analysis Batch: 71474

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20		ppb v/v			03/23/23 12:39	1
1,1,2,2-Tetrachloroethane	ND		0.20		ppb v/v			03/23/23 12:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ppb v/v			03/23/23 12:39	1
1,1,2-Trichloroethane	ND		0.20		ppb v/v			03/23/23 12:39	1
1,1-Dichloroethane	ND		0.20		ppb v/v			03/23/23 12:39	1
1,1-Dichloroethene	ND		0.20		ppb v/v			03/23/23 12:39	1
1,2,4-Trichlorobenzene	ND		1.0		ppb v/v			03/23/23 12:39	1
1,2,4-Trimethylbenzene	ND		0.20		ppb v/v			03/23/23 12:39	1
1,2-Dibromoethane (EDB)	ND		0.20		ppb v/v			03/23/23 12:39	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.20		ppb v/v			03/23/23 12:39	1
1,2-Dichlorobenzene	ND		0.40		ppb v/v			03/23/23 12:39	1
1,2-Dichloroethane	ND		0.20		ppb v/v			03/23/23 12:39	1
1,2-Dichloropropane	ND		0.20		ppb v/v			03/23/23 12:39	1
1,3,5-Trimethylbenzene	ND		0.40		ppb v/v			03/23/23 12:39	1
1,3-Butadiene	ND		0.40		ppb v/v			03/23/23 12:39	1
1,3-Dichlorobenzene	ND		0.20		ppb v/v			03/23/23 12:39	1
1,4-Dichlorobenzene	ND		0.20		ppb v/v			03/23/23 12:39	1
2-Butanone (MEK)	ND		1.0		ppb v/v			03/23/23 12:39	1
2-Hexanone	ND		0.50		ppb v/v			03/23/23 12:39	1
3-Chloropropene	ND		0.20		ppb v/v			03/23/23 12:39	1
4-Methyl-2-pentanone (MIBK)	ND		1.0		ppb v/v			03/23/23 12:39	1
Acetone	ND		7.5		ppb v/v			03/23/23 12:39	1
Acetonitrile	ND		1.0		ppb v/v			03/23/23 12:39	1
Acrolein	ND		1.0		ppb v/v			03/23/23 12:39	1
Acrylonitrile	ND		2.0		ppb v/v			03/23/23 12:39	1
Alpha Methyl Styrene	ND		0.40		ppb v/v			03/23/23 12:39	1
Benzene	ND		0.20		ppb v/v			03/23/23 12:39	1
Benzyl chloride	ND		0.40		ppb v/v			03/23/23 12:39	1
Bromodichloromethane	ND		0.20		ppb v/v			03/23/23 12:39	1
Bromoform	ND		0.20		ppb v/v			03/23/23 12:39	1
Bromomethane	ND		0.20		ppb v/v			03/23/23 12:39	1
Butane	ND		1.0		ppb v/v			03/23/23 12:39	1
Carbon disulfide	ND		0.40		ppb v/v			03/23/23 12:39	1
Carbon tetrachloride	ND		0.20		ppb v/v			03/23/23 12:39	1
Chlorobenzene	ND		0.20		ppb v/v			03/23/23 12:39	1
Chlorodifluoromethane	ND		0.20		ppb v/v			03/23/23 12:39	1
Chloroethane	ND		0.20		ppb v/v			03/23/23 12:39	1
Chloroform	ND		0.20		ppb v/v			03/23/23 12:39	1
Chloromethane	ND		1.0		ppb v/v			03/23/23 12:39	1
cis-1,2-Dichloroethene	ND		0.20		ppb v/v			03/23/23 12:39	1
cis-1,3-Dichloropropene	ND		0.40		ppb v/v			03/23/23 12:39	1
Cumene	ND		0.40		ppb v/v			03/23/23 12:39	1
Cyclohexane	ND		0.40		ppb v/v			03/23/23 12:39	1
Decane	ND		1.0		ppb v/v			03/23/23 12:39	1
Dibromochloromethane	ND		0.20		ppb v/v			03/23/23 12:39	1
Dibromomethane	ND		0.40		ppb v/v			03/23/23 12:39	1
Dichlorodifluoromethane	ND		0.20		ppb v/v			03/23/23 12:39	1
Dodecane	ND		1.0		ppb v/v			03/23/23 12:39	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-71474/5
Matrix: Air
Analysis Batch: 71474

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		2.0		ppb v/v			03/23/23 12:39	1
Ethylbenzene	ND		0.20		ppb v/v			03/23/23 12:39	1
Heptane	ND		0.40		ppb v/v			03/23/23 12:39	1
Hexachlorobutadiene	ND		1.0		ppb v/v			03/23/23 12:39	1
Hexane	ND		0.40		ppb v/v			03/23/23 12:39	1
Methyl tert-butyl ether	ND		1.0		ppb v/v			03/23/23 12:39	1
Methylene Chloride	ND		1.0		ppb v/v			03/23/23 12:39	1
m-Xylene & p-Xylene	ND		0.20		ppb v/v			03/23/23 12:39	1
Naphthalene	ND		0.40		ppb v/v			03/23/23 12:39	1
Nonane	ND		0.40		ppb v/v			03/23/23 12:39	1
Octane	ND		0.40		ppb v/v			03/23/23 12:39	1
o-Xylene	ND		0.20		ppb v/v			03/23/23 12:39	1
Pentane	ND		2.5		ppb v/v			03/23/23 12:39	1
Propylbenzene	ND		0.40		ppb v/v			03/23/23 12:39	1
Styrene	ND		0.20		ppb v/v			03/23/23 12:39	1
Tetrachloroethene	ND		0.20		ppb v/v			03/23/23 12:39	1
Toluene	ND		1.0		ppb v/v			03/23/23 12:39	1
trans-1,2-Dichloroethene	ND		0.20		ppb v/v			03/23/23 12:39	1
trans-1,3-Dichloropropene	ND		0.20		ppb v/v			03/23/23 12:39	1
Trichloroethene	ND		0.20		ppb v/v			03/23/23 12:39	1
Trichlorofluoromethane	ND		0.20		ppb v/v			03/23/23 12:39	1
Undecane	ND		1.0		ppb v/v			03/23/23 12:39	1
Vinyl acetate	ND		1.0		ppb v/v			03/23/23 12:39	1
Vinyl chloride	ND		0.40		ppb v/v			03/23/23 12:39	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1		ug/m3			03/23/23 12:39	1
1,1,2,2-Tetrachloroethane	ND		1.4		ug/m3			03/23/23 12:39	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.5		ug/m3			03/23/23 12:39	1
1,1,2-Trichloroethane	ND		1.1		ug/m3			03/23/23 12:39	1
1,1-Dichloroethane	ND		0.81		ug/m3			03/23/23 12:39	1
1,1-Dichloroethene	ND		0.79		ug/m3			03/23/23 12:39	1
1,2,4-Trichlorobenzene	ND		7.4		ug/m3			03/23/23 12:39	1
1,2,4-Trimethylbenzene	ND		0.98		ug/m3			03/23/23 12:39	1
1,2-Dibromoethane (EDB)	ND		1.5		ug/m3			03/23/23 12:39	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4		ug/m3			03/23/23 12:39	1
1,2-Dichlorobenzene	ND		2.4		ug/m3			03/23/23 12:39	1
1,2-Dichloroethane	ND		0.81		ug/m3			03/23/23 12:39	1
1,2-Dichloropropane	ND		0.92		ug/m3			03/23/23 12:39	1
1,3,5-Trimethylbenzene	ND		2.0		ug/m3			03/23/23 12:39	1
1,3-Butadiene	ND		0.88		ug/m3			03/23/23 12:39	1
1,3-Dichlorobenzene	ND		1.2		ug/m3			03/23/23 12:39	1
1,4-Dichlorobenzene	ND		1.2		ug/m3			03/23/23 12:39	1
2-Butanone (MEK)	ND		2.9		ug/m3			03/23/23 12:39	1
2-Hexanone	ND		2.0		ug/m3			03/23/23 12:39	1
3-Chloropropene	ND		0.63		ug/m3			03/23/23 12:39	1
4-Methyl-2-pentanone (MIBK)	ND		4.1		ug/m3			03/23/23 12:39	1
Acetone	ND		18		ug/m3			03/23/23 12:39	1
Acetonitrile	ND		1.7		ug/m3			03/23/23 12:39	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-71474/5
Matrix: Air
Analysis Batch: 71474

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		2.3		ug/m3			03/23/23 12:39	1
Acrylonitrile	ND		4.3		ug/m3			03/23/23 12:39	1
Alpha Methyl Styrene	ND		1.9		ug/m3			03/23/23 12:39	1
Benzene	ND		0.64		ug/m3			03/23/23 12:39	1
Benzyl chloride	ND		2.1		ug/m3			03/23/23 12:39	1
Bromodichloromethane	ND		1.3		ug/m3			03/23/23 12:39	1
Bromoform	ND		2.1		ug/m3			03/23/23 12:39	1
Bromomethane	ND		0.78		ug/m3			03/23/23 12:39	1
Butane	ND		2.4		ug/m3			03/23/23 12:39	1
Carbon disulfide	ND		1.2		ug/m3			03/23/23 12:39	1
Carbon tetrachloride	ND		1.3		ug/m3			03/23/23 12:39	1
Chlorobenzene	ND		0.92		ug/m3			03/23/23 12:39	1
Chlorodifluoromethane	ND		0.71		ug/m3			03/23/23 12:39	1
Chloroethane	ND		0.53		ug/m3			03/23/23 12:39	1
Chloroform	ND		0.98		ug/m3			03/23/23 12:39	1
Chloromethane	ND		2.1		ug/m3			03/23/23 12:39	1
cis-1,2-Dichloroethene	ND		0.79		ug/m3			03/23/23 12:39	1
cis-1,3-Dichloropropene	ND		1.8		ug/m3			03/23/23 12:39	1
Cumene	ND		2.0		ug/m3			03/23/23 12:39	1
Cyclohexane	ND		1.4		ug/m3			03/23/23 12:39	1
Decane	ND		5.8		ug/m3			03/23/23 12:39	1
Dibromochloromethane	ND		1.7		ug/m3			03/23/23 12:39	1
Dibromomethane	ND		2.8		ug/m3			03/23/23 12:39	1
Dichlorodifluoromethane	ND		0.99		ug/m3			03/23/23 12:39	1
Dodecane	ND		7.0		ug/m3			03/23/23 12:39	1
Ethyl ether	ND		6.1		ug/m3			03/23/23 12:39	1
Ethylbenzene	ND		0.87		ug/m3			03/23/23 12:39	1
Heptane	ND		1.6		ug/m3			03/23/23 12:39	1
Hexachlorobutadiene	ND		11		ug/m3			03/23/23 12:39	1
Hexane	ND		1.4		ug/m3			03/23/23 12:39	1
Methyl tert-butyl ether	ND		3.6		ug/m3			03/23/23 12:39	1
Methylene Chloride	ND		3.5		ug/m3			03/23/23 12:39	1
m-Xylene & p-Xylene	ND		0.87		ug/m3			03/23/23 12:39	1
Naphthalene	ND		2.1		ug/m3			03/23/23 12:39	1
Nonane	ND		2.1		ug/m3			03/23/23 12:39	1
Octane	ND		1.9		ug/m3			03/23/23 12:39	1
o-Xylene	ND		0.87		ug/m3			03/23/23 12:39	1
Pentane	ND		7.4		ug/m3			03/23/23 12:39	1
Propylbenzene	ND		2.0		ug/m3			03/23/23 12:39	1
Styrene	ND		0.85		ug/m3			03/23/23 12:39	1
Tetrachloroethene	ND		1.4		ug/m3			03/23/23 12:39	1
Toluene	ND		3.8		ug/m3			03/23/23 12:39	1
trans-1,2-Dichloroethene	ND		0.79		ug/m3			03/23/23 12:39	1
trans-1,3-Dichloropropene	ND		0.91		ug/m3			03/23/23 12:39	1
Trichloroethene	ND		1.1		ug/m3			03/23/23 12:39	1
Trichlorofluoromethane	ND		1.1		ug/m3			03/23/23 12:39	1
Undecane	ND		6.4		ug/m3			03/23/23 12:39	1
Vinyl acetate	ND		3.5		ug/m3			03/23/23 12:39	1
Vinyl chloride	ND		1.0		ug/m3			03/23/23 12:39	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	106		60 - 140		03/23/23 12:39	1

Lab Sample ID: LCS 140-71474/1002
Matrix: Air
Analysis Batch: 71474

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	2.00	1.83		ppb v/v		92	70 - 130
1,1,2,2-Tetrachloroethane	2.00	1.97		ppb v/v		99	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	1.76		ppb v/v		88	70 - 130
1,1,2-Trichloroethane	2.00	1.89		ppb v/v		94	70 - 130
1,1-Dichloroethane	2.00	1.90		ppb v/v		95	70 - 130
1,1-Dichloroethene	2.00	1.59		ppb v/v		80	70 - 130
1,2,4-Trichlorobenzene	2.00	1.96		ppb v/v		98	60 - 140
1,2,4-Trimethylbenzene	2.00	1.93		ppb v/v		97	70 - 130
1,2-Dibromoethane (EDB)	2.00	1.79		ppb v/v		90	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.00	2.00		ppb v/v		100	60 - 140
1,2-Dichlorobenzene	2.00	1.96		ppb v/v		98	70 - 130
1,2-Dichloroethane	2.00	2.22		ppb v/v		111	70 - 130
1,2-Dichloropropane	2.00	1.94		ppb v/v		97	70 - 130
1,3,5-Trimethylbenzene	2.00	1.90		ppb v/v		95	70 - 130
1,3-Butadiene	2.00	2.26		ppb v/v		113	60 - 140
1,3-Dichlorobenzene	2.00	1.88		ppb v/v		94	70 - 130
1,4-Dichlorobenzene	2.00	1.87		ppb v/v		94	70 - 130
2-Butanone (MEK)	2.00	1.59		ppb v/v		80	60 - 140
2-Hexanone	2.00	1.94		ppb v/v		97	60 - 140
3-Chloropropene	2.00	2.14		ppb v/v		107	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	2.01		ppb v/v		100	60 - 140
Acetone	2.00	1.96	J	ppb v/v		98	60 - 140
Acetonitrile	2.00	1.98		ppb v/v		99	60 - 140
Acrolein	2.00	1.80		ppb v/v		90	60 - 140
Acrylonitrile	2.00	1.88		ppb v/v		94	60 - 140
Alpha Methyl Styrene	2.00	1.66		ppb v/v		83	60 - 140
Benzene	2.00	1.81		ppb v/v		90	70 - 130
Benzyl chloride	2.00	1.92		ppb v/v		96	70 - 130
Bromodichloromethane	2.00	1.93		ppb v/v		96	70 - 130
Bromoform	2.00	2.02		ppb v/v		101	60 - 140
Bromomethane	2.00	1.76		ppb v/v		88	70 - 130
Butane	2.00	2.52		ppb v/v		126	60 - 140
Carbon disulfide	2.00	1.61		ppb v/v		80	70 - 130
Carbon tetrachloride	2.00	1.79		ppb v/v		90	70 - 130
Chlorobenzene	2.00	1.77		ppb v/v		89	70 - 130
Chlorodifluoromethane	2.00	2.48		ppb v/v		124	60 - 140
Chloroethane	2.00	1.95		ppb v/v		97	70 - 130
Chloroform	2.00	1.88		ppb v/v		94	70 - 130
Chloromethane	2.00	2.49		ppb v/v		124	60 - 140
cis-1,2-Dichloroethene	2.00	1.68		ppb v/v		84	70 - 130
cis-1,3-Dichloropropene	2.00	1.80		ppb v/v		90	70 - 130
Cumene	2.00	1.85		ppb v/v		92	70 - 130
Cyclohexane	2.00	1.69		ppb v/v		85	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-71474/1002
Matrix: Air
Analysis Batch: 71474

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Decane	2.00	2.24		ppb v/v		112	60 - 140
Dibromochloromethane	2.00	1.81		ppb v/v		91	70 - 130
Dibromomethane	2.00	1.90		ppb v/v		95	70 - 130
Dichlorodifluoromethane	2.00	2.23		ppb v/v		112	60 - 140
Dodecane	2.00	2.21		ppb v/v		111	60 - 140
Ethyl ether	2.00	1.86		ppb v/v		93	60 - 140
Ethylbenzene	2.00	1.82		ppb v/v		91	70 - 130
Heptane	2.00	1.63		ppb v/v		82	70 - 130
Hexachlorobutadiene	2.00	1.80		ppb v/v		90	60 - 140
Hexane	2.00	1.99		ppb v/v		99	70 - 130
Methyl tert-butyl ether	2.00	1.70		ppb v/v		85	60 - 140
Methylene Chloride	2.00	1.76		ppb v/v		88	70 - 130
m-Xylene & p-Xylene	4.00	3.79		ppb v/v		95	70 - 130
Naphthalene	2.00	1.71		ppb v/v		85	60 - 140
Nonane	2.00	2.16		ppb v/v		108	60 - 140
Octane	2.00	1.81		ppb v/v		90	70 - 130
o-Xylene	2.00	1.86		ppb v/v		93	70 - 130
Pentane	2.00	1.73		ppb v/v		87	70 - 130
Propylbenzene	2.00	1.83		ppb v/v		92	70 - 130
Styrene	2.00	1.72		ppb v/v		86	70 - 130
Tetrachloroethene	2.00	1.75		ppb v/v		88	70 - 130
Toluene	2.00	1.77		ppb v/v		88	70 - 130
trans-1,2-Dichloroethene	2.00	1.68		ppb v/v		84	70 - 130
trans-1,3-Dichloropropene	2.00	1.86		ppb v/v		93	70 - 130
Trichloroethene	2.00	1.66		ppb v/v		83	70 - 130
Trichlorofluoromethane	2.00	1.93		ppb v/v		96	60 - 140
Undecane	2.00	2.42		ppb v/v		121	60 - 140
Vinyl acetate	2.00	1.99		ppb v/v		99	60 - 140
Vinyl chloride	2.00	2.13		ppb v/v		107	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	11	10.0		ug/m3		92	70 - 130
1,1,2,2-Tetrachloroethane	14	13.6		ug/m3		99	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	15	13.5		ug/m3		88	70 - 130
1,1,2-Trichloroethane	11	10.3		ug/m3		94	70 - 130
1,1-Dichloroethane	8.1	7.70		ug/m3		95	70 - 130
1,1-Dichloroethene	7.9	6.31		ug/m3		80	70 - 130
1,2,4-Trichlorobenzene	15	14.6		ug/m3		98	60 - 140
1,2,4-Trimethylbenzene	9.8	9.50		ug/m3		97	70 - 130
1,2-Dibromoethane (EDB)	15	13.8		ug/m3		90	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	14	14.0		ug/m3		100	60 - 140
1,2-Dichlorobenzene	12	11.8		ug/m3		98	70 - 130
1,2-Dichloroethane	8.1	8.98		ug/m3		111	70 - 130
1,2-Dichloropropane	9.2	8.94		ug/m3		97	70 - 130
1,3,5-Trimethylbenzene	9.8	9.34		ug/m3		95	70 - 130
1,3-Butadiene	4.4	5.01		ug/m3		113	60 - 140
1,3-Dichlorobenzene	12	11.3		ug/m3		94	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-71474/1002
Matrix: Air
Analysis Batch: 71474

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	12	11.3		ug/m3		94	70 - 130
2-Butanone (MEK)	5.9	4.69		ug/m3		80	60 - 140
2-Hexanone	8.2	7.95		ug/m3		97	60 - 140
3-Chloropropene	6.3	6.70		ug/m3		107	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	8.23		ug/m3		100	60 - 140
Acetone	4.8	4.66	J	ug/m3		98	60 - 140
Acetonitrile	3.4	3.33		ug/m3		99	60 - 140
Acrolein	4.6	4.13		ug/m3		90	60 - 140
Acrylonitrile	4.3	4.09		ug/m3		94	60 - 140
Alpha Methyl Styrene	9.7	8.01		ug/m3		83	60 - 140
Benzene	6.4	5.78		ug/m3		90	70 - 130
Benzyl chloride	10	9.96		ug/m3		96	70 - 130
Bromodichloromethane	13	12.9		ug/m3		96	70 - 130
Bromoform	21	20.9		ug/m3		101	60 - 140
Bromomethane	7.8	6.83		ug/m3		88	70 - 130
Butane	4.8	6.00		ug/m3		126	60 - 140
Carbon disulfide	6.2	5.00		ug/m3		80	70 - 130
Carbon tetrachloride	13	11.3		ug/m3		90	70 - 130
Chlorobenzene	9.2	8.16		ug/m3		89	70 - 130
Chlorodifluoromethane	7.1	8.78		ug/m3		124	60 - 140
Chloroethane	5.3	5.14		ug/m3		97	70 - 130
Chloroform	9.8	9.20		ug/m3		94	70 - 130
Chloromethane	4.1	5.14		ug/m3		124	60 - 140
cis-1,2-Dichloroethene	7.9	6.65		ug/m3		84	70 - 130
cis-1,3-Dichloropropene	9.1	8.18		ug/m3		90	70 - 130
Cumene	9.8	9.07		ug/m3		92	70 - 130
Cyclohexane	6.9	5.83		ug/m3		85	70 - 130
Decane	12	13.0		ug/m3		112	60 - 140
Dibromochloromethane	17	15.4		ug/m3		91	70 - 130
Dibromomethane	14	13.5		ug/m3		95	70 - 130
Dichlorodifluoromethane	9.9	11.0		ug/m3		112	60 - 140
Dodecane	14	15.4		ug/m3		111	60 - 140
Ethyl ether	6.1	5.64		ug/m3		93	60 - 140
Ethylbenzene	8.7	7.90		ug/m3		91	70 - 130
Heptane	8.2	6.70		ug/m3		82	70 - 130
Hexachlorobutadiene	21	19.2		ug/m3		90	60 - 140
Hexane	7.0	7.00		ug/m3		99	70 - 130
Methyl tert-butyl ether	7.2	6.13		ug/m3		85	60 - 140
Methylene Chloride	6.9	6.10		ug/m3		88	70 - 130
m-Xylene & p-Xylene	17	16.5		ug/m3		95	70 - 130
Naphthalene	10	8.95		ug/m3		85	60 - 140
Nonane	10	11.3		ug/m3		108	60 - 140
Octane	9.3	8.45		ug/m3		90	70 - 130
o-Xylene	8.7	8.07		ug/m3		93	70 - 130
Pentane	5.9	5.11		ug/m3		87	70 - 130
Propylbenzene	9.8	9.01		ug/m3		92	70 - 130
Styrene	8.5	7.33		ug/m3		86	70 - 130
Tetrachloroethene	14	11.9		ug/m3		88	70 - 130
Toluene	7.5	6.67		ug/m3		88	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-71474/1002
Matrix: Air
Analysis Batch: 71474

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,2-Dichloroethene	7.9	6.67		ug/m3		84	70 - 130
trans-1,3-Dichloropropene	9.1	8.45		ug/m3		93	70 - 130
Trichloroethene	11	8.92		ug/m3		83	70 - 130
Trichlorofluoromethane	11	10.8		ug/m3		96	60 - 140
Undecane	13	15.5		ug/m3		121	60 - 140
Vinyl acetate	7.0	6.99		ug/m3		99	60 - 140
Vinyl chloride	5.1	5.45		ug/m3		107	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*118*		*60 - 140*

QC Association Summary

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-31010-1

Air - GC/MS VOA

Analysis Batch: 71474

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-31010-1	G-230320-001	Total/NA	Air	TO-15	
MB 140-71474/5	Method Blank	Total/NA	Air	TO-15	
LCS 140-71474/1002	Lab Control Sample	Total/NA	Air	TO-15	

Lab Chronicle

Client: GHD Services Inc.
Job ID: 140-31010-1
Project/Site: New Richmond Landfill

Client Sample ID: G-230320-001
Lab Sample ID: 140-31010-1
Date Collected: 03/20/23 16:21
Matrix: Air
Date Received: 03/22/23 09:45

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	50 mL	500 mL	71474	03/23/23 22:35	HMT	EET KNX
	Instrument ID: MS									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-71474/5
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	200 mL	500 mL	71474	03/23/23 12:39	HMT	EET KNX
	Instrument ID: MS									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-71474/1002
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	500 mL	500 mL	71474	03/23/23 08:48	HMT	EET KNX
	Instrument ID: MS									

Laboratory References:
EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 140-31010-1
Project/Site: New Richmond Landfill

Laboratory: Eurofins Knoxville

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998044300	08-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	1,1,1-Trichloroethane
TO-15		Air	1,1,2,2-Tetrachloroethane
TO-15		Air	1,1,2-Trichloro-1,2,2-trifluoroethane
TO-15		Air	1,1,2-Trichloroethane
TO-15		Air	1,1-Dichloroethane
TO-15		Air	1,1-Dichloroethene
TO-15		Air	1,2,4-Trichlorobenzene
TO-15		Air	1,2,4-Trimethylbenzene
TO-15		Air	1,2-Dibromoethane (EDB)
TO-15		Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane
TO-15		Air	1,2-Dichlorobenzene
TO-15		Air	1,2-Dichloroethane
TO-15		Air	1,2-Dichloropropane
TO-15		Air	1,3,5-Trimethylbenzene
TO-15		Air	1,3-Butadiene
TO-15		Air	1,3-Dichlorobenzene
TO-15		Air	1,4-Dichlorobenzene
TO-15		Air	2-Butanone (MEK)
TO-15		Air	2-Hexanone
TO-15		Air	3-Chloropropene
TO-15		Air	4-Methyl-2-pentanone (MIBK)
TO-15		Air	Acetone
TO-15		Air	Acetonitrile
TO-15		Air	Acrolein
TO-15		Air	Acrylonitrile
TO-15		Air	Alpha Methyl Styrene
TO-15		Air	Benzene
TO-15		Air	Benzyl chloride
TO-15		Air	Bromodichloromethane
TO-15		Air	Bromoform
TO-15		Air	Bromomethane
TO-15		Air	Butane
TO-15		Air	Carbon disulfide
TO-15		Air	Carbon tetrachloride
TO-15		Air	Chlorobenzene
TO-15		Air	Chlorodifluoromethane
TO-15		Air	Chloroethane
TO-15		Air	Chloroform
TO-15		Air	Chloromethane
TO-15		Air	cis-1,2-Dichloroethene
TO-15		Air	cis-1,3-Dichloropropene
TO-15		Air	Cumene
TO-15		Air	Cyclohexane
TO-15		Air	Decane
TO-15		Air	Dibromochloromethane

Client: GHD Services Inc.
Job ID: 140-31010-1
Project/Site: New Richmond Landfill

Laboratory: Eurofins Knoxville (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	Dibromomethane
TO-15		Air	Dichlorodifluoromethane
TO-15		Air	Dodecane
TO-15		Air	Ethyl ether
TO-15		Air	Ethylbenzene
TO-15		Air	Heptane
TO-15		Air	Hexachlorobutadiene
TO-15		Air	Hexane
TO-15		Air	Methyl tert-butyl ether
TO-15		Air	Methylene Chloride
TO-15		Air	m-Xylene & p-Xylene
TO-15		Air	Naphthalene
TO-15		Air	Nonane
TO-15		Air	Octane
TO-15		Air	o-Xylene
TO-15		Air	Pentane
TO-15		Air	Propylbenzene
TO-15		Air	Styrene
TO-15		Air	Tetrachloroethene
TO-15		Air	Toluene
TO-15		Air	trans-1,2-Dichloroethene
TO-15		Air	trans-1,3-Dichloropropene
TO-15		Air	Trichloroethene
TO-15		Air	Trichlorofluoromethane
TO-15		Air	Undecane
TO-15		Air	Vinyl acetate
TO-15		Air	Vinyl chloride

Method Summary

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-31010-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	EET KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-31010-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-31010-1	G-230320-001	Air	03/20/23 16:21	03/22/23 09:45	Air Canister (6-Liter) #34001501

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

eurofins
Environment Testing
TestAmerica

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information		Client Project Manager: Tom Hobday	Samples Collected By: Bill Zuidema	COC No:
Company Name: GHD Services Inc		Phone: 651-639-0913		1 of 1 COCs
Address: 900 Long Lake Rd		Email: Grant.anderson@GHD.com		TALS Project #:
City/State/Zip: St Paul, MN 55112				For Lab Use Only:
Phone: 651-639-0913		Site Contact:		Walk-in Client:
FAX:		Tel/Fax		Lab Sampling:
Project Name: New Richmond Land Fill		Analysis Turnaround Time		Job / SDG No.:
Site/Location: New Richmond, WI		Standard (Specific): X		(See below for Add'l Items)
P O # 048038		Rush (Specifiy):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
G-230320-001	3-20-23	1620	3-20-23	1621	-28	-01	-	34001501	X														
Custody Seal Intact																							
Received Ambient																							
DH 3/22/23																							
1 Box FedEx 3960 4804 8482 SO																							
1 Can / 1 Guage																							

140-31010 Chain of Custody

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

Special Instructions/QC Requirements & Comments:
Contact Grant Anderson with any questions

Samples Shipped by: Bill Zuidema	Date / Time: 3-21-2023 0900	Samples Received by: Deanna Hutch ETA KNX 3/22/23 09:45
Samples Relinquished by:	Date / Time:	Received by:
Relinquished by:	Date / Time:	Received by:
Lab Use Only: Shipper Name:	Opened by:	Condition:

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

3/28/2023

Loc: 140
31010

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST

Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?	Comments/Actions Taken
1. Are the shipping containers intact?	✓			☐ Containers, Broken	
2. Were ambient air containers received intact?			✓	☑ Checked in lab	
3. The coolers/containers custody seal if present, is it intact?	✓			☐ Yes ☐ NA	
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			✓	☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt	
5. Were all of the sample containers received intact?	✓			☐ Containers, Broken	
6. Were samples received in appropriate containers?	✓			☐ Containers, Improper; Client Contacted; Proceed/Cancel	
7. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ COC & Samples Do Not Match ☐ COC Incorrect/Incomplete ☐ COC Not Received	
8. Were all of the samples listed on the COC received?	✓			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received	
9. Is the date/time of sample collection noted?	✓			☐ COC; No Date/Time; Client Contacted	
10. Was the sampler identified on the COC?	✓			☐ Sampler Not Listed on COC	
11. Is the client and project name/# identified?	✓			☐ COC Incorrect/Incomplete	
12. Are tests/parameters listed for each sample?	✓			☐ COC No tests on COC	
13. Is the matrix of the samples noted?	✓			☐ COC Incorrect/Incomplete	
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ COC Incorrect/Incomplete	
15. Were samples received within holding time?	✓			☐ Holding Time - Receipt	
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ pH Adjusted, pH Included (See box 16A) ☐ Incorrect Preservative	
17. Were VOA samples received without headspace?			✓	☐ Headspace (VOA only)	
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			✓	☐ Residual Chlorine	
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust	
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info	

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 1400185D PM Instructions: _____

Sample Receiving Associate: Deanna Hurtt Date: 3/22/23

QA026R32.doc, 062719

Eurofins Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date/Time: 3/22/23 1305

Analyst	Sample ID	Pressure @ Receipt (-in Hg or +psig)/initial pressurisation (if applicable)	Asset #	Cleaning Job	Cert Type	Size (L)	Comments
afb	140-31010-A-1	0	34001501	140-30712-A-6	b	6	

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Grant Anderson
GHD Services Inc.
900 Long Lake Road
Suite 200
New Brighton, Minnesota 55112

Generated 7/3/2023 9:47:38 AM

JOB DESCRIPTION

New Richmond Landfill

JOB NUMBER

140-32321-1

Eurofins Knoxville
5815 Middlebrook Pike
Knoxville TN 37921

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization

Generated
7/3/2023 9:47:38 AM

Authorized for release by
Jamie McKinney, Senior Project Manager
Jamie.McKinney@et.eurofinsus.com
(865)291-3000

Table of Contents

Definitions/Glossary

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-32321-1

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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

Job ID: 140-32321-1

Laboratory: Eurofins Knoxville

Narrative

Job Narrative
140-32321-1

Comments
No additional comments.

Receipt
The sample was received on 6/23/2023 10:00 AM. Unless otherwise noted below, the sample arrived in good condition, and where required, properly preserved and on ice.

Air - GC/MS VOA
Methods TO 15 LL, TO-14A, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by Eurofins TestAmerica Knoxville.

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.
Project/Site: New Richmond Landfill

Job ID: 140-32321-1

Client Sample ID: G-230622-B2-001

Lab Sample ID: 140-32321-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	23		0.35		ppb v/v	2.2		TO-15	Total/NA
1,1-Dichloroethane	19		0.35		ppb v/v	2.2		TO-15	Total/NA
1,1-Dichloroethene	5.5		0.35		ppb v/v	2.2		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.0		0.35		ppb v/v	2.2		TO-15	Total/NA
2-Butanone (MEK)	5.0		1.8		ppb v/v	2.2		TO-15	Total/NA
Acetone	18		13		ppb v/v	2.2		TO-15	Total/NA
Benzene	2.2		0.35		ppb v/v	2.2		TO-15	Total/NA
Chlorodifluoromethane	0.88		0.35		ppb v/v	2.2		TO-15	Total/NA
Chloroethane	6.2		0.35		ppb v/v	2.2		TO-15	Total/NA
Chloroform	4.3		0.35		ppb v/v	2.2		TO-15	Total/NA
cis-1,2-Dichloroethene	2.5		0.35		ppb v/v	2.2		TO-15	Total/NA
Dichlorodifluoromethane	4.4		0.35		ppb v/v	2.2		TO-15	Total/NA
m-Xylene & p-Xylene	0.39		0.35		ppb v/v	2.2		TO-15	Total/NA
Tetrachloroethene	2.5		0.35		ppb v/v	2.2		TO-15	Total/NA
Trichloroethene	0.49		0.35		ppb v/v	2.2		TO-15	Total/NA
Trichlorofluoromethane	9.3		0.35		ppb v/v	2.2		TO-15	Total/NA
Vinyl chloride	3.0		0.70		ppb v/v	2.2		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	130		1.9		ug/m3	2.2		TO-15	Total/NA
1,1-Dichloroethane	77		1.4		ug/m3	2.2		TO-15	Total/NA
1,1-Dichloroethene	22		1.4		ug/m3	2.2		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	7.1		2.5		ug/m3	2.2		TO-15	Total/NA
2-Butanone (MEK)	15		5.2		ug/m3	2.2		TO-15	Total/NA
Acetone	42		31		ug/m3	2.2		TO-15	Total/NA
Benzene	7.0		1.1		ug/m3	2.2		TO-15	Total/NA
Chlorodifluoromethane	3.1		1.2		ug/m3	2.2		TO-15	Total/NA
Chloroethane	16		0.93		ug/m3	2.2		TO-15	Total/NA
Chloroform	21		1.7		ug/m3	2.2		TO-15	Total/NA
cis-1,2-Dichloroethene	10		1.4		ug/m3	2.2		TO-15	Total/NA
Dichlorodifluoromethane	22		1.7		ug/m3	2.2		TO-15	Total/NA
m-Xylene & p-Xylene	1.7		1.5		ug/m3	2.2		TO-15	Total/NA
Tetrachloroethene	17		2.4		ug/m3	2.2		TO-15	Total/NA
Trichloroethene	2.6		1.9		ug/m3	2.2		TO-15	Total/NA
Trichlorofluoromethane	52		2.0		ug/m3	2.2		TO-15	Total/NA
Vinyl chloride	7.6		1.8		ug/m3	2.2		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-32321-1

Client Sample ID: G-230622-B2-001
Date Collected: 06/22/23 11:46
Date Received: 06/23/23 10:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-32321-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**23**		0.35		ppb v/v			06/27/23 19:18	2.2
1,1,2,2-Tetrachloroethane	ND		0.35		ppb v/v			06/27/23 19:18	2.2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.35		ppb v/v			06/27/23 19:18	2.2
1,1,2-Trichloroethane	ND		0.35		ppb v/v			06/27/23 19:18	2.2
1,1-Dichloroethane	**19**		0.35		ppb v/v			06/27/23 19:18	2.2
1,1-Dichloroethene	**5.5**		0.35		ppb v/v			06/27/23 19:18	2.2
1,2,4-Trichlorobenzene	ND		1.8		ppb v/v			06/27/23 19:18	2.2
1,2,4-Trimethylbenzene	ND		0.35		ppb v/v			06/27/23 19:18	2.2
1,2-Dibromoethane (EDB)	ND		0.35		ppb v/v			06/27/23 19:18	2.2
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**1.0**		0.35		ppb v/v			06/27/23 19:18	2.2
1,2-Dichlorobenzene	ND		0.70		ppb v/v			06/27/23 19:18	2.2
1,2-Dichloroethane	ND		0.35		ppb v/v			06/27/23 19:18	2.2
1,2-Dichloropropane	ND		0.35		ppb v/v			06/27/23 19:18	2.2
1,3,5-Trimethylbenzene	ND		0.70		ppb v/v			06/27/23 19:18	2.2
1,3-Butadiene	ND		0.70		ppb v/v			06/27/23 19:18	2.2
1,3-Dichlorobenzene	ND		0.35		ppb v/v			06/27/23 19:18	2.2
1,4-Dichlorobenzene	ND		0.35		ppb v/v			06/27/23 19:18	2.2
2-Butanone (MEK)	**5.0**		1.8		ppb v/v			06/27/23 19:18	2.2
2-Hexanone	ND		0.88		ppb v/v			06/27/23 19:18	2.2
3-Chloropropene	ND		0.35		ppb v/v			06/27/23 19:18	2.2
4-Methyl-2-pentanone (MIBK)	ND		1.8		ppb v/v			06/27/23 19:18	2.2
Acetone	**18**		13		ppb v/v			06/27/23 19:18	2.2
Acetonitrile	ND		1.8		ppb v/v			06/27/23 19:18	2.2
Acrolein	ND		1.8		ppb v/v			06/27/23 19:18	2.2
Acrylonitrile	ND		3.5		ppb v/v			06/27/23 19:18	2.2
Alpha Methyl Styrene	ND		0.70		ppb v/v			06/27/23 19:18	2.2
Benzene	**2.2**		0.35		ppb v/v			06/27/23 19:18	2.2
Benzyl chloride	ND		0.70		ppb v/v			06/27/23 19:18	2.2
Bromodichloromethane	ND		0.35		ppb v/v			06/27/23 19:18	2.2
Bromoform	ND		0.35		ppb v/v			06/27/23 19:18	2.2
Bromomethane	ND		0.35		ppb v/v			06/27/23 19:18	2.2
Butane	ND		1.8		ppb v/v			06/27/23 19:18	2.2
Carbon disulfide	ND		0.70		ppb v/v			06/27/23 19:18	2.2
Carbon tetrachloride	ND		0.35		ppb v/v			06/27/23 19:18	2.2
Chlorobenzene	ND		0.35		ppb v/v			06/27/23 19:18	2.2
Chlorodifluoromethane	**0.88**		0.35		ppb v/v			06/27/23 19:18	2.2
Chloroethane	**6.2**		0.35		ppb v/v			06/27/23 19:18	2.2
Chloroform	**4.3**		0.35		ppb v/v			06/27/23 19:18	2.2
Chloromethane	ND		1.8		ppb v/v			06/27/23 19:18	2.2
cis-1,2-Dichloroethene	**2.5**		0.35		ppb v/v			06/27/23 19:18	2.2
cis-1,3-Dichloropropene	ND		0.70		ppb v/v			06/27/23 19:18	2.2
Cumene	ND		0.70		ppb v/v			06/27/23 19:18	2.2
Cyclohexane	ND		0.70		ppb v/v			06/27/23 19:18	2.2
Decane	ND		1.8		ppb v/v			06/27/23 19:18	2.2
Dibromochloromethane	ND		0.35		ppb v/v			06/27/23 19:18	2.2
Dibromomethane	ND		0.70		ppb v/v			06/27/23 19:18	2.2
Dichlorodifluoromethane	**4.4**		0.35		ppb v/v			06/27/23 19:18	2.2
Dodecane	ND		1.8		ppb v/v			06/27/23 19:18	2.2

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-32321-1

Client Sample ID: G-230622-B2-001
Date Collected: 06/22/23 11:46
Date Received: 06/23/23 10:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-32321-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		3.5		ppb v/v			06/27/23 19:18	2.2
Ethylbenzene	ND		0.35		ppb v/v			06/27/23 19:18	2.2
Heptane	ND		0.70		ppb v/v			06/27/23 19:18	2.2
Hexachlorobutadiene	ND		1.8		ppb v/v			06/27/23 19:18	2.2
Hexane	ND		0.70		ppb v/v			06/27/23 19:18	2.2
Methyl tert-butyl ether	ND		1.8		ppb v/v			06/27/23 19:18	2.2
Methylene Chloride	ND		1.8		ppb v/v			06/27/23 19:18	2.2
m-Xylene & p-Xylene	**0.39**		0.35		ppb v/v			06/27/23 19:18	2.2
Naphthalene	ND		0.70		ppb v/v			06/27/23 19:18	2.2
Nonane	ND		0.70		ppb v/v			06/27/23 19:18	2.2
Octane	ND		0.70		ppb v/v			06/27/23 19:18	2.2
o-Xylene	ND		0.35		ppb v/v			06/27/23 19:18	2.2
Pentane	ND		4.4		ppb v/v			06/27/23 19:18	2.2
Propylbenzene	ND		0.70		ppb v/v			06/27/23 19:18	2.2
Styrene	ND		0.35		ppb v/v			06/27/23 19:18	2.2
Tetrachloroethene	**2.5**		0.35		ppb v/v			06/27/23 19:18	2.2
Toluene	ND		1.8		ppb v/v			06/27/23 19:18	2.2
trans-1,2-Dichloroethene	ND		0.35		ppb v/v			06/27/23 19:18	2.2
trans-1,3-Dichloropropene	ND		0.35		ppb v/v			06/27/23 19:18	2.2
Trichloroethene	**0.49**		0.35		ppb v/v			06/27/23 19:18	2.2
Trichlorofluoromethane	**9.3**		0.35		ppb v/v			06/27/23 19:18	2.2
Undecane	ND		1.8		ppb v/v			06/27/23 19:18	2.2
Vinyl acetate	ND		1.8		ppb v/v			06/27/23 19:18	2.2
Vinyl chloride	**3.0**		0.70		ppb v/v			06/27/23 19:18	2.2

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**130**		1.9		ug/m3			06/27/23 19:18	2.2
1,1,2,2-Tetrachloroethane	ND		2.4		ug/m3			06/27/23 19:18	2.2
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.7		ug/m3			06/27/23 19:18	2.2
1,1,2-Trichloroethane	ND		1.9		ug/m3			06/27/23 19:18	2.2
1,1-Dichloroethane	**77**		1.4		ug/m3			06/27/23 19:18	2.2
1,1-Dichloroethene	**22**		1.4		ug/m3			06/27/23 19:18	2.2
1,2,4-Trichlorobenzene	ND		13		ug/m3			06/27/23 19:18	2.2
1,2,4-Trimethylbenzene	ND		1.7		ug/m3			06/27/23 19:18	2.2
1,2-Dibromoethane (EDB)	ND		2.7		ug/m3			06/27/23 19:18	2.2
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**7.1**		2.5		ug/m3			06/27/23 19:18	2.2
1,2-Dichlorobenzene	ND		4.2		ug/m3			06/27/23 19:18	2.2
1,2-Dichloroethane	ND		1.4		ug/m3			06/27/23 19:18	2.2
1,2-Dichloropropane	ND		1.6		ug/m3			06/27/23 19:18	2.2
1,3,5-Trimethylbenzene	ND		3.5		ug/m3			06/27/23 19:18	2.2
1,3-Butadiene	ND		1.6		ug/m3			06/27/23 19:18	2.2
1,3-Dichlorobenzene	ND		2.1		ug/m3			06/27/23 19:18	2.2
1,4-Dichlorobenzene	ND		2.1		ug/m3			06/27/23 19:18	2.2
2-Butanone (MEK)	**15**		5.2		ug/m3			06/27/23 19:18	2.2
2-Hexanone	ND		3.6		ug/m3			06/27/23 19:18	2.2
3-Chloropropene	ND		1.1		ug/m3			06/27/23 19:18	2.2
4-Methyl-2-pentanone (MIBK)	ND		7.2		ug/m3			06/27/23 19:18	2.2
Acetone	**42**		31		ug/m3			06/27/23 19:18	2.2

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-32321-1

Client Sample ID: G-230622-B2-001
Date Collected: 06/22/23 11:46
Date Received: 06/23/23 10:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-32321-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	ND		3.0		ug/m3			06/27/23 19:18	2.2
Acrolein	ND		4.0		ug/m3			06/27/23 19:18	2.2
Acrylonitrile	ND		7.6		ug/m3			06/27/23 19:18	2.2
Alpha Methyl Styrene	ND		3.4		ug/m3			06/27/23 19:18	2.2
Benzene	**7.0**		1.1		ug/m3			06/27/23 19:18	2.2
Benzyl chloride	ND		3.6		ug/m3			06/27/23 19:18	2.2
Bromodichloromethane	ND		2.4		ug/m3			06/27/23 19:18	2.2
Bromoform	ND		3.6		ug/m3			06/27/23 19:18	2.2
Bromomethane	ND		1.4		ug/m3			06/27/23 19:18	2.2
Butane	ND		4.2		ug/m3			06/27/23 19:18	2.2
Carbon disulfide	ND		2.2		ug/m3			06/27/23 19:18	2.2
Carbon tetrachloride	ND		2.2		ug/m3			06/27/23 19:18	2.2
Chlorobenzene	ND		1.6		ug/m3			06/27/23 19:18	2.2
Chlorodifluoromethane	**3.1**		1.2		ug/m3			06/27/23 19:18	2.2
Chloroethane	**16**		0.93		ug/m3			06/27/23 19:18	2.2
Chloroform	**21**		1.7		ug/m3			06/27/23 19:18	2.2
Chloromethane	ND		3.6		ug/m3			06/27/23 19:18	2.2
cis-1,2-Dichloroethene	**10**		1.4		ug/m3			06/27/23 19:18	2.2
cis-1,3-Dichloropropene	ND		3.2		ug/m3			06/27/23 19:18	2.2
Cumene	ND		3.5		ug/m3			06/27/23 19:18	2.2
Cyclohexane	ND		2.4		ug/m3			06/27/23 19:18	2.2
Decane	ND		10		ug/m3			06/27/23 19:18	2.2
Dibromochloromethane	ND		3.0		ug/m3			06/27/23 19:18	2.2
Dibromomethane	ND		5.0		ug/m3			06/27/23 19:18	2.2
Dichlorodifluoromethane	**22**		1.7		ug/m3			06/27/23 19:18	2.2
Dodecane	ND		12		ug/m3			06/27/23 19:18	2.2
Ethyl ether	ND		11		ug/m3			06/27/23 19:18	2.2
Ethylbenzene	ND		1.5		ug/m3			06/27/23 19:18	2.2
Heptane	ND		2.9		ug/m3			06/27/23 19:18	2.2
Hexachlorobutadiene	ND		19		ug/m3			06/27/23 19:18	2.2
Hexane	ND		2.5		ug/m3			06/27/23 19:18	2.2
Methyl tert-butyl ether	ND		6.3		ug/m3			06/27/23 19:18	2.2
Methylene Chloride	ND		6.1		ug/m3			06/27/23 19:18	2.2
m-Xylene & p-Xylene	**1.7**		1.5		ug/m3			06/27/23 19:18	2.2
Naphthalene	ND		3.7		ug/m3			06/27/23 19:18	2.2
Nonane	ND		3.7		ug/m3			06/27/23 19:18	2.2
Octane	ND		3.3		ug/m3			06/27/23 19:18	2.2
o-Xylene	ND		1.5		ug/m3			06/27/23 19:18	2.2
Pentane	ND		13		ug/m3			06/27/23 19:18	2.2
Propylbenzene	ND		3.5		ug/m3			06/27/23 19:18	2.2
Styrene	ND		1.5		ug/m3			06/27/23 19:18	2.2
Tetrachloroethene	**17**		2.4		ug/m3			06/27/23 19:18	2.2
Toluene	ND		6.6		ug/m3			06/27/23 19:18	2.2
trans-1,2-Dichloroethene	ND		1.4		ug/m3			06/27/23 19:18	2.2
trans-1,3-Dichloropropene	ND		1.6		ug/m3			06/27/23 19:18	2.2
Trichloroethene	**2.6**		1.9		ug/m3			06/27/23 19:18	2.2
Trichlorofluoromethane	**52**		2.0		ug/m3			06/27/23 19:18	2.2
Undecane	ND		11		ug/m3			06/27/23 19:18	2.2

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-32321-1

Client Sample ID: G-230622-B2-001
Date Collected: 06/22/23 11:46
Date Received: 06/23/23 10:00
Sample Container: Summa Canister 6L

Lab Sample ID: 140-32321-1
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		6.2		ug/m3			06/27/23 19:18	2.2
Vinyl chloride	**7.6**		1.8		ug/m3			06/27/23 19:18	2.2

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*99*		*60 - 140*		*06/27/23 19:18*	*2.2*

Default Detection Limits

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-32321-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.20	0.072	ppb v/v
1,1,1-Trichloroethane	1.1	0.39	ug/m3
1,1,2,2-Tetrachloroethane	0.20	0.035	ppb v/v
1,1,2,2-Tetrachloroethane	1.4	0.24	ug/m3
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	0.024	ppb v/v
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	0.18	ug/m3
1,1,2-Trichloroethane	0.20	0.038	ppb v/v
1,1,2-Trichloroethane	1.1	0.21	ug/m3
1,1-Dichloroethane	0.20	0.027	ppb v/v
1,1-Dichloroethane	0.81	0.11	ug/m3
1,1-Dichloroethene	0.20	0.032	ppb v/v
1,1-Dichloroethene	0.79	0.13	ug/m3
1,2,4-Trichlorobenzene	1.0	0.089	ppb v/v
1,2,4-Trichlorobenzene	7.4	0.66	ug/m3
1,2,4-Trimethylbenzene	0.20	0.050	ppb v/v
1,2,4-Trimethylbenzene	0.98	0.25	ug/m3
1,2-Dibromoethane (EDB)	0.20	0.031	ppb v/v
1,2-Dibromoethane (EDB)	1.5	0.24	ug/m3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.20	0.030	ppb v/v
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.4	0.21	ug/m3
1,2-Dichlorobenzene	0.40	0.078	ppb v/v
1,2-Dichlorobenzene	2.4	0.47	ug/m3
1,2-Dichloroethane	0.20	0.025	ppb v/v
1,2-Dichloroethane	0.81	0.10	ug/m3
1,2-Dichloropropane	0.20	0.025	ppb v/v
1,2-Dichloropropane	0.92	0.12	ug/m3
1,3,5-Trimethylbenzene	0.40	0.16	ppb v/v
1,3,5-Trimethylbenzene	2.0	0.79	ug/m3
1,3-Butadiene	0.40	0.048	ppb v/v
1,3-Butadiene	0.88	0.11	ug/m3
1,3-Dichlorobenzene	0.20	0.040	ppb v/v
1,3-Dichlorobenzene	1.2	0.24	ug/m3
1,4-Dichlorobenzene	0.20	0.040	ppb v/v
1,4-Dichlorobenzene	1.2	0.24	ug/m3
2-Butanone (MEK)	1.0	0.18	ppb v/v
2-Butanone (MEK)	2.9	0.53	ug/m3
2-Hexanone	0.50	0.14	ppb v/v
2-Hexanone	2.0	0.57	ug/m3
3-Chloropropene	0.20	0.10	ppb v/v
3-Chloropropene	0.63	0.31	ug/m3
4-Methyl-2-pentanone (MIBK)	1.0	0.14	ppb v/v
4-Methyl-2-pentanone (MIBK)	4.1	0.57	ug/m3
Acetone	7.5	1.4	ppb v/v
Acetone	18	3.3	ug/m3
Acetonitrile	1.0	0.38	ppb v/v
Acetonitrile	1.7	0.64	ug/m3
Acrolein	1.0	0.25	ppb v/v
Acrolein	2.3	0.57	ug/m3
Acrylonitrile	2.0	0.27	ppb v/v
Acrylonitrile	4.3	0.59	ug/m3
Alpha Methyl Styrene	0.40	0.093	ppb v/v
Alpha Methyl Styrene	1.9	0.45	ug/m3
Benzene	0.20	0.033	ppb v/v

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	RL	MDL	Units
Benzene	0.64	0.11	ug/m3
Benzyl chloride	0.40	0.095	ppb v/v
Benzyl chloride	2.1	0.49	ug/m3
Bromodichloromethane	0.20	0.044	ppb v/v
Bromodichloromethane	1.3	0.29	ug/m3
Bromoform	0.20	0.066	ppb v/v
Bromoform	2.1	0.68	ug/m3
Bromomethane	0.20	0.055	ppb v/v
Bromomethane	0.78	0.21	ug/m3
Butane	1.0	0.21	ppb v/v
Butane	2.4	0.50	ug/m3
Carbon disulfide	0.40	0.087	ppb v/v
Carbon disulfide	1.2	0.27	ug/m3
Carbon tetrachloride	0.20	0.032	ppb v/v
Carbon tetrachloride	1.3	0.20	ug/m3
Chlorobenzene	0.20	0.056	ppb v/v
Chlorobenzene	0.92	0.26	ug/m3
Chlorodifluoromethane	0.20	0.055	ppb v/v
Chlorodifluoromethane	0.71	0.19	ug/m3
Chloroethane	0.20	0.079	ppb v/v
Chloroethane	0.53	0.21	ug/m3
Chloroform	0.20	0.036	ppb v/v
Chloroform	0.98	0.18	ug/m3
Chloromethane	1.0	0.16	ppb v/v
Chloromethane	2.1	0.33	ug/m3
cis-1,2-Dichloroethene	0.20	0.025	ppb v/v
cis-1,2-Dichloroethene	0.79	0.099	ug/m3
cis-1,3-Dichloropropene	0.40	0.048	ppb v/v
cis-1,3-Dichloropropene	1.8	0.22	ug/m3
Cumene	0.40	0.043	ppb v/v
Cumene	2.0	0.21	ug/m3
Cyclohexane	0.40	0.093	ppb v/v
Cyclohexane	1.4	0.32	ug/m3
Decane	1.0	0.095	ppb v/v
Decane	5.8	0.55	ug/m3
Dibromochloromethane	0.20	0.034	ppb v/v
Dibromochloromethane	1.7	0.29	ug/m3
Dibromomethane	0.40	0.030	ppb v/v
Dibromomethane	2.8	0.21	ug/m3
Dichlorodifluoromethane	0.20	0.035	ppb v/v
Dichlorodifluoromethane	0.99	0.17	ug/m3
Dodecane	1.0	0.32	ppb v/v
Dodecane	7.0	2.2	ug/m3
Ethyl ether	2.0	0.085	ppb v/v
Ethyl ether	6.1	0.26	ug/m3
Ethylbenzene	0.20	0.033	ppb v/v
Ethylbenzene	0.87	0.14	ug/m3
Heptane	0.40	0.035	ppb v/v
Heptane	1.6	0.14	ug/m3
Hexachlorobutadiene	1.0	0.080	ppb v/v
Hexachlorobutadiene	11	0.85	ug/m3
Hexane	0.40	0.063	ppb v/v
Hexane	1.4	0.22	ug/m3

Default Detection Limits

Client: GHD Services Inc.
Job ID: 140-32321-1
Project/Site: New Richmond Landfill

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	RL	MDL	Units
Methyl tert-butyl ether	1.0	0.13	ppb v/v
Methyl tert-butyl ether	3.6	0.47	ug/m3
Methylene Chloride	1.0	0.34	ppb v/v
Methylene Chloride	3.5	1.2	ug/m3
m-Xylene & p-Xylene	0.20	0.073	ppb v/v
m-Xylene & p-Xylene	0.87	0.32	ug/m3
Naphthalene	0.40	0.10	ppb v/v
Naphthalene	2.1	0.52	ug/m3
Nonane	0.40	0.11	ppb v/v
Nonane	2.1	0.58	ug/m3
Octane	0.40	0.11	ppb v/v
Octane	1.9	0.51	ug/m3
o-Xylene	0.20	0.038	ppb v/v
o-Xylene	0.87	0.17	ug/m3
Pentane	2.5	0.24	ppb v/v
Pentane	7.4	0.71	ug/m3
Propylbenzene	0.40	0.048	ppb v/v
Propylbenzene	2.0	0.24	ug/m3
Styrene	0.20	0.060	ppb v/v
Styrene	0.85	0.26	ug/m3
Tetrachloroethene	0.20	0.029	ppb v/v
Tetrachloroethene	1.4	0.20	ug/m3
Toluene	1.0	0.057	ppb v/v
Toluene	3.8	0.21	ug/m3
trans-1,2-Dichloroethene	0.20	0.033	ppb v/v
trans-1,2-Dichloroethene	0.79	0.13	ug/m3
trans-1,3-Dichloropropene	0.20	0.049	ppb v/v
trans-1,3-Dichloropropene	0.91	0.22	ug/m3
Trichloroethene	0.20	0.033	ppb v/v
Trichloroethene	1.1	0.18	ug/m3
Trichlorofluoromethane	0.20	0.028	ppb v/v
Trichlorofluoromethane	1.1	0.16	ug/m3
Undecane	1.0	0.12	ppb v/v
Undecane	6.4	0.77	ug/m3
Vinyl acetate	1.0	0.070	ppb v/v
Vinyl acetate	3.5	0.25	ug/m3
Vinyl chloride	0.40	0.065	ppb v/v
Vinyl chloride	1.0	0.17	ug/m3

Surrogate Summary

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-32321-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)								
		BFB								
Lab Sample ID	Client Sample ID	(60-140)								
140-32321-1	G-230622-B2-001	99								
LCS 140-74723/1002	Lab Control Sample	108								
MB 140-74723/6	Method Blank	99								

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 140-74723/6
Matrix: Air
Analysis Batch: 74723

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20		ppb v/v			06/27/23 11:16	1
1,1,2,2-Tetrachloroethane	ND		0.20		ppb v/v			06/27/23 11:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ppb v/v			06/27/23 11:16	1
1,1,2-Trichloroethane	ND		0.20		ppb v/v			06/27/23 11:16	1
1,1-Dichloroethane	ND		0.20		ppb v/v			06/27/23 11:16	1
1,1-Dichloroethene	ND		0.20		ppb v/v			06/27/23 11:16	1
1,2,4-Trichlorobenzene	ND		1.0		ppb v/v			06/27/23 11:16	1
1,2,4-Trimethylbenzene	ND		0.20		ppb v/v			06/27/23 11:16	1
1,2-Dibromoethane (EDB)	ND		0.20		ppb v/v			06/27/23 11:16	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.20		ppb v/v			06/27/23 11:16	1
1,2-Dichlorobenzene	ND		0.40		ppb v/v			06/27/23 11:16	1
1,2-Dichloroethane	ND		0.20		ppb v/v			06/27/23 11:16	1
1,2-Dichloropropane	ND		0.20		ppb v/v			06/27/23 11:16	1
1,3,5-Trimethylbenzene	ND		0.40		ppb v/v			06/27/23 11:16	1
1,3-Butadiene	ND		0.40		ppb v/v			06/27/23 11:16	1
1,3-Dichlorobenzene	ND		0.20		ppb v/v			06/27/23 11:16	1
1,4-Dichlorobenzene	ND		0.20		ppb v/v			06/27/23 11:16	1
2-Butanone (MEK)	ND		1.0		ppb v/v			06/27/23 11:16	1
2-Hexanone	ND		0.50		ppb v/v			06/27/23 11:16	1
3-Chloropropene	ND		0.20		ppb v/v			06/27/23 11:16	1
4-Methyl-2-pentanone (MIBK)	ND		1.0		ppb v/v			06/27/23 11:16	1
Acetone	ND		7.5		ppb v/v			06/27/23 11:16	1
Acetonitrile	ND		1.0		ppb v/v			06/27/23 11:16	1
Acrolein	ND		1.0		ppb v/v			06/27/23 11:16	1
Acrylonitrile	ND		2.0		ppb v/v			06/27/23 11:16	1
Alpha Methyl Styrene	ND		0.40		ppb v/v			06/27/23 11:16	1
Benzene	ND		0.20		ppb v/v			06/27/23 11:16	1
Benzyl chloride	ND		0.40		ppb v/v			06/27/23 11:16	1
Bromodichloromethane	ND		0.20		ppb v/v			06/27/23 11:16	1
Bromoform	ND		0.20		ppb v/v			06/27/23 11:16	1
Bromomethane	ND		0.20		ppb v/v			06/27/23 11:16	1
Butane	ND		1.0		ppb v/v			06/27/23 11:16	1
Carbon disulfide	ND		0.40		ppb v/v			06/27/23 11:16	1
Carbon tetrachloride	ND		0.20		ppb v/v			06/27/23 11:16	1
Chlorobenzene	ND		0.20		ppb v/v			06/27/23 11:16	1
Chlorodifluoromethane	ND		0.20		ppb v/v			06/27/23 11:16	1
Chloroethane	ND		0.20		ppb v/v			06/27/23 11:16	1
Chloroform	ND		0.20		ppb v/v			06/27/23 11:16	1
Chloromethane	ND		1.0		ppb v/v			06/27/23 11:16	1
cis-1,2-Dichloroethene	ND		0.20		ppb v/v			06/27/23 11:16	1
cis-1,3-Dichloropropene	ND		0.40		ppb v/v			06/27/23 11:16	1
Cumene	ND		0.40		ppb v/v			06/27/23 11:16	1
Cyclohexane	ND		0.40		ppb v/v			06/27/23 11:16	1
Decane	ND		1.0		ppb v/v			06/27/23 11:16	1
Dibromochloromethane	ND		0.20		ppb v/v			06/27/23 11:16	1
Dibromomethane	ND		0.40		ppb v/v			06/27/23 11:16	1
Dichlorodifluoromethane	ND		0.20		ppb v/v			06/27/23 11:16	1
Dodecane	ND		1.0		ppb v/v			06/27/23 11:16	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-74723/6
Matrix: Air
Analysis Batch: 74723

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		2.0		ppb v/v			06/27/23 11:16	1
Ethylbenzene	ND		0.20		ppb v/v			06/27/23 11:16	1
Heptane	ND		0.40		ppb v/v			06/27/23 11:16	1
Hexachlorobutadiene	ND		1.0		ppb v/v			06/27/23 11:16	1
Hexane	ND		0.40		ppb v/v			06/27/23 11:16	1
Methyl tert-butyl ether	ND		1.0		ppb v/v			06/27/23 11:16	1
Methylene Chloride	ND		1.0		ppb v/v			06/27/23 11:16	1
m-Xylene & p-Xylene	ND		0.20		ppb v/v			06/27/23 11:16	1
Naphthalene	ND		0.40		ppb v/v			06/27/23 11:16	1
Nonane	ND		0.40		ppb v/v			06/27/23 11:16	1
Octane	ND		0.40		ppb v/v			06/27/23 11:16	1
o-Xylene	ND		0.20		ppb v/v			06/27/23 11:16	1
Pentane	ND		2.5		ppb v/v			06/27/23 11:16	1
Propylbenzene	ND		0.40		ppb v/v			06/27/23 11:16	1
Styrene	ND		0.20		ppb v/v			06/27/23 11:16	1
Tetrachloroethene	ND		0.20		ppb v/v			06/27/23 11:16	1
Toluene	ND		1.0		ppb v/v			06/27/23 11:16	1
trans-1,2-Dichloroethene	ND		0.20		ppb v/v			06/27/23 11:16	1
trans-1,3-Dichloropropene	ND		0.20		ppb v/v			06/27/23 11:16	1
Trichloroethene	ND		0.20		ppb v/v			06/27/23 11:16	1
Trichlorofluoromethane	ND		0.20		ppb v/v			06/27/23 11:16	1
Undecane	ND		1.0		ppb v/v			06/27/23 11:16	1
Vinyl acetate	ND		1.0		ppb v/v			06/27/23 11:16	1
Vinyl chloride	ND		0.40		ppb v/v			06/27/23 11:16	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1		ug/m3			06/27/23 11:16	1
1,1,2,2-Tetrachloroethane	ND		1.4		ug/m3			06/27/23 11:16	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.5		ug/m3			06/27/23 11:16	1
1,1,2-Trichloroethane	ND		1.1		ug/m3			06/27/23 11:16	1
1,1-Dichloroethane	ND		0.81		ug/m3			06/27/23 11:16	1
1,1-Dichloroethene	ND		0.79		ug/m3			06/27/23 11:16	1
1,2,4-Trichlorobenzene	ND		7.4		ug/m3			06/27/23 11:16	1
1,2,4-Trimethylbenzene	ND		0.98		ug/m3			06/27/23 11:16	1
1,2-Dibromoethane (EDB)	ND		1.5		ug/m3			06/27/23 11:16	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4		ug/m3			06/27/23 11:16	1
1,2-Dichlorobenzene	ND		2.4		ug/m3			06/27/23 11:16	1
1,2-Dichloroethane	ND		0.81		ug/m3			06/27/23 11:16	1
1,2-Dichloropropane	ND		0.92		ug/m3			06/27/23 11:16	1
1,3,5-Trimethylbenzene	ND		2.0		ug/m3			06/27/23 11:16	1
1,3-Butadiene	ND		0.88		ug/m3			06/27/23 11:16	1
1,3-Dichlorobenzene	ND		1.2		ug/m3			06/27/23 11:16	1
1,4-Dichlorobenzene	ND		1.2		ug/m3			06/27/23 11:16	1
2-Butanone (MEK)	ND		2.9		ug/m3			06/27/23 11:16	1
2-Hexanone	ND		2.0		ug/m3			06/27/23 11:16	1
3-Chloropropene	ND		0.63		ug/m3			06/27/23 11:16	1
4-Methyl-2-pentanone (MIBK)	ND		4.1		ug/m3			06/27/23 11:16	1
Acetone	ND		18		ug/m3			06/27/23 11:16	1
Acetonitrile	ND		1.7		ug/m3			06/27/23 11:16	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-74723/6
Matrix: Air
Analysis Batch: 74723

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		2.3		ug/m3			06/27/23 11:16	1
Acrylonitrile	ND		4.3		ug/m3			06/27/23 11:16	1
Alpha Methyl Styrene	ND		1.9		ug/m3			06/27/23 11:16	1
Benzene	ND		0.64		ug/m3			06/27/23 11:16	1
Benzyl chloride	ND		2.1		ug/m3			06/27/23 11:16	1
Bromodichloromethane	ND		1.3		ug/m3			06/27/23 11:16	1
Bromoform	ND		2.1		ug/m3			06/27/23 11:16	1
Bromomethane	ND		0.78		ug/m3			06/27/23 11:16	1
Butane	ND		2.4		ug/m3			06/27/23 11:16	1
Carbon disulfide	ND		1.2		ug/m3			06/27/23 11:16	1
Carbon tetrachloride	ND		1.3		ug/m3			06/27/23 11:16	1
Chlorobenzene	ND		0.92		ug/m3			06/27/23 11:16	1
Chlorodifluoromethane	ND		0.71		ug/m3			06/27/23 11:16	1
Chloroethane	ND		0.53		ug/m3			06/27/23 11:16	1
Chloroform	ND		0.98		ug/m3			06/27/23 11:16	1
Chloromethane	ND		2.1		ug/m3			06/27/23 11:16	1
cis-1,2-Dichloroethene	ND		0.79		ug/m3			06/27/23 11:16	1
cis-1,3-Dichloropropene	ND		1.8		ug/m3			06/27/23 11:16	1
Cumene	ND		2.0		ug/m3			06/27/23 11:16	1
Cyclohexane	ND		1.4		ug/m3			06/27/23 11:16	1
Decane	ND		5.8		ug/m3			06/27/23 11:16	1
Dibromochloromethane	ND		1.7		ug/m3			06/27/23 11:16	1
Dibromomethane	ND		2.8		ug/m3			06/27/23 11:16	1
Dichlorodifluoromethane	ND		0.99		ug/m3			06/27/23 11:16	1
Dodecane	ND		7.0		ug/m3			06/27/23 11:16	1
Ethyl ether	ND		6.1		ug/m3			06/27/23 11:16	1
Ethylbenzene	ND		0.87		ug/m3			06/27/23 11:16	1
Heptane	ND		1.6		ug/m3			06/27/23 11:16	1
Hexachlorobutadiene	ND		11		ug/m3			06/27/23 11:16	1
Hexane	ND		1.4		ug/m3			06/27/23 11:16	1
Methyl tert-butyl ether	ND		3.6		ug/m3			06/27/23 11:16	1
Methylene Chloride	ND		3.5		ug/m3			06/27/23 11:16	1
m-Xylene & p-Xylene	ND		0.87		ug/m3			06/27/23 11:16	1
Naphthalene	ND		2.1		ug/m3			06/27/23 11:16	1
Nonane	ND		2.1		ug/m3			06/27/23 11:16	1
Octane	ND		1.9		ug/m3			06/27/23 11:16	1
o-Xylene	ND		0.87		ug/m3			06/27/23 11:16	1
Pentane	ND		7.4		ug/m3			06/27/23 11:16	1
Propylbenzene	ND		2.0		ug/m3			06/27/23 11:16	1
Styrene	ND		0.85		ug/m3			06/27/23 11:16	1
Tetrachloroethene	ND		1.4		ug/m3			06/27/23 11:16	1
Toluene	ND		3.8		ug/m3			06/27/23 11:16	1
trans-1,2-Dichloroethene	ND		0.79		ug/m3			06/27/23 11:16	1
trans-1,3-Dichloropropene	ND		0.91		ug/m3			06/27/23 11:16	1
Trichloroethene	ND		1.1		ug/m3			06/27/23 11:16	1
Trichlorofluoromethane	ND		1.1		ug/m3			06/27/23 11:16	1
Undecane	ND		6.4		ug/m3			06/27/23 11:16	1
Vinyl acetate	ND		3.5		ug/m3			06/27/23 11:16	1
Vinyl chloride	ND		1.0		ug/m3			06/27/23 11:16	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	99		60 - 140		06/27/23 11:16	1

Lab Sample ID: LCS 140-74723/1002
Matrix: Air
Analysis Batch: 74723

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	2.00	1.91		ppb v/v		96	70 - 130
1,1,2,2-Tetrachloroethane	2.00	1.95		ppb v/v		98	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	2.00	1.92		ppb v/v		96	70 - 130
1,1,2-Trichloroethane	2.00	1.82		ppb v/v		91	70 - 130
1,1-Dichloroethane	2.00	1.94		ppb v/v		97	70 - 130
1,1-Dichloroethene	2.00	1.81		ppb v/v		90	70 - 130
1,2,4-Trichlorobenzene	2.00	2.11		ppb v/v		106	60 - 140
1,2,4-Trimethylbenzene	2.00	2.05		ppb v/v		102	70 - 130
1,2-Dibromoethane (EDB)	2.00	1.88		ppb v/v		94	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.00	1.84		ppb v/v		92	60 - 140
1,2-Dichlorobenzene	2.00	2.02		ppb v/v		101	70 - 130
1,2-Dichloroethane	2.00	1.85		ppb v/v		93	70 - 130
1,2-Dichloropropane	2.00	1.84		ppb v/v		92	70 - 130
1,3,5-Trimethylbenzene	2.00	2.25		ppb v/v		112	70 - 130
1,3-Butadiene	2.00	1.72		ppb v/v		86	60 - 140
1,3-Dichlorobenzene	2.00	2.02		ppb v/v		101	70 - 130
1,4-Dichlorobenzene	2.00	2.00		ppb v/v		100	70 - 130
2-Butanone (MEK)	2.00	1.85		ppb v/v		92	60 - 140
2-Hexanone	2.00	1.89		ppb v/v		95	60 - 140
3-Chloropropene	2.00	1.75		ppb v/v		88	60 - 140
4-Methyl-2-pentanone (MIBK)	2.00	1.88		ppb v/v		94	60 - 140
Acetone	2.00	2.25	J	ppb v/v		112	60 - 140
Acetonitrile	2.00	1.69		ppb v/v		84	60 - 140
Acrolein	2.00	1.95		ppb v/v		97	60 - 140
Acrylonitrile	2.00	1.82		ppb v/v		91	60 - 140
Alpha Methyl Styrene	2.00	2.04		ppb v/v		102	60 - 140
Benzene	2.00	1.90		ppb v/v		95	70 - 130
Benzyl chloride	2.00	2.38		ppb v/v		119	70 - 130
Bromodichloromethane	2.00	1.95		ppb v/v		97	70 - 130
Bromoform	2.00	1.96		ppb v/v		98	60 - 140
Bromomethane	2.00	1.76		ppb v/v		88	70 - 130
Butane	2.00	1.78		ppb v/v		89	60 - 140
Carbon disulfide	2.00	1.87		ppb v/v		93	70 - 130
Carbon tetrachloride	2.00	2.02		ppb v/v		101	70 - 130
Chlorobenzene	2.00	1.85		ppb v/v		93	70 - 130
Chlorodifluoromethane	2.00	1.79		ppb v/v		90	60 - 140
Chloroethane	2.00	1.89		ppb v/v		94	70 - 130
Chloroform	2.00	1.98		ppb v/v		99	70 - 130
Chloromethane	2.00	1.82		ppb v/v		91	60 - 140
cis-1,2-Dichloroethene	2.00	1.96		ppb v/v		98	70 - 130
cis-1,3-Dichloropropene	2.00	1.99		ppb v/v		99	70 - 130
Cumene	2.00	1.95		ppb v/v		97	70 - 130
Cyclohexane	2.00	1.85		ppb v/v		93	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-74723/1002
Matrix: Air
Analysis Batch: 74723

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Decane	2.00	1.93		ppb v/v		96	60 - 140
Dibromochloromethane	2.00	1.90		ppb v/v		95	70 - 130
Dibromomethane	2.00	1.82		ppb v/v		91	70 - 130
Dichlorodifluoromethane	2.00	1.96		ppb v/v		98	60 - 140
Dodecane	2.00	1.78		ppb v/v		89	60 - 140
Ethyl ether	2.00	1.82		ppb v/v		91	60 - 140
Ethylbenzene	2.00	1.84		ppb v/v		92	70 - 130
Heptane	2.00	1.87		ppb v/v		94	70 - 130
Hexachlorobutadiene	2.00	1.45		ppb v/v		72	60 - 140
Hexane	2.00	1.98		ppb v/v		99	70 - 130
Methyl tert-butyl ether	2.00	1.92		ppb v/v		96	60 - 140
Methylene Chloride	2.00	1.83		ppb v/v		91	70 - 130
m-Xylene & p-Xylene	4.00	3.95		ppb v/v		99	70 - 130
Naphthalene	2.00	2.15		ppb v/v		107	60 - 140
Nonane	2.00	1.96		ppb v/v		98	60 - 140
Octane	2.00	1.94		ppb v/v		97	70 - 130
o-Xylene	2.00	1.89		ppb v/v		94	70 - 130
Pentane	2.00	2.01		ppb v/v		101	70 - 130
Propylbenzene	2.00	1.89		ppb v/v		94	70 - 130
Styrene	2.00	2.05		ppb v/v		103	70 - 130
Tetrachloroethene	2.00	1.81		ppb v/v		91	70 - 130
Toluene	2.00	1.85		ppb v/v		93	70 - 130
trans-1,2-Dichloroethene	2.00	1.85		ppb v/v		93	70 - 130
trans-1,3-Dichloropropene	2.00	1.90		ppb v/v		95	70 - 130
Trichloroethene	2.00	1.88		ppb v/v		94	70 - 130
Trichlorofluoromethane	2.00	1.88		ppb v/v		94	60 - 140
Undecane	2.00	1.92		ppb v/v		96	60 - 140
Vinyl acetate	2.00	1.54		ppb v/v		77	60 - 140
Vinyl chloride	2.00	1.65		ppb v/v		83	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	11	10.4		ug/m3		96	70 - 130
1,1,2,2-Tetrachloroethane	14	13.4		ug/m3		98	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	15	14.7		ug/m3		96	70 - 130
1,1,2-Trichloroethane	11	9.94		ug/m3		91	70 - 130
1,1-Dichloroethane	8.1	7.85		ug/m3		97	70 - 130
1,1-Dichloroethene	7.9	7.16		ug/m3		90	70 - 130
1,2,4-Trichlorobenzene	15	15.7		ug/m3		106	60 - 140
1,2,4-Trimethylbenzene	9.8	10.1		ug/m3		102	70 - 130
1,2-Dibromoethane (EDB)	15	14.5		ug/m3		94	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	14	12.9		ug/m3		92	60 - 140
1,2-Dichlorobenzene	12	12.1		ug/m3		101	70 - 130
1,2-Dichloroethane	8.1	7.50		ug/m3		93	70 - 130
1,2-Dichloropropane	9.2	8.52		ug/m3		92	70 - 130
1,3,5-Trimethylbenzene	9.8	11.0		ug/m3		112	70 - 130
1,3-Butadiene	4.4	3.80		ug/m3		86	60 - 140
1,3-Dichlorobenzene	12	12.1		ug/m3		101	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-74723/1002
Matrix: Air
Analysis Batch: 74723

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	12	12.0		ug/m3		100	70 - 130
2-Butanone (MEK)	5.9	5.45		ug/m3		92	60 - 140
2-Hexanone	8.2	7.76		ug/m3		95	60 - 140
3-Chloropropene	6.3	5.48		ug/m3		88	60 - 140
4-Methyl-2-pentanone (MIBK)	8.2	7.68		ug/m3		94	60 - 140
Acetone	4.8	5.34	J	ug/m3		112	60 - 140
Acetonitrile	3.4	2.83		ug/m3		84	60 - 140
Acrolein	4.6	4.46		ug/m3		97	60 - 140
Acrylonitrile	4.3	3.95		ug/m3		91	60 - 140
Alpha Methyl Styrene	9.7	9.86		ug/m3		102	60 - 140
Benzene	6.4	6.06		ug/m3		95	70 - 130
Benzyl chloride	10	12.3		ug/m3		119	70 - 130
Bromodichloromethane	13	13.0		ug/m3		97	70 - 130
Bromoform	21	20.3		ug/m3		98	60 - 140
Bromomethane	7.8	6.83		ug/m3		88	70 - 130
Butane	4.8	4.24		ug/m3		89	60 - 140
Carbon disulfide	6.2	5.82		ug/m3		93	70 - 130
Carbon tetrachloride	13	12.7		ug/m3		101	70 - 130
Chlorobenzene	9.2	8.54		ug/m3		93	70 - 130
Chlorodifluoromethane	7.1	6.34		ug/m3		90	60 - 140
Chloroethane	5.3	4.98		ug/m3		94	70 - 130
Chloroform	9.8	9.67		ug/m3		99	70 - 130
Chloromethane	4.1	3.76		ug/m3		91	60 - 140
cis-1,2-Dichloroethene	7.9	7.77		ug/m3		98	70 - 130
cis-1,3-Dichloropropene	9.1	9.01		ug/m3		99	70 - 130
Cumene	9.8	9.58		ug/m3		97	70 - 130
Cyclohexane	6.9	6.38		ug/m3		93	70 - 130
Decane	12	11.2		ug/m3		96	60 - 140
Dibromochloromethane	17	16.1		ug/m3		95	70 - 130
Dibromomethane	14	12.9		ug/m3		91	70 - 130
Dichlorodifluoromethane	9.9	9.72		ug/m3		98	60 - 140
Dodecane	14	12.4		ug/m3		89	60 - 140
Ethyl ether	6.1	5.51		ug/m3		91	60 - 140
Ethylbenzene	8.7	8.00		ug/m3		92	70 - 130
Heptane	8.2	7.67		ug/m3		94	70 - 130
Hexachlorobutadiene	21	15.4		ug/m3		72	60 - 140
Hexane	7.0	6.98		ug/m3		99	70 - 130
Methyl tert-butyl ether	7.2	6.93		ug/m3		96	60 - 140
Methylene Chloride	6.9	6.35		ug/m3		91	70 - 130
m-Xylene & p-Xylene	17	17.2		ug/m3		99	70 - 130
Naphthalene	10	11.2		ug/m3		107	60 - 140
Nonane	10	10.3		ug/m3		98	60 - 140
Octane	9.3	9.07		ug/m3		97	70 - 130
o-Xylene	8.7	8.20		ug/m3		94	70 - 130
Pentane	5.9	5.94		ug/m3		101	70 - 130
Propylbenzene	9.8	9.28		ug/m3		94	70 - 130
Styrene	8.5	8.75		ug/m3		103	70 - 130
Tetrachloroethene	14	12.3		ug/m3		91	70 - 130
Toluene	7.5	6.97		ug/m3		93	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-74723/1002
Matrix: Air
Analysis Batch: 74723

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,2-Dichloroethene	7.9	7.34		ug/m3		93	70 - 130
trans-1,3-Dichloropropene	9.1	8.64		ug/m3		95	70 - 130
Trichloroethene	11	10.1		ug/m3		94	70 - 130
Trichlorofluoromethane	11	10.5		ug/m3		94	60 - 140
Undecane	13	12.3		ug/m3		96	60 - 140
Vinyl acetate	7.0	5.43		ug/m3		77	60 - 140
Vinyl chloride	5.1	4.22		ug/m3		83	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*108*		*60 - 140*

QC Association Summary

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-32321-1

Air - GC/MS VOA

Analysis Batch: 74723

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-32321-1	G-230622-B2-001	Total/NA	Air	TO-15	
MB 140-74723/6	Method Blank	Total/NA	Air	TO-15	
LCS 140-74723/1002	Lab Control Sample	Total/NA	Air	TO-15	

Lab Chronicle

Client: GHD Services Inc.
Job ID: 140-32321-1
Project/Site: New Richmond Landfill

Client Sample ID: G-230622-B2-001
Lab Sample ID: 140-32321-1
Date Collected: 06/22/23 11:46
Matrix: Air
Date Received: 06/23/23 10:00

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		2.2	250 mL	500 mL	74723	06/27/23 19:18	RDR	EET KNX
	Instrument ID: MR									

Client Sample ID: Method Blank
Lab Sample ID: MB 140-74723/6
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	200 mL	500 mL	74723	06/27/23 11:16	RDR	EET KNX
	Instrument ID: MR									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-74723/1002
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	500 mL	500 mL	74723	06/27/23 09:20	RDR	EET KNX
	Instrument ID: MR									

Laboratory References:
EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 140-32321-1
Project/Site: New Richmond Landfill

Laboratory: Eurofins Knoxville

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998044300	08-31-23

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	1,1,1-Trichloroethane
TO-15		Air	1,1,2,2-Tetrachloroethane
TO-15		Air	1,1,2-Trichloro-1,2,2-trifluoroethane
TO-15		Air	1,1,2-Trichloroethane
TO-15		Air	1,1-Dichloroethane
TO-15		Air	1,1-Dichloroethene
TO-15		Air	1,2,4-Trichlorobenzene
TO-15		Air	1,2,4-Trimethylbenzene
TO-15		Air	1,2-Dibromoethane (EDB)
TO-15		Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane
TO-15		Air	1,2-Dichlorobenzene
TO-15		Air	1,2-Dichloroethane
TO-15		Air	1,2-Dichloropropane
TO-15		Air	1,3,5-Trimethylbenzene
TO-15		Air	1,3-Butadiene
TO-15		Air	1,3-Dichlorobenzene
TO-15		Air	1,4-Dichlorobenzene
TO-15		Air	2-Butanone (MEK)
TO-15		Air	2-Hexanone
TO-15		Air	3-Chloropropene
TO-15		Air	4-Methyl-2-pentanone (MIBK)
TO-15		Air	Acetone
TO-15		Air	Acetonitrile
TO-15		Air	Acrolein
TO-15		Air	Acrylonitrile
TO-15		Air	Alpha Methyl Styrene
TO-15		Air	Benzene
TO-15		Air	Benzyl chloride
TO-15		Air	Bromodichloromethane
TO-15		Air	Bromoform
TO-15		Air	Bromomethane
TO-15		Air	Butane
TO-15		Air	Carbon disulfide
TO-15		Air	Carbon tetrachloride
TO-15		Air	Chlorobenzene
TO-15		Air	Chlorodifluoromethane
TO-15		Air	Chloroethane
TO-15		Air	Chloroform
TO-15		Air	Chloromethane
TO-15		Air	cis-1,2-Dichloroethene
TO-15		Air	cis-1,3-Dichloropropene
TO-15		Air	Cumene
TO-15		Air	Cyclohexane
TO-15		Air	Decane
TO-15		Air	Dibromochloromethane

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 140-32321-1
Project/Site: New Richmond Landfill

Laboratory: Eurofins Knoxville (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	Dibromomethane
TO-15		Air	Dichlorodifluoromethane
TO-15		Air	Dodecane
TO-15		Air	Ethyl ether
TO-15		Air	Ethylbenzene
TO-15		Air	Heptane
TO-15		Air	Hexachlorobutadiene
TO-15		Air	Hexane
TO-15		Air	Methyl tert-butyl ether
TO-15		Air	Methylene Chloride
TO-15		Air	m-Xylene & p-Xylene
TO-15		Air	Naphthalene
TO-15		Air	Nonane
TO-15		Air	Octane
TO-15		Air	o-Xylene
TO-15		Air	Pentane
TO-15		Air	Propylbenzene
TO-15		Air	Styrene
TO-15		Air	Tetrachloroethene
TO-15		Air	Toluene
TO-15		Air	trans-1,2-Dichloroethene
TO-15		Air	trans-1,3-Dichloropropene
TO-15		Air	Trichloroethene
TO-15		Air	Trichlorofluoromethane
TO-15		Air	Undecane
TO-15		Air	Vinyl acetate
TO-15		Air	Vinyl chloride

Method Summary

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-32321-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	EET KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-32321-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-32321-1	G-230622-B2-001	Air	06/22/23 11:46	06/23/23 10:00	Air Canister (6-Liter) #10251

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike
Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information	**Client Project Manager:** Tom Holaday	**Samples Collected By:** Bill Zoidema	COC No:
Company Name: GHD Services Inc	**Phone:** 651-639-0913		1 of 1 COCs
Address: 900 Long Lake Rd Ste 200	**Email:** Grant.Anderson@ghd.com		TALS Project #:
City/State/Zip St. Paul, MN 55112			**For Lab Use Only:**
Phone: 651-639-0913	**Site Contact:**		Walk-in Client:
FAX:	**Tel/Fax**		Lab Sampling:
Project Name: New Richmond 2E	**Analysis Turnaround Time**		Job / SDG No.:
Site/Location: New Richmond, WI	Standard (Specific): X		(See below for Add'l Items)
P O # 048038	Rush (Specify):		

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
G-230622-BZ-001	6-22-23	1145	6-22-23	1146	-28	-15	12338	1403174744															
Custody Seal Intact																							
Received Ambient																							
OH 61231 23																							
1 Box FedEx 7802 3631 7636 PO																							
1 Con / 1 Gauge																							

Temperature (Fahrenheit)			
Start	Interior	Ambient	
Stop			

Pressure (inches of Hg)			
Start	Interior	Ambient	
Stop			

140-32321 Chain of Custody

Special Instructions/QC Requirements & Comments:
Contact Grant Anderson with any questions

Samples Shipped by: Bill Zoidema	**Date / Time:** 06-22-2023 1610	**Samples Received by:** Dean Hicks FTA KNX 61231 23 10:00
Samples Relinquished by:	**Date / Time:**	**Received by:**
Relinquished by:	**Date / Time:**	**Received by:**
Lab Use Only: **Shipper Name:**	**Opened by:**	**Condition:**

Loc: 140
32321

EUROFINS/TESTAMERICA KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST **Log In Number:**

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓			☐ Containers, Broken
2. Were ambient air containers received intact?			✓	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	✓			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			✓	☐ Cooler Out of Temp, Client Contacted, Proceed/Cancel ☐ Cooler Out of Temp, Same Day Receipt
5. Were all of the sample containers received intact?	✓			☐ Containers, Broken
6. Were samples received in appropriate containers?	✓			☐ Containers, Improper; Client Contacted; Proceed/Cancel
7. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ COC & Samples Do Not Match ☐ COC Incorrect/Incomplete ☐ COC Not Received
8. Were all of the samples listed on the COC received?	✓			☐ Sample Received, Not on COC ☐ Sample on COC, Not Received
9. Is the date/time of sample collection noted?	✓			☐ COC; No Date/Time; Client Contacted
10. Was the sampler identified on the COC?	✓			☐ Sampler Not Listed on COC
11. Is the client and project name/# identified?	✓			☐ COC Incorrect/Incomplete
12. Are tests/parameters listed for each sample? DR 6/23/23	✓	✓		☐ COC No tests on COC
13. Is the matrix of the samples noted?	✓			☐ COC Incorrect/Incomplete
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ COC Incorrect/Incomplete
15. Were samples received within holding time?	✓			☐ Holding Time - Receipt
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ pH Adjusted, pH Included (See box 16A) ☐ Incorrect Preservative
17. Were VOA samples received without headspace?			✓	☐ Headspace (VOA only)
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			✓	☐ Residual Chlorine
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

12,

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 1400185D PM Instructions: _____

Sample Receiving Associate: Dean Hick Date: 6/23/23

QA026R32.doc, 062719

Eurofins Knoxville - Air Canister Initial Pressure Check

Gauge ID: g5
Date/Time: 6/23/23 1330

Analyst	Sample ID	Pressure @ Receipt (-in Hg or +psig)/initial pressurisation (if applicable)	Asset #	Cleaning Job	Cert Type	Size (L)	Comments
btb	140-32321-A-1	-16.3/0.0	10251	140-31747-A-4	b	6	

Summa Canister Dilution Worksheet

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job No.: 140-32321-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Pressure Gauge ID	Date	Analyst Initals
140-32321-1	6	-16.3	0.46	2.73	0.0	1.00	6.00		2.20	2.20	g5	06/23/23 13:31	BTB

Formulae:

Preadjusted Volume (L) = ((Preadjusted Pressure ("Hg) + 29.92 "Hg) * Vol L) / 29.92 "Hg
Adjusted Volume (L) = ((Adjusted Pressure (psig) + 14.7 psig)* Vol L) / 14.7 psig
Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

Where:

29.92 "Hg = Standard atmospheric pressure in inches of Mercury (“Hg)
14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Grant Anderson
GHD Services Inc.
900 Long Lake Road
Suite 200
New Brighton, Minnesota 55112

Generated 1/9/2024 1:40:17 PM

JOB DESCRIPTION

New Richmond Landfill

JOB NUMBER

140-34939-1

Eurofins Knoxville
5815 Middlebrook Pike
Knoxville TN 37921

See page two for job notes and contact information.

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins TestAmerica Project Manager.

Authorization

Generated
1/9/2024 1:40:17 PM

Authorized for release by
Jamie McKinney, Senior Project Manager
Jamie.McKinney@et.eurofinsus.com
(865)291-3000

Table of Contents

Definitions/Glossary

Client: GHD Services Inc.
Job ID: 140-34939-1
Project/Site: New Richmond Landfill

Qualifiers

Air - GC/MS VOA

Qualifier	Qualifier Description
*+	LCS and/or LCSD is outside acceptance limits, high biased.
J	Result is less than the RL but greater than or equal to the MDL and the concentration is an approximate value.

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

Job Narrative
140-34939-1

Receipt
The samples were received on 12/27/2023 9:30 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice.

Receipt Exceptions
The Chain-of-Custody (COC) was incomplete as received and/or improperly completed. No tests listed on COC. Logged per project requirements.

Air - GC/MS VOA
Methods TO 15 LL, TO-15: The continuing calibration verification (CCV) associated with batch 140-82010 exhibited % difference of > 30% for the following analyte(s) 3-Chloro-1-propene and Vinyl acetate; however, the results were within the LCS acceptance limits. The EPA method requires that all target analytes in the continuing calibration verification standard be within 30% difference from the initial calibration. According to the laboratory standard operating procedure, the continuing calibration is acceptable if it meets the laboratory control sample acceptance criteria.

Methods TO 15 LL, TO-15: The continuing calibration verification (CCV) associated with batch 140-82010 recovered above the upper control limit for Bromoform. The samples associated with this CCV were non-detects for the affected analyte; therefore, the data have been reported.

Methods TO 15 LL, TO-15: The laboratory control sample (LCS) for analytical batch 140-82010 recovered outside control limits for the following analyte: Bromoform. This analyte was biased high in the LCS and was not detected in the associated samples; therefore, the data have been reported.

Methods TO 15 LL, TO-15: EPA methods TO-14A and TO-15 specify the use of humidified "zero air" as the blank reagent for canister cleaning, instrument calibration and sample analysis. Ultra-high purity humidified nitrogen from a cryogenic reservoir is used in place of "zero air" by Eurofins TestAmerica Knoxville.

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.
Project/Site: New Richmond Landfill

Job ID: 140-34939-1

Client Sample ID: G231221-BZ-001 — Lab Sample ID: 140-34939-1

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	20		2.0		ppb v/v	1		TO-15	Total/NA
1,1-Dichloroethane	4.9		2.0		ppb v/v	1		TO-15	Total/NA
1,1-Dichloroethene	3.8		2.0		ppb v/v	1		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	4.3		2.0		ppb v/v	1		TO-15	Total/NA
Butane	24		10		ppb v/v	1		TO-15	Total/NA
Chlorodifluoromethane	33		2.0		ppb v/v	1		TO-15	Total/NA
Chloroethane	5.4		2.0		ppb v/v	1		TO-15	Total/NA
Chloroform	14		2.0		ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	64		2.0		ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	2.1		2.0		ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	32		2.0		ppb v/v	1		TO-15	Total/NA
Vinyl chloride	8.9		4.0		ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	110		11		ug/m3	1		TO-15	Total/NA
1,1-Dichloroethane	20		8.1		ug/m3	1		TO-15	Total/NA
1,1-Dichloroethene	15		7.9		ug/m3	1		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	30		14		ug/m3	1		TO-15	Total/NA
Butane	57		24		ug/m3	1		TO-15	Total/NA
Chlorodifluoromethane	120		7.1		ug/m3	1		TO-15	Total/NA
Chloroethane	14		5.3		ug/m3	1		TO-15	Total/NA
Chloroform	68		9.8		ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	320		9.9		ug/m3	1		TO-15	Total/NA
Tetrachloroethene	15		14		ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	180		11		ug/m3	1		TO-15	Total/NA
Vinyl chloride	23		10		ug/m3	1		TO-15	Total/NA

Client Sample ID: G231221-BZ-002 — Lab Sample ID: 140-34939-2

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	45		2.0		ppb v/v	1.97		TO-15	Total/NA
1,1-Dichloroethane	32		2.0		ppb v/v	1.97		TO-15	Total/NA
1,1-Dichloroethene	16		2.0		ppb v/v	1.97		TO-15	Total/NA
Chloroform	13		2.0		ppb v/v	1.97		TO-15	Total/NA
Dichlorodifluoromethane	8.8		2.0		ppb v/v	1.97		TO-15	Total/NA
Trichlorofluoromethane	2.5		2.0		ppb v/v	1.97		TO-15	Total/NA
Vinyl chloride	46		4.0		ppb v/v	1.97		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	240		11		ug/m3	1.97		TO-15	Total/NA
1,1-Dichloroethane	130		8.1		ug/m3	1.97		TO-15	Total/NA
1,1-Dichloroethene	62		7.9		ug/m3	1.97		TO-15	Total/NA
Chloroform	64		9.8		ug/m3	1.97		TO-15	Total/NA
Dichlorodifluoromethane	44		9.9		ug/m3	1.97		TO-15	Total/NA
Trichlorofluoromethane	14		11		ug/m3	1.97		TO-15	Total/NA
Vinyl chloride	120		10		ug/m3	1.97		TO-15	Total/NA

Client Sample ID: G231221-BZ-003 — Lab Sample ID: 140-34939-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	130		2.0		ppb v/v	1		TO-15	Total/NA
1,1-Dichloroethane	80		2.0		ppb v/v	1		TO-15	Total/NA
1,1-Dichloroethene	29		2.0		ppb v/v	1		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Eurofins Knoxville

Client Sample ID: G231221-BZ-003 (Continued) — Lab Sample ID: 140-34939-3

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,2-Dichloro-1,1,2,2-tetrafluoroethane	3.1		2.0		ppb v/v	1		TO-15	Total/NA
Chloroform	8.2		2.0		ppb v/v	1		TO-15	Total/NA
Dichlorodifluoromethane	11		2.0		ppb v/v	1		TO-15	Total/NA
Tetrachloroethene	6.3		2.0		ppb v/v	1		TO-15	Total/NA
Trichlorofluoromethane	2.6		2.0		ppb v/v	1		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	730		11		ug/m3	1		TO-15	Total/NA
1,1-Dichloroethane	320		8.1		ug/m3	1		TO-15	Total/NA
1,1-Dichloroethene	120		7.9		ug/m3	1		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	21		14		ug/m3	1		TO-15	Total/NA
Chloroform	40		9.8		ug/m3	1		TO-15	Total/NA
Dichlorodifluoromethane	53		9.9		ug/m3	1		TO-15	Total/NA
Tetrachloroethene	43		14		ug/m3	1		TO-15	Total/NA
Trichlorofluoromethane	14		11		ug/m3	1		TO-15	Total/NA

Client Sample ID: G231221-BZ-004 — Lab Sample ID: 140-34939-4

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	27		2.0		ppb v/v	2.43		TO-15	Total/NA
1,1-Dichloroethane	40		2.0		ppb v/v	2.43		TO-15	Total/NA
1,1-Dichloroethene	5.9		2.0		ppb v/v	2.43		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	4.3		2.0		ppb v/v	2.43		TO-15	Total/NA
Chlorodifluoromethane	5.3		2.0		ppb v/v	2.43		TO-15	Total/NA
Chloroethane	66		2.0		ppb v/v	2.43		TO-15	Total/NA
cis-1,2-Dichloroethene	12		2.0		ppb v/v	2.43		TO-15	Total/NA
Dichlorodifluoromethane	8.1		2.0		ppb v/v	2.43		TO-15	Total/NA
Trichlorofluoromethane	2.5		2.0		ppb v/v	2.43		TO-15	Total/NA
Vinyl chloride	6.3		4.0		ppb v/v	2.43		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	150		11		ug/m3	2.43		TO-15	Total/NA
1,1-Dichloroethane	160		8.1		ug/m3	2.43		TO-15	Total/NA
1,1-Dichloroethene	23		7.9		ug/m3	2.43		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	30		14		ug/m3	2.43		TO-15	Total/NA
Chlorodifluoromethane	19		7.1		ug/m3	2.43		TO-15	Total/NA
Chloroethane	170		5.3		ug/m3	2.43		TO-15	Total/NA
cis-1,2-Dichloroethene	47		7.9		ug/m3	2.43		TO-15	Total/NA
Dichlorodifluoromethane	40		9.9		ug/m3	2.43		TO-15	Total/NA
Trichlorofluoromethane	14		11		ug/m3	2.43		TO-15	Total/NA
Vinyl chloride	16		10		ug/m3	2.43		TO-15	Total/NA

Client Sample ID: G231221-BZ-005 — Lab Sample ID: 140-34939-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	53		2.0		ppb v/v	1.72		TO-15	Total/NA
1,1-Dichloroethane	190		2.0		ppb v/v	1.72		TO-15	Total/NA
1,1-Dichloroethene	9.1		2.0		ppb v/v	1.72		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	4.9		2.0		ppb v/v	1.72		TO-15	Total/NA
Butane	16		10		ppb v/v	1.72		TO-15	Total/NA
Chlorodifluoromethane	4.9		2.0		ppb v/v	1.72		TO-15	Total/NA
Chloroethane	34		2.0		ppb v/v	1.72		TO-15	Total/NA
Chloroform	5.6		2.0		ppb v/v	1.72		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client Sample ID: G231221-BZ-005 (Continued)

Lab Sample ID: 140-34939-5

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
cis-1,2-Dichloroethene	5.4		2.0		ppb v/v	1.72		TO-15	Total/NA
Dichlorodifluoromethane	10		2.0		ppb v/v	1.72		TO-15	Total/NA
Tetrachloroethene	7.1		2.0		ppb v/v	1.72		TO-15	Total/NA
Trichlorofluoromethane	3.9		2.0		ppb v/v	1.72		TO-15	Total/NA
Vinyl chloride	49		4.0		ppb v/v	1.72		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	290		11		ug/m3	1.72		TO-15	Total/NA
1,1-Dichloroethane	790		8.1		ug/m3	1.72		TO-15	Total/NA
1,1-Dichloroethene	36		7.9		ug/m3	1.72		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	34		14		ug/m3	1.72		TO-15	Total/NA
Butane	37		24		ug/m3	1.72		TO-15	Total/NA
Chlorodifluoromethane	17		7.1		ug/m3	1.72		TO-15	Total/NA
Chloroethane	89		5.3		ug/m3	1.72		TO-15	Total/NA
Chloroform	27		9.8		ug/m3	1.72		TO-15	Total/NA
cis-1,2-Dichloroethene	22		7.9		ug/m3	1.72		TO-15	Total/NA
Dichlorodifluoromethane	50		9.9		ug/m3	1.72		TO-15	Total/NA
Tetrachloroethene	48		14		ug/m3	1.72		TO-15	Total/NA
Trichlorofluoromethane	22		11		ug/m3	1.72		TO-15	Total/NA
Vinyl chloride	130		10		ug/m3	1.72		TO-15	Total/NA

Client Sample ID: G231221-BZ-006

Lab Sample ID: 140-34939-6

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	29		2.0		ppb v/v	1.76		TO-15	Total/NA
1,1-Dichloroethane	32		2.0		ppb v/v	1.76		TO-15	Total/NA
1,1-Dichloroethene	4.1		2.0		ppb v/v	1.76		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	2.7		2.0		ppb v/v	1.76		TO-15	Total/NA
Chlorodifluoromethane	5.8		2.0		ppb v/v	1.76		TO-15	Total/NA
Chloroethane	8.5		2.0		ppb v/v	1.76		TO-15	Total/NA
Chloroform	4.2		2.0		ppb v/v	1.76		TO-15	Total/NA
Dichlorodifluoromethane	16		2.0		ppb v/v	1.76		TO-15	Total/NA
Tetrachloroethene	3.3		2.0		ppb v/v	1.76		TO-15	Total/NA
Trichlorofluoromethane	15		2.0		ppb v/v	1.76		TO-15	Total/NA
Vinyl chloride	11		4.0		ppb v/v	1.76		TO-15	Total/NA

Analyte	Result	Qualifier	RL	MDL	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	160		11		ug/m3	1.76		TO-15	Total/NA
1,1-Dichloroethane	130		8.1		ug/m3	1.76		TO-15	Total/NA
1,1-Dichloroethene	16		7.9		ug/m3	1.76		TO-15	Total/NA
1,2-Dichloro-1,1,2,2-tetrafluoroethane	19		14		ug/m3	1.76		TO-15	Total/NA
Chlorodifluoromethane	21		7.1		ug/m3	1.76		TO-15	Total/NA
Chloroethane	22		5.3		ug/m3	1.76		TO-15	Total/NA
Chloroform	21		9.8		ug/m3	1.76		TO-15	Total/NA
Dichlorodifluoromethane	79		9.9		ug/m3	1.76		TO-15	Total/NA
Tetrachloroethene	22		14		ug/m3	1.76		TO-15	Total/NA
Trichlorofluoromethane	82		11		ug/m3	1.76		TO-15	Total/NA
Vinyl chloride	27		10		ug/m3	1.76		TO-15	Total/NA

This Detection Summary does not include radiochemical test results.

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-34939-1

Client Sample ID: G231221-BZ-001

Lab Sample ID: 140-34939-1

Date Collected: 12/21/23 15:21
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**20**		2.0		ppb v/v			01/05/24 22:50	1
1,1,2,2-Tetrachloroethane	ND		2.0		ppb v/v			01/05/24 22:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0		ppb v/v			01/05/24 22:50	1
1,1,2-Trichloroethane	ND		2.0		ppb v/v			01/05/24 22:50	1
1,1-Dichloroethane	**4.9**		2.0		ppb v/v			01/05/24 22:50	1
1,1-Dichloroethene	**3.8**		2.0		ppb v/v			01/05/24 22:50	1
1,2,4-Trichlorobenzene	ND		10		ppb v/v			01/05/24 22:50	1
1,2,4-Trimethylbenzene	ND		2.0		ppb v/v			01/05/24 22:50	1
1,2-Dibromoethane (EDB)	ND		2.0		ppb v/v			01/05/24 22:50	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**4.3**		2.0		ppb v/v			01/05/24 22:50	1
1,2-Dichlorobenzene	ND		4.0		ppb v/v			01/05/24 22:50	1
1,2-Dichloroethane	ND		2.0		ppb v/v			01/05/24 22:50	1
1,2-Dichloropropane	ND		2.0		ppb v/v			01/05/24 22:50	1
1,3,5-Trimethylbenzene	ND		4.0		ppb v/v			01/05/24 22:50	1
1,3-Butadiene	ND		4.0		ppb v/v			01/05/24 22:50	1
1,3-Dichlorobenzene	ND		2.0		ppb v/v			01/05/24 22:50	1
1,4-Dichlorobenzene	ND		2.0		ppb v/v			01/05/24 22:50	1
2-Butanone (MEK)	ND		10		ppb v/v			01/05/24 22:50	1
2-Hexanone	ND		5.0		ppb v/v			01/05/24 22:50	1
3-Chloropropene	ND		2.0		ppb v/v			01/05/24 22:50	1
4-Methyl-2-pentanone (MIBK)	ND		10		ppb v/v			01/05/24 22:50	1
Acetone	ND		75		ppb v/v			01/05/24 22:50	1
Acetonitrile	ND		10		ppb v/v			01/05/24 22:50	1
Acrolein	ND		10		ppb v/v			01/05/24 22:50	1
Acrylonitrile	ND		20		ppb v/v			01/05/24 22:50	1
Alpha Methyl Styrene	ND		4.0		ppb v/v			01/05/24 22:50	1
Benzene	ND		2.0		ppb v/v			01/05/24 22:50	1
Benzyl chloride	ND		4.0		ppb v/v			01/05/24 22:50	1
Bromodichloromethane	ND		2.0		ppb v/v			01/05/24 22:50	1
Bromoform	ND	*+	2.0		ppb v/v			01/05/24 22:50	1
Bromomethane	ND		2.0		ppb v/v			01/05/24 22:50	1
Butane	**24**		10		ppb v/v			01/05/24 22:50	1
Carbon disulfide	ND		4.0		ppb v/v			01/05/24 22:50	1
Carbon tetrachloride	ND		2.0		ppb v/v			01/05/24 22:50	1
Chlorobenzene	ND		2.0		ppb v/v			01/05/24 22:50	1
Chlorodifluoromethane	**33**		2.0		ppb v/v			01/05/24 22:50	1
Chloroethane	**5.4**		2.0		ppb v/v			01/05/24 22:50	1
Chloroform	**14**		2.0		ppb v/v			01/05/24 22:50	1
Chloromethane	ND		10		ppb v/v			01/05/24 22:50	1
cis-1,2-Dichloroethene	ND		2.0		ppb v/v			01/05/24 22:50	1
cis-1,3-Dichloropropene	ND		4.0		ppb v/v			01/05/24 22:50	1
Cumene	ND		4.0		ppb v/v			01/05/24 22:50	1
Cyclohexane	ND		4.0		ppb v/v			01/05/24 22:50	1
Decane	ND		10		ppb v/v			01/05/24 22:50	1
Dibromochloromethane	ND		2.0		ppb v/v			01/05/24 22:50	1
Dibromomethane	ND		4.0		ppb v/v			01/05/24 22:50	1
Dichlorodifluoromethane	**64**		2.0		ppb v/v			01/05/24 22:50	1
Dodecane	ND		10		ppb v/v			01/05/24 22:50	1

Client Sample ID: G231221-BZ-001

Lab Sample ID: 140-34939-1

Date Collected: 12/21/23 15:21
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		20		ppb v/v			01/05/24 22:50	1
Ethylbenzene	ND		2.0		ppb v/v			01/05/24 22:50	1
Heptane	ND		4.0		ppb v/v			01/05/24 22:50	1
Hexachlorobutadiene	ND		10		ppb v/v			01/05/24 22:50	1
Hexane	ND		4.0		ppb v/v			01/05/24 22:50	1
Methyl tert-butyl ether	ND		10		ppb v/v			01/05/24 22:50	1
Methylene Chloride	ND		10		ppb v/v			01/05/24 22:50	1
m-Xylene & p-Xylene	ND		2.0		ppb v/v			01/05/24 22:50	1
Naphthalene	ND		4.0		ppb v/v			01/05/24 22:50	1
Nonane	ND		4.0		ppb v/v			01/05/24 22:50	1
Octane	ND		4.0		ppb v/v			01/05/24 22:50	1
o-Xylene	ND		2.0		ppb v/v			01/05/24 22:50	1
Pentane	ND		25		ppb v/v			01/05/24 22:50	1
Propylbenzene	ND		4.0		ppb v/v			01/05/24 22:50	1
Styrene	ND		2.0		ppb v/v			01/05/24 22:50	1
Tetrachloroethene	**2.1**		2.0		ppb v/v			01/05/24 22:50	1
Toluene	ND		10		ppb v/v			01/05/24 22:50	1
trans-1,2-Dichloroethene	ND		2.0		ppb v/v			01/05/24 22:50	1
trans-1,3-Dichloropropene	ND		2.0		ppb v/v			01/05/24 22:50	1
Trichloroethene	ND		2.0		ppb v/v			01/05/24 22:50	1
Trichlorofluoromethane	**32**		2.0		ppb v/v			01/05/24 22:50	1
Undecane	ND		10		ppb v/v			01/05/24 22:50	1
Vinyl acetate	ND		10		ppb v/v			01/05/24 22:50	1
Vinyl chloride	**8.9**		4.0		ppb v/v			01/05/24 22:50	1

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**110**		11		ug/m3			01/05/24 22:50	1
1,1,2,2-Tetrachloroethane	ND		14		ug/m3			01/05/24 22:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15		ug/m3			01/05/24 22:50	1
1,1,2-Trichloroethane	ND		11		ug/m3			01/05/24 22:50	1
1,1-Dichloroethane	**20**		8.1		ug/m3			01/05/24 22:50	1
1,1-Dichloroethene	**15**		7.9		ug/m3			01/05/24 22:50	1
1,2,4-Trichlorobenzene	ND		74		ug/m3			01/05/24 22:50	1
1,2,4-Trimethylbenzene	ND		9.8		ug/m3			01/05/24 22:50	1
1,2-Dibromoethane (EDB)	ND		15		ug/m3			01/05/24 22:50	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**30**		14		ug/m3			01/05/24 22:50	1
1,2-Dichlorobenzene	ND		24		ug/m3			01/05/24 22:50	1
1,2-Dichloroethane	ND		8.1		ug/m3			01/05/24 22:50	1
1,2-Dichloropropane	ND		9.2		ug/m3			01/05/24 22:50	1
1,3,5-Trimethylbenzene	ND		20		ug/m3			01/05/24 22:50	1
1,3-Butadiene	ND		8.8		ug/m3			01/05/24 22:50	1
1,3-Dichlorobenzene	ND		12		ug/m3			01/05/24 22:50	1
1,4-Dichlorobenzene	ND		12		ug/m3			01/05/24 22:50	1
2-Butanone (MEK)	ND		29		ug/m3			01/05/24 22:50	1
2-Hexanone	ND		20		ug/m3			01/05/24 22:50	1
3-Chloropropene	ND		6.3		ug/m3			01/05/24 22:50	1
4-Methyl-2-pentanone (MIBK)	ND		41		ug/m3			01/05/24 22:50	1
Acetone	ND		180		ug/m3			01/05/24 22:50	1

Client Sample ID: G231221-BZ-001

Lab Sample ID: 140-34939-1

Date Collected: 12/21/23 15:21
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acetonitrile	ND		17		ug/m3			01/05/24 22:50	1
Acrolein	ND		23		ug/m3			01/05/24 22:50	1
Acrylonitrile	ND		43		ug/m3			01/05/24 22:50	1
Alpha Methyl Styrene	ND		19		ug/m3			01/05/24 22:50	1
Benzene	ND		6.4		ug/m3			01/05/24 22:50	1
Benzyl chloride	ND		21		ug/m3			01/05/24 22:50	1
Bromodichloromethane	ND		13		ug/m3			01/05/24 22:50	1
Bromoform	ND	*+	21		ug/m3			01/05/24 22:50	1
Bromomethane	ND		7.8		ug/m3			01/05/24 22:50	1
Butane	**57**		24		ug/m3			01/05/24 22:50	1
Carbon disulfide	ND		12		ug/m3			01/05/24 22:50	1
Carbon tetrachloride	ND		13		ug/m3			01/05/24 22:50	1
Chlorobenzene	ND		9.2		ug/m3			01/05/24 22:50	1
Chlorodifluoromethane	**120**		7.1		ug/m3			01/05/24 22:50	1
Chloroethane	**14**		5.3		ug/m3			01/05/24 22:50	1
Chloroform	**68**		9.8		ug/m3			01/05/24 22:50	1
Chloromethane	ND		21		ug/m3			01/05/24 22:50	1
cis-1,2-Dichloroethene	ND		7.9		ug/m3			01/05/24 22:50	1
cis-1,3-Dichloropropene	ND		18		ug/m3			01/05/24 22:50	1
Cumene	ND		20		ug/m3			01/05/24 22:50	1
Cyclohexane	ND		14		ug/m3			01/05/24 22:50	1
Decane	ND		58		ug/m3			01/05/24 22:50	1
Dibromochloromethane	ND		17		ug/m3			01/05/24 22:50	1
Dibromomethane	ND		28		ug/m3			01/05/24 22:50	1
Dichlorodifluoromethane	**320**		9.9		ug/m3			01/05/24 22:50	1
Dodecane	ND		70		ug/m3			01/05/24 22:50	1
Ethyl ether	ND		61		ug/m3			01/05/24 22:50	1
Ethylbenzene	ND		8.7		ug/m3			01/05/24 22:50	1
Heptane	ND		16		ug/m3			01/05/24 22:50	1
Hexachlorobutadiene	ND		110		ug/m3			01/05/24 22:50	1
Hexane	ND		14		ug/m3			01/05/24 22:50	1
Methyl tert-butyl ether	ND		36		ug/m3			01/05/24 22:50	1
Methylene Chloride	ND		35		ug/m3			01/05/24 22:50	1
m-Xylene & p-Xylene	ND		8.7		ug/m3			01/05/24 22:50	1
Naphthalene	ND		21		ug/m3			01/05/24 22:50	1
Nonane	ND		21		ug/m3			01/05/24 22:50	1
Octane	ND		19		ug/m3			01/05/24 22:50	1
o-Xylene	ND		8.7		ug/m3			01/05/24 22:50	1
Pentane	ND		74		ug/m3			01/05/24 22:50	1
Propylbenzene	ND		20		ug/m3			01/05/24 22:50	1
Styrene	ND		8.5		ug/m3			01/05/24 22:50	1
Tetrachloroethene	**15**		14		ug/m3			01/05/24 22:50	1
Toluene	ND		38		ug/m3			01/05/24 22:50	1
trans-1,2-Dichloroethene	ND		7.9		ug/m3			01/05/24 22:50	1
trans-1,3-Dichloropropene	ND		9.1		ug/m3			01/05/24 22:50	1
Trichloroethene	ND		11		ug/m3			01/05/24 22:50	1
Trichlorofluoromethane	**180**		11		ug/m3			01/05/24 22:50	1
Undecane	ND		64		ug/m3			01/05/24 22:50	1

Client Sample ID: G231221-BZ-001

Lab Sample ID: 140-34939-1

Date Collected: 12/21/23 15:21
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl acetate	ND		35		ug/m3			01/05/24 22:50	1
Vinyl chloride	**23**		10		ug/m3			01/05/24 22:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*88*		*60 - 140*		*01/05/24 22:50*	*1*

Client Sample ID: G231221-BZ-002

Lab Sample ID: 140-34939-2

Date Collected: 12/21/23 15:29
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**45**		2.0		ppb v/v			01/05/24 23:40	1.97
1,1,2,2-Tetrachloroethane	ND		2.0		ppb v/v			01/05/24 23:40	1.97
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0		ppb v/v			01/05/24 23:40	1.97
1,1,2-Trichloroethane	ND		2.0		ppb v/v			01/05/24 23:40	1.97
1,1-Dichloroethane	**32**		2.0		ppb v/v			01/05/24 23:40	1.97
1,1-Dichloroethene	**16**		2.0		ppb v/v			01/05/24 23:40	1.97
1,2,4-Trichlorobenzene	ND		10		ppb v/v			01/05/24 23:40	1.97
1,2,4-Trimethylbenzene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
1,2-Dibromoethane (EDB)	ND		2.0		ppb v/v			01/05/24 23:40	1.97
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		2.0		ppb v/v			01/05/24 23:40	1.97
1,2-Dichlorobenzene	ND		4.0		ppb v/v			01/05/24 23:40	1.97
1,2-Dichloroethane	ND		2.0		ppb v/v			01/05/24 23:40	1.97
1,2-Dichloropropane	ND		2.0		ppb v/v			01/05/24 23:40	1.97
1,3,5-Trimethylbenzene	ND		4.0		ppb v/v			01/05/24 23:40	1.97
1,3-Butadiene	ND		4.0		ppb v/v			01/05/24 23:40	1.97
1,3-Dichlorobenzene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
1,4-Dichlorobenzene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
2-Butanone (MEK)	ND		10		ppb v/v			01/05/24 23:40	1.97
2-Hexanone	ND		5.0		ppb v/v			01/05/24 23:40	1.97
3-Chloropropene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
4-Methyl-2-pentanone (MIBK)	ND		10		ppb v/v			01/05/24 23:40	1.97
Acetone	ND		75		ppb v/v			01/05/24 23:40	1.97
Acetonitrile	ND		10		ppb v/v			01/05/24 23:40	1.97
Acrolein	ND		10		ppb v/v			01/05/24 23:40	1.97
Acrylonitrile	ND		20		ppb v/v			01/05/24 23:40	1.97
Alpha Methyl Styrene	ND		4.0		ppb v/v			01/05/24 23:40	1.97
Benzene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Benzyl chloride	ND		4.0		ppb v/v			01/05/24 23:40	1.97
Bromodichloromethane	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Bromoform	ND	*+	2.0		ppb v/v			01/05/24 23:40	1.97
Bromomethane	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Butane	ND		10		ppb v/v			01/05/24 23:40	1.97
Carbon disulfide	ND		4.0		ppb v/v			01/05/24 23:40	1.97
Carbon tetrachloride	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Chlorobenzene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Chlorodifluoromethane	ND		2.0		ppb v/v			01/05/24 23:40	1.97

Client Sample ID: G231221-BZ-002

Lab Sample ID: 140-34939-2

Date Collected: 12/21/23 15:29
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Chloroform	**13**		2.0		ppb v/v			01/05/24 23:40	1.97
Chloromethane	ND		10		ppb v/v			01/05/24 23:40	1.97
cis-1,2-Dichloroethene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
cis-1,3-Dichloropropene	ND		4.0		ppb v/v			01/05/24 23:40	1.97
Cumene	ND		4.0		ppb v/v			01/05/24 23:40	1.97
Cyclohexane	ND		4.0		ppb v/v			01/05/24 23:40	1.97
Decane	ND		10		ppb v/v			01/05/24 23:40	1.97
Dibromochloromethane	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Dibromomethane	ND		4.0		ppb v/v			01/05/24 23:40	1.97
Dichlorodifluoromethane	**8.8**		2.0		ppb v/v			01/05/24 23:40	1.97
Dodecane	ND		10		ppb v/v			01/05/24 23:40	1.97
Ethyl ether	ND		20		ppb v/v			01/05/24 23:40	1.97
Ethylbenzene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Heptane	ND		4.0		ppb v/v			01/05/24 23:40	1.97
Hexachlorobutadiene	ND		10		ppb v/v			01/05/24 23:40	1.97
Hexane	ND		4.0		ppb v/v			01/05/24 23:40	1.97
Methyl tert-butyl ether	ND		10		ppb v/v			01/05/24 23:40	1.97
Methylene Chloride	ND		10		ppb v/v			01/05/24 23:40	1.97
m-Xylene & p-Xylene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Naphthalene	ND		4.0		ppb v/v			01/05/24 23:40	1.97
Nonane	ND		4.0		ppb v/v			01/05/24 23:40	1.97
Octane	ND		4.0		ppb v/v			01/05/24 23:40	1.97
o-Xylene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Pentane	ND		25		ppb v/v			01/05/24 23:40	1.97
Propylbenzene	ND		4.0		ppb v/v			01/05/24 23:40	1.97
Styrene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Tetrachloroethene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Toluene	ND		10		ppb v/v			01/05/24 23:40	1.97
trans-1,2-Dichloroethene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
trans-1,3-Dichloropropene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Trichloroethene	ND		2.0		ppb v/v			01/05/24 23:40	1.97
Trichlorofluoromethane	**2.5**		2.0		ppb v/v			01/05/24 23:40	1.97
Undecane	ND		10		ppb v/v			01/05/24 23:40	1.97
Vinyl acetate	ND		10		ppb v/v			01/05/24 23:40	1.97
Vinyl chloride	**46**		4.0		ppb v/v			01/05/24 23:40	1.97

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**240**		11		ug/m3			01/05/24 23:40	1.97
1,1,2,2-Tetrachloroethane	ND		14		ug/m3			01/05/24 23:40	1.97
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15		ug/m3			01/05/24 23:40	1.97
1,1,2-Trichloroethane	ND		11		ug/m3			01/05/24 23:40	1.97
1,1-Dichloroethane	**130**		8.1		ug/m3			01/05/24 23:40	1.97
1,1-Dichloroethene	**62**		7.9		ug/m3			01/05/24 23:40	1.97
1,2,4-Trichlorobenzene	ND		74		ug/m3			01/05/24 23:40	1.97
1,2,4-Trimethylbenzene	ND		9.8		ug/m3			01/05/24 23:40	1.97
1,2-Dibromoethane (EDB)	ND		15		ug/m3			01/05/24 23:40	1.97
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		14		ug/m3			01/05/24 23:40	1.97
1,2-Dichlorobenzene	ND		24		ug/m3			01/05/24 23:40	1.97

Client Sample ID: G231221-BZ-002

Lab Sample ID: 140-34939-2

Date Collected: 12/21/23 15:29
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,2-Dichloroethane	ND		8.1		ug/m3			01/05/24 23:40	1.97
1,2-Dichloropropane	ND		9.2		ug/m3			01/05/24 23:40	1.97
1,3,5-Trimethylbenzene	ND		20		ug/m3			01/05/24 23:40	1.97
1,3-Butadiene	ND		8.8		ug/m3			01/05/24 23:40	1.97
1,3-Dichlorobenzene	ND		12		ug/m3			01/05/24 23:40	1.97
1,4-Dichlorobenzene	ND		12		ug/m3			01/05/24 23:40	1.97
2-Butanone (MEK)	ND		29		ug/m3			01/05/24 23:40	1.97
2-Hexanone	ND		20		ug/m3			01/05/24 23:40	1.97
3-Chloropropene	ND		6.3		ug/m3			01/05/24 23:40	1.97
4-Methyl-2-pentanone (MIBK)	ND		41		ug/m3			01/05/24 23:40	1.97
Acetone	ND		180		ug/m3			01/05/24 23:40	1.97
Acetonitrile	ND		17		ug/m3			01/05/24 23:40	1.97
Acrolein	ND		23		ug/m3			01/05/24 23:40	1.97
Acrylonitrile	ND		43		ug/m3			01/05/24 23:40	1.97
Alpha Methyl Styrene	ND		19		ug/m3			01/05/24 23:40	1.97
Benzene	ND		6.4		ug/m3			01/05/24 23:40	1.97
Benzyl chloride	ND		21		ug/m3			01/05/24 23:40	1.97
Bromodichloromethane	ND		13		ug/m3			01/05/24 23:40	1.97
Bromoform	ND	*+	21		ug/m3			01/05/24 23:40	1.97
Bromomethane	ND		7.8		ug/m3			01/05/24 23:40	1.97
Butane	ND		24		ug/m3			01/05/24 23:40	1.97
Carbon disulfide	ND		12		ug/m3			01/05/24 23:40	1.97
Carbon tetrachloride	ND		13		ug/m3			01/05/24 23:40	1.97
Chlorobenzene	ND		9.2		ug/m3			01/05/24 23:40	1.97
Chlorodifluoromethane	ND		7.1		ug/m3			01/05/24 23:40	1.97
Chloroethane	ND		5.3		ug/m3			01/05/24 23:40	1.97
Chloroform	**64**		9.8		ug/m3			01/05/24 23:40	1.97
Chloromethane	ND		21		ug/m3			01/05/24 23:40	1.97
cis-1,2-Dichloroethene	ND		7.9		ug/m3			01/05/24 23:40	1.97
cis-1,3-Dichloropropene	ND		18		ug/m3			01/05/24 23:40	1.97
Cumene	ND		20		ug/m3			01/05/24 23:40	1.97
Cyclohexane	ND		14		ug/m3			01/05/24 23:40	1.97
Decane	ND		58		ug/m3			01/05/24 23:40	1.97
Dibromochloromethane	ND		17		ug/m3			01/05/24 23:40	1.97
Dibromomethane	ND		28		ug/m3			01/05/24 23:40	1.97
Dichlorodifluoromethane	**44**		9.9		ug/m3			01/05/24 23:40	1.97
Dodecane	ND		70		ug/m3			01/05/24 23:40	1.97
Ethyl ether	ND		61		ug/m3			01/05/24 23:40	1.97
Ethylbenzene	ND		8.7		ug/m3			01/05/24 23:40	1.97
Heptane	ND		16		ug/m3			01/05/24 23:40	1.97
Hexachlorobutadiene	ND		110		ug/m3			01/05/24 23:40	1.97
Hexane	ND		14		ug/m3			01/05/24 23:40	1.97
Methyl tert-butyl ether	ND		36		ug/m3			01/05/24 23:40	1.97
Methylene Chloride	ND		35		ug/m3			01/05/24 23:40	1.97
m-Xylene & p-Xylene	ND		8.7		ug/m3			01/05/24 23:40	1.97
Naphthalene	ND		21		ug/m3			01/05/24 23:40	1.97
Nonane	ND		21		ug/m3			01/05/24 23:40	1.97
Octane	ND		19		ug/m3			01/05/24 23:40	1.97

Client Sample ID: G231221-BZ-002

Lab Sample ID: 140-34939-2

Date Collected: 12/21/23 15:29
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
o-Xylene	ND		8.7		ug/m3			01/05/24 23:40	1.97
Pentane	ND		74		ug/m3			01/05/24 23:40	1.97
Propylbenzene	ND		20		ug/m3			01/05/24 23:40	1.97
Styrene	ND		8.5		ug/m3			01/05/24 23:40	1.97
Tetrachloroethene	ND		14		ug/m3			01/05/24 23:40	1.97
Toluene	ND		38		ug/m3			01/05/24 23:40	1.97
trans-1,2-Dichloroethene	ND		7.9		ug/m3			01/05/24 23:40	1.97
trans-1,3-Dichloropropene	ND		9.1		ug/m3			01/05/24 23:40	1.97
Trichloroethene	ND		11		ug/m3			01/05/24 23:40	1.97
Trichlorofluoromethane	**14**		11		ug/m3			01/05/24 23:40	1.97
Undecane	ND		64		ug/m3			01/05/24 23:40	1.97
Vinyl acetate	ND		35		ug/m3			01/05/24 23:40	1.97
Vinyl chloride	**120**		10		ug/m3			01/05/24 23:40	1.97

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*60 - 140*		*01/05/24 23:40*	*1.97*

Client Sample ID: G231221-BZ-003

Lab Sample ID: 140-34939-3

Date Collected: 12/21/23 15:31
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**130**		2.0		ppb v/v			01/06/24 00:29	1
1,1,2,2-Tetrachloroethane	ND		2.0		ppb v/v			01/06/24 00:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0		ppb v/v			01/06/24 00:29	1
1,1,2-Trichloroethane	ND		2.0		ppb v/v			01/06/24 00:29	1
1,1-Dichloroethane	**80**		2.0		ppb v/v			01/06/24 00:29	1
1,1-Dichloroethene	**29**		2.0		ppb v/v			01/06/24 00:29	1
1,2,4-Trichlorobenzene	ND		10		ppb v/v			01/06/24 00:29	1
1,2,4-Trimethylbenzene	ND		2.0		ppb v/v			01/06/24 00:29	1
1,2-Dibromoethane (EDB)	ND		2.0		ppb v/v			01/06/24 00:29	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**3.1**		2.0		ppb v/v			01/06/24 00:29	1
1,2-Dichlorobenzene	ND		4.0		ppb v/v			01/06/24 00:29	1
1,2-Dichloroethane	ND		2.0		ppb v/v			01/06/24 00:29	1
1,2-Dichloropropane	ND		2.0		ppb v/v			01/06/24 00:29	1
1,3,5-Trimethylbenzene	ND		4.0		ppb v/v			01/06/24 00:29	1
1,3-Butadiene	ND		4.0		ppb v/v			01/06/24 00:29	1
1,3-Dichlorobenzene	ND		2.0		ppb v/v			01/06/24 00:29	1
1,4-Dichlorobenzene	ND		2.0		ppb v/v			01/06/24 00:29	1
2-Butanone (MEK)	ND		10		ppb v/v			01/06/24 00:29	1
2-Hexanone	ND		5.0		ppb v/v			01/06/24 00:29	1
3-Chloropropene	ND		2.0		ppb v/v			01/06/24 00:29	1
4-Methyl-2-pentanone (MIBK)	ND		10		ppb v/v			01/06/24 00:29	1
Acetone	ND		75		ppb v/v			01/06/24 00:29	1
Acetonitrile	ND		10		ppb v/v			01/06/24 00:29	1
Acrolein	ND		10		ppb v/v			01/06/24 00:29	1

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-34939-1

Client Sample ID: G231221-BZ-003
Date Collected: 12/21/23 15:31
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Lab Sample ID: 140-34939-3
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrylonitrile	ND		20		ppb v/v			01/06/24 00:29	1
Alpha Methyl Styrene	ND		4.0		ppb v/v			01/06/24 00:29	1
Benzene	ND		2.0		ppb v/v			01/06/24 00:29	1
Benzyl chloride	ND		4.0		ppb v/v			01/06/24 00:29	1
Bromodichloromethane	ND		2.0		ppb v/v			01/06/24 00:29	1
Bromoform	ND	*+	2.0		ppb v/v			01/06/24 00:29	1
Bromomethane	ND		2.0		ppb v/v			01/06/24 00:29	1
Butane	ND		10		ppb v/v			01/06/24 00:29	1
Carbon disulfide	ND		4.0		ppb v/v			01/06/24 00:29	1
Carbon tetrachloride	ND		2.0		ppb v/v			01/06/24 00:29	1
Chlorobenzene	ND		2.0		ppb v/v			01/06/24 00:29	1
Chlorodifluoromethane	ND		2.0		ppb v/v			01/06/24 00:29	1
Chloroethane	ND		2.0		ppb v/v			01/06/24 00:29	1
Chloroform	**8.2**		2.0		ppb v/v			01/06/24 00:29	1
Chloromethane	ND		10		ppb v/v			01/06/24 00:29	1
cis-1,2-Dichloroethene	ND		2.0		ppb v/v			01/06/24 00:29	1
cis-1,3-Dichloropropene	ND		4.0		ppb v/v			01/06/24 00:29	1
Cumene	ND		4.0		ppb v/v			01/06/24 00:29	1
Cyclohexane	ND		4.0		ppb v/v			01/06/24 00:29	1
Decane	ND		10		ppb v/v			01/06/24 00:29	1
Dibromochloromethane	ND		2.0		ppb v/v			01/06/24 00:29	1
Dibromomethane	ND		4.0		ppb v/v			01/06/24 00:29	1
Dichlorodifluoromethane	**11**		2.0		ppb v/v			01/06/24 00:29	1
Dodecane	ND		10		ppb v/v			01/06/24 00:29	1
Ethyl ether	ND		20		ppb v/v			01/06/24 00:29	1
Ethylbenzene	ND		2.0		ppb v/v			01/06/24 00:29	1
Heptane	ND		4.0		ppb v/v			01/06/24 00:29	1
Hexachlorobutadiene	ND		10		ppb v/v			01/06/24 00:29	1
Hexane	ND		4.0		ppb v/v			01/06/24 00:29	1
Methyl tert-butyl ether	ND		10		ppb v/v			01/06/24 00:29	1
Methylene Chloride	ND		10		ppb v/v			01/06/24 00:29	1
m-Xylene & p-Xylene	ND		2.0		ppb v/v			01/06/24 00:29	1
Naphthalene	ND		4.0		ppb v/v			01/06/24 00:29	1
Nonane	ND		4.0		ppb v/v			01/06/24 00:29	1
Octane	ND		4.0		ppb v/v			01/06/24 00:29	1
o-Xylene	ND		2.0		ppb v/v			01/06/24 00:29	1
Pentane	ND		25		ppb v/v			01/06/24 00:29	1
Propylbenzene	ND		4.0		ppb v/v			01/06/24 00:29	1
Styrene	ND		2.0		ppb v/v			01/06/24 00:29	1
Tetrachloroethene	**6.3**		2.0		ppb v/v			01/06/24 00:29	1
Toluene	ND		10		ppb v/v			01/06/24 00:29	1
trans-1,2-Dichloroethene	ND		2.0		ppb v/v			01/06/24 00:29	1
trans-1,3-Dichloropropene	ND		2.0		ppb v/v			01/06/24 00:29	1
Trichloroethene	ND		2.0		ppb v/v			01/06/24 00:29	1
Trichlorofluoromethane	**2.6**		2.0		ppb v/v			01/06/24 00:29	1
Undecane	ND		10		ppb v/v			01/06/24 00:29	1
Vinyl acetate	ND		10		ppb v/v			01/06/24 00:29	1
Vinyl chloride	ND		4.0		ppb v/v			01/06/24 00:29	1

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-34939-1

Client Sample ID: G231221-BZ-003

Date Collected: 12/21/23 15:31
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Lab Sample ID: 140-34939-3

Matrix: Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**730**		11		ug/m3			01/06/24 00:29	1
1,1,2,2-Tetrachloroethane	ND		14		ug/m3			01/06/24 00:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15		ug/m3			01/06/24 00:29	1
1,1,2-Trichloroethane	ND		11		ug/m3			01/06/24 00:29	1
1,1-Dichloroethane	**320**		8.1		ug/m3			01/06/24 00:29	1
1,1-Dichloroethene	**120**		7.9		ug/m3			01/06/24 00:29	1
1,2,4-Trichlorobenzene	ND		74		ug/m3			01/06/24 00:29	1
1,2,4-Trimethylbenzene	ND		9.8		ug/m3			01/06/24 00:29	1
1,2-Dibromoethane (EDB)	ND		15		ug/m3			01/06/24 00:29	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**21**		14		ug/m3			01/06/24 00:29	1
1,2-Dichlorobenzene	ND		24		ug/m3			01/06/24 00:29	1
1,2-Dichloroethane	ND		8.1		ug/m3			01/06/24 00:29	1
1,2-Dichloropropane	ND		9.2		ug/m3			01/06/24 00:29	1
1,3,5-Trimethylbenzene	ND		20		ug/m3			01/06/24 00:29	1
1,3-Butadiene	ND		8.8		ug/m3			01/06/24 00:29	1
1,3-Dichlorobenzene	ND		12		ug/m3			01/06/24 00:29	1
1,4-Dichlorobenzene	ND		12		ug/m3			01/06/24 00:29	1
2-Butanone (MEK)	ND		29		ug/m3			01/06/24 00:29	1
2-Hexanone	ND		20		ug/m3			01/06/24 00:29	1
3-Chloropropene	ND		6.3		ug/m3			01/06/24 00:29	1
4-Methyl-2-pentanone (MIBK)	ND		41		ug/m3			01/06/24 00:29	1
Acetone	ND		180		ug/m3			01/06/24 00:29	1
Acetonitrile	ND		17		ug/m3			01/06/24 00:29	1
Acrolein	ND		23		ug/m3			01/06/24 00:29	1
Acrylonitrile	ND		43		ug/m3			01/06/24 00:29	1
Alpha Methyl Styrene	ND		19		ug/m3			01/06/24 00:29	1
Benzene	ND		6.4		ug/m3			01/06/24 00:29	1
Benzyl chloride	ND		21		ug/m3			01/06/24 00:29	1
Bromodichloromethane	ND		13		ug/m3			01/06/24 00:29	1
Bromoform	ND	*+	21		ug/m3			01/06/24 00:29	1
Bromomethane	ND		7.8		ug/m3			01/06/24 00:29	1
Butane	ND		24		ug/m3			01/06/24 00:29	1
Carbon disulfide	ND		12		ug/m3			01/06/24 00:29	1
Carbon tetrachloride	ND		13		ug/m3			01/06/24 00:29	1
Chlorobenzene	ND		9.2		ug/m3			01/06/24 00:29	1
Chlorodifluoromethane	ND		7.1		ug/m3			01/06/24 00:29	1
Chloroethane	ND		5.3		ug/m3			01/06/24 00:29	1
Chloroform	**40**		9.8		ug/m3			01/06/24 00:29	1
Chloromethane	ND		21		ug/m3			01/06/24 00:29	1
cis-1,2-Dichloroethene	ND		7.9		ug/m3			01/06/24 00:29	1
cis-1,3-Dichloropropene	ND		18		ug/m3			01/06/24 00:29	1
Cumene	ND		20		ug/m3			01/06/24 00:29	1
Cyclohexane	ND		14		ug/m3			01/06/24 00:29	1
Decane	ND		58		ug/m3			01/06/24 00:29	1
Dibromochloromethane	ND		17		ug/m3			01/06/24 00:29	1
Dibromomethane	ND		28		ug/m3			01/06/24 00:29	1
Dichlorodifluoromethane	**53**		9.9		ug/m3			01/06/24 00:29	1
Dodecane	ND		70		ug/m3			01/06/24 00:29	1
Ethyl ether	ND		61		ug/m3			01/06/24 00:29	1

Client Sample ID: G231221-BZ-003

Lab Sample ID: 140-34939-3

Date Collected: 12/21/23 15:31
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethylbenzene	ND		8.7		ug/m3			01/06/24 00:29	1
Heptane	ND		16		ug/m3			01/06/24 00:29	1
Hexachlorobutadiene	ND		110		ug/m3			01/06/24 00:29	1
Hexane	ND		14		ug/m3			01/06/24 00:29	1
Methyl tert-butyl ether	ND		36		ug/m3			01/06/24 00:29	1
Methylene Chloride	ND		35		ug/m3			01/06/24 00:29	1
m-Xylene & p-Xylene	ND		8.7		ug/m3			01/06/24 00:29	1
Naphthalene	ND		21		ug/m3			01/06/24 00:29	1
Nonane	ND		21		ug/m3			01/06/24 00:29	1
Octane	ND		19		ug/m3			01/06/24 00:29	1
o-Xylene	ND		8.7		ug/m3			01/06/24 00:29	1
Pentane	ND		74		ug/m3			01/06/24 00:29	1
Propylbenzene	ND		20		ug/m3			01/06/24 00:29	1
Styrene	ND		8.5		ug/m3			01/06/24 00:29	1
Tetrachloroethene	**43**		14		ug/m3			01/06/24 00:29	1
Toluene	ND		38		ug/m3			01/06/24 00:29	1
trans-1,2-Dichloroethene	ND		7.9		ug/m3			01/06/24 00:29	1
trans-1,3-Dichloropropene	ND		9.1		ug/m3			01/06/24 00:29	1
Trichloroethene	ND		11		ug/m3			01/06/24 00:29	1
Trichlorofluoromethane	**14**		11		ug/m3			01/06/24 00:29	1
Undecane	ND		64		ug/m3			01/06/24 00:29	1
Vinyl acetate	ND		35		ug/m3			01/06/24 00:29	1
Vinyl chloride	ND		10		ug/m3			01/06/24 00:29	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*60 - 140*		*01/06/24 00:29*	*1*

Client Sample ID: G231221-BZ-004

Lab Sample ID: 140-34939-4

Date Collected: 12/21/23 15:39
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**27**		2.0		ppb v/v			01/06/24 01:17	2.43
1,1,2,2-Tetrachloroethane	ND		2.0		ppb v/v			01/06/24 01:17	2.43
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0		ppb v/v			01/06/24 01:17	2.43
1,1,2-Trichloroethane	ND		2.0		ppb v/v			01/06/24 01:17	2.43
1,1-Dichloroethane	**40**		2.0		ppb v/v			01/06/24 01:17	2.43
1,1-Dichloroethene	**5.9**		2.0		ppb v/v			01/06/24 01:17	2.43
1,2,4-Trichlorobenzene	ND		10		ppb v/v			01/06/24 01:17	2.43
1,2,4-Trimethylbenzene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
1,2-Dibromoethane (EDB)	ND		2.0		ppb v/v			01/06/24 01:17	2.43
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**4.3**		2.0		ppb v/v			01/06/24 01:17	2.43
1,2-Dichlorobenzene	ND		4.0		ppb v/v			01/06/24 01:17	2.43
1,2-Dichloroethane	ND		2.0		ppb v/v			01/06/24 01:17	2.43
1,2-Dichloropropane	ND		2.0		ppb v/v			01/06/24 01:17	2.43
1,3,5-Trimethylbenzene	ND		4.0		ppb v/v			01/06/24 01:17	2.43

Client Sample ID: G231221-BZ-004
Date Collected: 12/21/23 15:39
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Lab Sample ID: 140-34939-4
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Butadiene	ND		4.0		ppb v/v			01/06/24 01:17	2.43
1,3-Dichlorobenzene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
1,4-Dichlorobenzene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
2-Butanone (MEK)	ND		10		ppb v/v			01/06/24 01:17	2.43
2-Hexanone	ND		5.0		ppb v/v			01/06/24 01:17	2.43
3-Chloropropene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
4-Methyl-2-pentanone (MIBK)	ND		10		ppb v/v			01/06/24 01:17	2.43
Acetone	ND		75		ppb v/v			01/06/24 01:17	2.43
Acetonitrile	ND		10		ppb v/v			01/06/24 01:17	2.43
Acrolein	ND		10		ppb v/v			01/06/24 01:17	2.43
Acrylonitrile	ND		20		ppb v/v			01/06/24 01:17	2.43
Alpha Methyl Styrene	ND		4.0		ppb v/v			01/06/24 01:17	2.43
Benzene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Benzyl chloride	ND		4.0		ppb v/v			01/06/24 01:17	2.43
Bromodichloromethane	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Bromoform	ND	*+	2.0		ppb v/v			01/06/24 01:17	2.43
Bromomethane	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Butane	ND		10		ppb v/v			01/06/24 01:17	2.43
Carbon disulfide	ND		4.0		ppb v/v			01/06/24 01:17	2.43
Carbon tetrachloride	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Chlorobenzene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Chlorodifluoromethane	**5.3**		2.0		ppb v/v			01/06/24 01:17	2.43
Chloroethane	**66**		2.0		ppb v/v			01/06/24 01:17	2.43
Chloroform	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Chloromethane	ND		10		ppb v/v			01/06/24 01:17	2.43
cis-1,2-Dichloroethene	**12**		2.0		ppb v/v			01/06/24 01:17	2.43
cis-1,3-Dichloropropene	ND		4.0		ppb v/v			01/06/24 01:17	2.43
Cumene	ND		4.0		ppb v/v			01/06/24 01:17	2.43
Cyclohexane	ND		4.0		ppb v/v			01/06/24 01:17	2.43
Decane	ND		10		ppb v/v			01/06/24 01:17	2.43
Dibromochloromethane	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Dibromomethane	ND		4.0		ppb v/v			01/06/24 01:17	2.43
Dichlorodifluoromethane	**8.1**		2.0		ppb v/v			01/06/24 01:17	2.43
Dodecane	ND		10		ppb v/v			01/06/24 01:17	2.43
Ethyl ether	ND		20		ppb v/v			01/06/24 01:17	2.43
Ethylbenzene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Heptane	ND		4.0		ppb v/v			01/06/24 01:17	2.43
Hexachlorobutadiene	ND		10		ppb v/v			01/06/24 01:17	2.43
Hexane	ND		4.0		ppb v/v			01/06/24 01:17	2.43
Methyl tert-butyl ether	ND		10		ppb v/v			01/06/24 01:17	2.43
Methylene Chloride	ND		10		ppb v/v			01/06/24 01:17	2.43
m-Xylene & p-Xylene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Naphthalene	ND		4.0		ppb v/v			01/06/24 01:17	2.43
Nonane	ND		4.0		ppb v/v			01/06/24 01:17	2.43
Octane	ND		4.0		ppb v/v			01/06/24 01:17	2.43
o-Xylene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Pentane	ND		25		ppb v/v			01/06/24 01:17	2.43
Propylbenzene	ND		4.0		ppb v/v			01/06/24 01:17	2.43

Client Sample ID: G231221-BZ-004
Date Collected: 12/21/23 15:39
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Lab Sample ID: 140-34939-4
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Tetrachloroethene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Toluene	ND		10		ppb v/v			01/06/24 01:17	2.43
trans-1,2-Dichloroethene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
trans-1,3-Dichloropropene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Trichloroethene	ND		2.0		ppb v/v			01/06/24 01:17	2.43
Trichlorofluoromethane	**2.5**		2.0		ppb v/v			01/06/24 01:17	2.43
Undecane	ND		10		ppb v/v			01/06/24 01:17	2.43
Vinyl acetate	ND		10		ppb v/v			01/06/24 01:17	2.43
Vinyl chloride	**6.3**		4.0		ppb v/v			01/06/24 01:17	2.43

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**150**		11		ug/m3			01/06/24 01:17	2.43
1,1,2,2-Tetrachloroethane	ND		14		ug/m3			01/06/24 01:17	2.43
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15		ug/m3			01/06/24 01:17	2.43
1,1,2-Trichloroethane	ND		11		ug/m3			01/06/24 01:17	2.43
1,1-Dichloroethane	**160**		8.1		ug/m3			01/06/24 01:17	2.43
1,1-Dichloroethene	**23**		7.9		ug/m3			01/06/24 01:17	2.43
1,2,4-Trichlorobenzene	ND		74		ug/m3			01/06/24 01:17	2.43
1,2,4-Trimethylbenzene	ND		9.8		ug/m3			01/06/24 01:17	2.43
1,2-Dibromoethane (EDB)	ND		15		ug/m3			01/06/24 01:17	2.43
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**30**		14		ug/m3			01/06/24 01:17	2.43
1,2-Dichlorobenzene	ND		24		ug/m3			01/06/24 01:17	2.43
1,2-Dichloroethane	ND		8.1		ug/m3			01/06/24 01:17	2.43
1,2-Dichloropropane	ND		9.2		ug/m3			01/06/24 01:17	2.43
1,3,5-Trimethylbenzene	ND		20		ug/m3			01/06/24 01:17	2.43
1,3-Butadiene	ND		8.8		ug/m3			01/06/24 01:17	2.43
1,3-Dichlorobenzene	ND		12		ug/m3			01/06/24 01:17	2.43
1,4-Dichlorobenzene	ND		12		ug/m3			01/06/24 01:17	2.43
2-Butanone (MEK)	ND		29		ug/m3			01/06/24 01:17	2.43
2-Hexanone	ND		20		ug/m3			01/06/24 01:17	2.43
3-Chloropropene	ND		6.3		ug/m3			01/06/24 01:17	2.43
4-Methyl-2-pentanone (MIBK)	ND		41		ug/m3			01/06/24 01:17	2.43
Acetone	ND		180		ug/m3			01/06/24 01:17	2.43
Acetonitrile	ND		17		ug/m3			01/06/24 01:17	2.43
Acrolein	ND		23		ug/m3			01/06/24 01:17	2.43
Acrylonitrile	ND		43		ug/m3			01/06/24 01:17	2.43
Alpha Methyl Styrene	ND		19		ug/m3			01/06/24 01:17	2.43
Benzene	ND		6.4		ug/m3			01/06/24 01:17	2.43
Benzyl chloride	ND		21		ug/m3			01/06/24 01:17	2.43
Bromodichloromethane	ND		13		ug/m3			01/06/24 01:17	2.43
Bromoform	ND	*+	21		ug/m3			01/06/24 01:17	2.43
Bromomethane	ND		7.8		ug/m3			01/06/24 01:17	2.43
Butane	ND		24		ug/m3			01/06/24 01:17	2.43
Carbon disulfide	ND		12		ug/m3			01/06/24 01:17	2.43
Carbon tetrachloride	ND		13		ug/m3			01/06/24 01:17	2.43
Chlorobenzene	ND		9.2		ug/m3			01/06/24 01:17	2.43
Chlorodifluoromethane	**19**		7.1		ug/m3			01/06/24 01:17	2.43

Client Sample ID: G231221-BZ-004

Lab Sample ID: 140-34939-4

Date Collected: 12/21/23 15:39
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Chloroethane	**170**		5.3		ug/m3			01/06/24 01:17	2.43
Chloroform	ND		9.8		ug/m3			01/06/24 01:17	2.43
Chloromethane	ND		21		ug/m3			01/06/24 01:17	2.43
cis-1,2-Dichloroethene	**47**		7.9		ug/m3			01/06/24 01:17	2.43
cis-1,3-Dichloropropene	ND		18		ug/m3			01/06/24 01:17	2.43
Cumene	ND		20		ug/m3			01/06/24 01:17	2.43
Cyclohexane	ND		14		ug/m3			01/06/24 01:17	2.43
Decane	ND		58		ug/m3			01/06/24 01:17	2.43
Dibromochloromethane	ND		17		ug/m3			01/06/24 01:17	2.43
Dibromomethane	ND		28		ug/m3			01/06/24 01:17	2.43
Dichlorodifluoromethane	**40**		9.9		ug/m3			01/06/24 01:17	2.43
Dodecane	ND		70		ug/m3			01/06/24 01:17	2.43
Ethyl ether	ND		61		ug/m3			01/06/24 01:17	2.43
Ethylbenzene	ND		8.7		ug/m3			01/06/24 01:17	2.43
Heptane	ND		16		ug/m3			01/06/24 01:17	2.43
Hexachlorobutadiene	ND		110		ug/m3			01/06/24 01:17	2.43
Hexane	ND		14		ug/m3			01/06/24 01:17	2.43
Methyl tert-butyl ether	ND		36		ug/m3			01/06/24 01:17	2.43
Methylene Chloride	ND		35		ug/m3			01/06/24 01:17	2.43
m-Xylene & p-Xylene	ND		8.7		ug/m3			01/06/24 01:17	2.43
Naphthalene	ND		21		ug/m3			01/06/24 01:17	2.43
Nonane	ND		21		ug/m3			01/06/24 01:17	2.43
Octane	ND		19		ug/m3			01/06/24 01:17	2.43
o-Xylene	ND		8.7		ug/m3			01/06/24 01:17	2.43
Pentane	ND		74		ug/m3			01/06/24 01:17	2.43
Propylbenzene	ND		20		ug/m3			01/06/24 01:17	2.43
Styrene	ND		8.5		ug/m3			01/06/24 01:17	2.43
Tetrachloroethene	ND		14		ug/m3			01/06/24 01:17	2.43
Toluene	ND		38		ug/m3			01/06/24 01:17	2.43
trans-1,2-Dichloroethene	ND		7.9		ug/m3			01/06/24 01:17	2.43
trans-1,3-Dichloropropene	ND		9.1		ug/m3			01/06/24 01:17	2.43
Trichloroethene	ND		11		ug/m3			01/06/24 01:17	2.43
Trichlorofluoromethane	**14**		11		ug/m3			01/06/24 01:17	2.43
Undecane	ND		64		ug/m3			01/06/24 01:17	2.43
Vinyl acetate	ND		35		ug/m3			01/06/24 01:17	2.43
Vinyl chloride	**16**		10		ug/m3			01/06/24 01:17	2.43

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*83*		*60 - 140*		*01/06/24 01:17*	*2.43*

Client Sample ID: G231221-BZ-005

Lab Sample ID: 140-34939-5

Date Collected: 12/21/23 15:46
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**53**		2.0		ppb v/v			01/06/24 02:08	1.72
1,1,2,2-Tetrachloroethane	ND		2.0		ppb v/v			01/06/24 02:08	1.72

Client Sample ID: G231221-BZ-005
Date Collected: 12/21/23 15:46
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Lab Sample ID: 140-34939-5
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0		ppb v/v			01/06/24 02:08	1.72
1,1,2-Trichloroethane	ND		2.0		ppb v/v			01/06/24 02:08	1.72
1,1-Dichloroethane	**190**		2.0		ppb v/v			01/06/24 02:08	1.72
1,1-Dichloroethene	**9.1**		2.0		ppb v/v			01/06/24 02:08	1.72
1,2,4-Trichlorobenzene	ND		10		ppb v/v			01/06/24 02:08	1.72
1,2,4-Trimethylbenzene	ND		2.0		ppb v/v			01/06/24 02:08	1.72
1,2-Dibromoethane (EDB)	ND		2.0		ppb v/v			01/06/24 02:08	1.72
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**4.9**		2.0		ppb v/v			01/06/24 02:08	1.72
1,2-Dichlorobenzene	ND		4.0		ppb v/v			01/06/24 02:08	1.72
1,2-Dichloroethane	ND		2.0		ppb v/v			01/06/24 02:08	1.72
1,2-Dichloropropane	ND		2.0		ppb v/v			01/06/24 02:08	1.72
1,3,5-Trimethylbenzene	ND		4.0		ppb v/v			01/06/24 02:08	1.72
1,3-Butadiene	ND		4.0		ppb v/v			01/06/24 02:08	1.72
1,3-Dichlorobenzene	ND		2.0		ppb v/v			01/06/24 02:08	1.72
1,4-Dichlorobenzene	ND		2.0		ppb v/v			01/06/24 02:08	1.72
2-Butanone (MEK)	ND		10		ppb v/v			01/06/24 02:08	1.72
2-Hexanone	ND		5.0		ppb v/v			01/06/24 02:08	1.72
3-Chloropropene	ND		2.0		ppb v/v			01/06/24 02:08	1.72
4-Methyl-2-pentanone (MIBK)	ND		10		ppb v/v			01/06/24 02:08	1.72
Acetone	ND		75		ppb v/v			01/06/24 02:08	1.72
Acetonitrile	ND		10		ppb v/v			01/06/24 02:08	1.72
Acrolein	ND		10		ppb v/v			01/06/24 02:08	1.72
Acrylonitrile	ND		20		ppb v/v			01/06/24 02:08	1.72
Alpha Methyl Styrene	ND		4.0		ppb v/v			01/06/24 02:08	1.72
Benzene	ND		2.0		ppb v/v			01/06/24 02:08	1.72
Benzyl chloride	ND		4.0		ppb v/v			01/06/24 02:08	1.72
Bromodichloromethane	ND		2.0		ppb v/v			01/06/24 02:08	1.72
Bromoform	ND	*+	2.0		ppb v/v			01/06/24 02:08	1.72
Bromomethane	ND		2.0		ppb v/v			01/06/24 02:08	1.72
Butane	**16**		10		ppb v/v			01/06/24 02:08	1.72
Carbon disulfide	ND		4.0		ppb v/v			01/06/24 02:08	1.72
Carbon tetrachloride	ND		2.0		ppb v/v			01/06/24 02:08	1.72
Chlorobenzene	ND		2.0		ppb v/v			01/06/24 02:08	1.72
Chlorodifluoromethane	**4.9**		2.0		ppb v/v			01/06/24 02:08	1.72
Chloroethane	**34**		2.0		ppb v/v			01/06/24 02:08	1.72
Chloroform	**5.6**		2.0		ppb v/v			01/06/24 02:08	1.72
Chloromethane	ND		10		ppb v/v			01/06/24 02:08	1.72
cis-1,2-Dichloroethene	**5.4**		2.0		ppb v/v			01/06/24 02:08	1.72
cis-1,3-Dichloropropene	ND		4.0		ppb v/v			01/06/24 02:08	1.72
Cumene	ND		4.0		ppb v/v			01/06/24 02:08	1.72
Cyclohexane	ND		4.0		ppb v/v			01/06/24 02:08	1.72
Decane	ND		10		ppb v/v			01/06/24 02:08	1.72
Dibromochloromethane	ND		2.0		ppb v/v			01/06/24 02:08	1.72
Dibromomethane	ND		4.0		ppb v/v			01/06/24 02:08	1.72
Dichlorodifluoromethane	**10**		2.0		ppb v/v			01/06/24 02:08	1.72
Dodecane	ND		10		ppb v/v			01/06/24 02:08	1.72
Ethyl ether	ND		20		ppb v/v			01/06/24 02:08	1.72
Ethylbenzene	ND		2.0		ppb v/v			01/06/24 02:08	1.72

Client Sample ID: G231221-BZ-005

Lab Sample ID: 140-34939-5

Date Collected: 12/21/23 15:46
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Heptane	ND		4.0		ppb v/v			01/06/24 02:08	1.72
Hexachlorobutadiene	ND		10		ppb v/v			01/06/24 02:08	1.72
Hexane	ND		4.0		ppb v/v			01/06/24 02:08	1.72
Methyl tert-butyl ether	ND		10		ppb v/v			01/06/24 02:08	1.72
Methylene Chloride	ND		10		ppb v/v			01/06/24 02:08	1.72
m-Xylene & p-Xylene	ND		2.0		ppb v/v			01/06/24 02:08	1.72
Naphthalene	ND		4.0		ppb v/v			01/06/24 02:08	1.72
Nonane	ND		4.0		ppb v/v			01/06/24 02:08	1.72
Octane	ND		4.0		ppb v/v			01/06/24 02:08	1.72
o-Xylene	ND		2.0		ppb v/v			01/06/24 02:08	1.72
Pentane	ND		25		ppb v/v			01/06/24 02:08	1.72
Propylbenzene	ND		4.0		ppb v/v			01/06/24 02:08	1.72
Styrene	ND		2.0		ppb v/v			01/06/24 02:08	1.72
Tetrachloroethene	**7.1**		2.0		ppb v/v			01/06/24 02:08	1.72
Toluene	ND		10		ppb v/v			01/06/24 02:08	1.72
trans-1,2-Dichloroethene	ND		2.0		ppb v/v			01/06/24 02:08	1.72
trans-1,3-Dichloropropene	ND		2.0		ppb v/v			01/06/24 02:08	1.72
Trichloroethene	ND		2.0		ppb v/v			01/06/24 02:08	1.72
Trichlorofluoromethane	**3.9**		2.0		ppb v/v			01/06/24 02:08	1.72
Undecane	ND		10		ppb v/v			01/06/24 02:08	1.72
Vinyl acetate	ND		10		ppb v/v			01/06/24 02:08	1.72
Vinyl chloride	**49**		4.0		ppb v/v			01/06/24 02:08	1.72

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**290**		11		ug/m3			01/06/24 02:08	1.72
1,1,2,2-Tetrachloroethane	ND		14		ug/m3			01/06/24 02:08	1.72
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15		ug/m3			01/06/24 02:08	1.72
1,1,2-Trichloroethane	ND		11		ug/m3			01/06/24 02:08	1.72
1,1-Dichloroethane	**790**		8.1		ug/m3			01/06/24 02:08	1.72
1,1-Dichloroethene	**36**		7.9		ug/m3			01/06/24 02:08	1.72
1,2,4-Trichlorobenzene	ND		74		ug/m3			01/06/24 02:08	1.72
1,2,4-Trimethylbenzene	ND		9.8		ug/m3			01/06/24 02:08	1.72
1,2-Dibromoethane (EDB)	ND		15		ug/m3			01/06/24 02:08	1.72
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**34**		14		ug/m3			01/06/24 02:08	1.72
1,2-Dichlorobenzene	ND		24		ug/m3			01/06/24 02:08	1.72
1,2-Dichloroethane	ND		8.1		ug/m3			01/06/24 02:08	1.72
1,2-Dichloropropane	ND		9.2		ug/m3			01/06/24 02:08	1.72
1,3,5-Trimethylbenzene	ND		20		ug/m3			01/06/24 02:08	1.72
1,3-Butadiene	ND		8.8		ug/m3			01/06/24 02:08	1.72
1,3-Dichlorobenzene	ND		12		ug/m3			01/06/24 02:08	1.72
1,4-Dichlorobenzene	ND		12		ug/m3			01/06/24 02:08	1.72
2-Butanone (MEK)	ND		29		ug/m3			01/06/24 02:08	1.72
2-Hexanone	ND		20		ug/m3			01/06/24 02:08	1.72
3-Chloropropene	ND		6.3		ug/m3			01/06/24 02:08	1.72
4-Methyl-2-pentanone (MIBK)	ND		41		ug/m3			01/06/24 02:08	1.72
Acetone	ND		180		ug/m3			01/06/24 02:08	1.72
Acetonitrile	ND		17		ug/m3			01/06/24 02:08	1.72
Acrolein	ND		23		ug/m3			01/06/24 02:08	1.72

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-34939-1

Client Sample ID: G231221-BZ-005
Date Collected: 12/21/23 15:46
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Lab Sample ID: 140-34939-5
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrylonitrile	ND		43		ug/m3			01/06/24 02:08	1.72
Alpha Methyl Styrene	ND		19		ug/m3			01/06/24 02:08	1.72
Benzene	ND		6.4		ug/m3			01/06/24 02:08	1.72
Benzyl chloride	ND		21		ug/m3			01/06/24 02:08	1.72
Bromodichloromethane	ND		13		ug/m3			01/06/24 02:08	1.72
Bromoform	ND	*+	21		ug/m3			01/06/24 02:08	1.72
Bromomethane	ND		7.8		ug/m3			01/06/24 02:08	1.72
Butane	**37**		24		ug/m3			01/06/24 02:08	1.72
Carbon disulfide	ND		12		ug/m3			01/06/24 02:08	1.72
Carbon tetrachloride	ND		13		ug/m3			01/06/24 02:08	1.72
Chlorobenzene	ND		9.2		ug/m3			01/06/24 02:08	1.72
Chlorodifluoromethane	**17**		7.1		ug/m3			01/06/24 02:08	1.72
Chloroethane	**89**		5.3		ug/m3			01/06/24 02:08	1.72
Chloroform	**27**		9.8		ug/m3			01/06/24 02:08	1.72
Chloromethane	ND		21		ug/m3			01/06/24 02:08	1.72
cis-1,2-Dichloroethene	**22**		7.9		ug/m3			01/06/24 02:08	1.72
cis-1,3-Dichloropropene	ND		18		ug/m3			01/06/24 02:08	1.72
Cumene	ND		20		ug/m3			01/06/24 02:08	1.72
Cyclohexane	ND		14		ug/m3			01/06/24 02:08	1.72
Decane	ND		58		ug/m3			01/06/24 02:08	1.72
Dibromochloromethane	ND		17		ug/m3			01/06/24 02:08	1.72
Dibromomethane	ND		28		ug/m3			01/06/24 02:08	1.72
Dichlorodifluoromethane	**50**		9.9		ug/m3			01/06/24 02:08	1.72
Dodecane	ND		70		ug/m3			01/06/24 02:08	1.72
Ethyl ether	ND		61		ug/m3			01/06/24 02:08	1.72
Ethylbenzene	ND		8.7		ug/m3			01/06/24 02:08	1.72
Heptane	ND		16		ug/m3			01/06/24 02:08	1.72
Hexachlorobutadiene	ND		110		ug/m3			01/06/24 02:08	1.72
Hexane	ND		14		ug/m3			01/06/24 02:08	1.72
Methyl tert-butyl ether	ND		36		ug/m3			01/06/24 02:08	1.72
Methylene Chloride	ND		35		ug/m3			01/06/24 02:08	1.72
m-Xylene & p-Xylene	ND		8.7		ug/m3			01/06/24 02:08	1.72
Naphthalene	ND		21		ug/m3			01/06/24 02:08	1.72
Nonane	ND		21		ug/m3			01/06/24 02:08	1.72
Octane	ND		19		ug/m3			01/06/24 02:08	1.72
o-Xylene	ND		8.7		ug/m3			01/06/24 02:08	1.72
Pentane	ND		74		ug/m3			01/06/24 02:08	1.72
Propylbenzene	ND		20		ug/m3			01/06/24 02:08	1.72
Styrene	ND		8.5		ug/m3			01/06/24 02:08	1.72
Tetrachloroethene	**48**		14		ug/m3			01/06/24 02:08	1.72
Toluene	ND		38		ug/m3			01/06/24 02:08	1.72
trans-1,2-Dichloroethene	ND		7.9		ug/m3			01/06/24 02:08	1.72
trans-1,3-Dichloropropene	ND		9.1		ug/m3			01/06/24 02:08	1.72
Trichloroethene	ND		11		ug/m3			01/06/24 02:08	1.72
Trichlorofluoromethane	**22**		11		ug/m3			01/06/24 02:08	1.72
Undecane	ND		64		ug/m3			01/06/24 02:08	1.72
Vinyl acetate	ND		35		ug/m3			01/06/24 02:08	1.72
Vinyl chloride	**130**		10		ug/m3			01/06/24 02:08	1.72

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-34939-1

Client Sample ID: G231221-BZ-005

Lab Sample ID: 140-34939-5

Date Collected: 12/21/23 15:46
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Surrogate	%Recovery	Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	*80*		*60 - 140*		*01/06/24 02:08*	*1.72*

Client Sample ID: G231221-BZ-006

Lab Sample ID: 140-34939-6

Date Collected: 12/21/23 15:51
Matrix: Air
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**29**		2.0		ppb v/v			01/06/24 02:58	1.76
1,1,2,2-Tetrachloroethane	ND		2.0		ppb v/v			01/06/24 02:58	1.76
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		2.0		ppb v/v			01/06/24 02:58	1.76
1,1,2-Trichloroethane	ND		2.0		ppb v/v			01/06/24 02:58	1.76
1,1-Dichloroethane	**32**		2.0		ppb v/v			01/06/24 02:58	1.76
1,1-Dichloroethene	**4.1**		2.0		ppb v/v			01/06/24 02:58	1.76
1,2,4-Trichlorobenzene	ND		10		ppb v/v			01/06/24 02:58	1.76
1,2,4-Trimethylbenzene	ND		2.0		ppb v/v			01/06/24 02:58	1.76
1,2-Dibromoethane (EDB)	ND		2.0		ppb v/v			01/06/24 02:58	1.76
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**2.7**		2.0		ppb v/v			01/06/24 02:58	1.76
1,2-Dichlorobenzene	ND		4.0		ppb v/v			01/06/24 02:58	1.76
1,2-Dichloroethane	ND		2.0		ppb v/v			01/06/24 02:58	1.76
1,2-Dichloropropane	ND		2.0		ppb v/v			01/06/24 02:58	1.76
1,3,5-Trimethylbenzene	ND		4.0		ppb v/v			01/06/24 02:58	1.76
1,3-Butadiene	ND		4.0		ppb v/v			01/06/24 02:58	1.76
1,3-Dichlorobenzene	ND		2.0		ppb v/v			01/06/24 02:58	1.76
1,4-Dichlorobenzene	ND		2.0		ppb v/v			01/06/24 02:58	1.76
2-Butanone (MEK)	ND		10		ppb v/v			01/06/24 02:58	1.76
2-Hexanone	ND		5.0		ppb v/v			01/06/24 02:58	1.76
3-Chloropropene	ND		2.0		ppb v/v			01/06/24 02:58	1.76
4-Methyl-2-pentanone (MIBK)	ND		10		ppb v/v			01/06/24 02:58	1.76
Acetone	ND		75		ppb v/v			01/06/24 02:58	1.76
Acetonitrile	ND		10		ppb v/v			01/06/24 02:58	1.76
Acrolein	ND		10		ppb v/v			01/06/24 02:58	1.76
Acrylonitrile	ND		20		ppb v/v			01/06/24 02:58	1.76
Alpha Methyl Styrene	ND		4.0		ppb v/v			01/06/24 02:58	1.76
Benzene	ND		2.0		ppb v/v			01/06/24 02:58	1.76
Benzyl chloride	ND		4.0		ppb v/v			01/06/24 02:58	1.76
Bromodichloromethane	ND		2.0		ppb v/v			01/06/24 02:58	1.76
Bromoform	ND	*+	2.0		ppb v/v			01/06/24 02:58	1.76
Bromomethane	ND		2.0		ppb v/v			01/06/24 02:58	1.76
Butane	ND		10		ppb v/v			01/06/24 02:58	1.76
Carbon disulfide	ND		4.0		ppb v/v			01/06/24 02:58	1.76
Carbon tetrachloride	ND		2.0		ppb v/v			01/06/24 02:58	1.76
Chlorobenzene	ND		2.0		ppb v/v			01/06/24 02:58	1.76
Chlorodifluoromethane	**5.8**		2.0		ppb v/v			01/06/24 02:58	1.76
Chloroethane	**8.5**		2.0		ppb v/v			01/06/24 02:58	1.76
Chloroform	**4.2**		2.0		ppb v/v			01/06/24 02:58	1.76
Chloromethane	ND		10		ppb v/v			01/06/24 02:58	1.76
cis-1,2-Dichloroethene	ND		2.0		ppb v/v			01/06/24 02:58	1.76

Client Sample ID: G231221-BZ-006
Date Collected: 12/21/23 15:51
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Lab Sample ID: 140-34939-6
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
cis-1,3-Dichloropropene	ND		4.0		ppb v/v			01/06/24 02:58	1.76
Cumene	ND		4.0		ppb v/v			01/06/24 02:58	1.76
Cyclohexane	ND		4.0		ppb v/v			01/06/24 02:58	1.76
Decane	ND		10		ppb v/v			01/06/24 02:58	1.76
Dibromochloromethane	ND		2.0		ppb v/v			01/06/24 02:58	1.76
Dibromomethane	ND		4.0		ppb v/v			01/06/24 02:58	1.76
Dichlorodifluoromethane	**16**		2.0		ppb v/v			01/06/24 02:58	1.76
Dodecane	ND		10		ppb v/v			01/06/24 02:58	1.76
Ethyl ether	ND		20		ppb v/v			01/06/24 02:58	1.76
Ethylbenzene	ND		2.0		ppb v/v			01/06/24 02:58	1.76
Heptane	ND		4.0		ppb v/v			01/06/24 02:58	1.76
Hexachlorobutadiene	ND		10		ppb v/v			01/06/24 02:58	1.76
Hexane	ND		4.0		ppb v/v			01/06/24 02:58	1.76
Methyl tert-butyl ether	ND		10		ppb v/v			01/06/24 02:58	1.76
Methylene Chloride	ND		10		ppb v/v			01/06/24 02:58	1.76
m-Xylene & p-Xylene	ND		2.0		ppb v/v			01/06/24 02:58	1.76
Naphthalene	ND		4.0		ppb v/v			01/06/24 02:58	1.76
Nonane	ND		4.0		ppb v/v			01/06/24 02:58	1.76
Octane	ND		4.0		ppb v/v			01/06/24 02:58	1.76
o-Xylene	ND		2.0		ppb v/v			01/06/24 02:58	1.76
Pentane	ND		25		ppb v/v			01/06/24 02:58	1.76
Propylbenzene	ND		4.0		ppb v/v			01/06/24 02:58	1.76
Styrene	ND		2.0		ppb v/v			01/06/24 02:58	1.76
Tetrachloroethene	**3.3**		2.0		ppb v/v			01/06/24 02:58	1.76
Toluene	ND		10		ppb v/v			01/06/24 02:58	1.76
trans-1,2-Dichloroethene	ND		2.0		ppb v/v			01/06/24 02:58	1.76
trans-1,3-Dichloropropene	ND		2.0		ppb v/v			01/06/24 02:58	1.76
Trichloroethene	ND		2.0		ppb v/v			01/06/24 02:58	1.76
Trichlorofluoromethane	**15**		2.0		ppb v/v			01/06/24 02:58	1.76
Undecane	ND		10		ppb v/v			01/06/24 02:58	1.76
Vinyl acetate	ND		10		ppb v/v			01/06/24 02:58	1.76
Vinyl chloride	**11**		4.0		ppb v/v			01/06/24 02:58	1.76

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**160**		11		ug/m3			01/06/24 02:58	1.76
1,1,2,2-Tetrachloroethane	ND		14		ug/m3			01/06/24 02:58	1.76
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		15		ug/m3			01/06/24 02:58	1.76
1,1,2-Trichloroethane	ND		11		ug/m3			01/06/24 02:58	1.76
1,1-Dichloroethane	**130**		8.1		ug/m3			01/06/24 02:58	1.76
1,1-Dichloroethene	**16**		7.9		ug/m3			01/06/24 02:58	1.76
1,2,4-Trichlorobenzene	ND		74		ug/m3			01/06/24 02:58	1.76
1,2,4-Trimethylbenzene	ND		9.8		ug/m3			01/06/24 02:58	1.76
1,2-Dibromoethane (EDB)	ND		15		ug/m3			01/06/24 02:58	1.76
1,2-Dichloro-1,1,2,2-tetrafluoroethane	**19**		14		ug/m3			01/06/24 02:58	1.76
1,2-Dichlorobenzene	ND		24		ug/m3			01/06/24 02:58	1.76
1,2-Dichloroethane	ND		8.1		ug/m3			01/06/24 02:58	1.76
1,2-Dichloropropane	ND		9.2		ug/m3			01/06/24 02:58	1.76
1,3,5-Trimethylbenzene	ND		20		ug/m3			01/06/24 02:58	1.76

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-34939-1

Client Sample ID: G231221-BZ-006
Date Collected: 12/21/23 15:51
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Lab Sample ID: 140-34939-6
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,3-Butadiene	ND		8.8		ug/m3			01/06/24 02:58	1.76
1,3-Dichlorobenzene	ND		12		ug/m3			01/06/24 02:58	1.76
1,4-Dichlorobenzene	ND		12		ug/m3			01/06/24 02:58	1.76
2-Butanone (MEK)	ND		29		ug/m3			01/06/24 02:58	1.76
2-Hexanone	ND		20		ug/m3			01/06/24 02:58	1.76
3-Chloropropene	ND		6.3		ug/m3			01/06/24 02:58	1.76
4-Methyl-2-pentanone (MIBK)	ND		41		ug/m3			01/06/24 02:58	1.76
Acetone	ND		180		ug/m3			01/06/24 02:58	1.76
Acetonitrile	ND		17		ug/m3			01/06/24 02:58	1.76
Acrolein	ND		23		ug/m3			01/06/24 02:58	1.76
Acrylonitrile	ND		43		ug/m3			01/06/24 02:58	1.76
Alpha Methyl Styrene	ND		19		ug/m3			01/06/24 02:58	1.76
Benzene	ND		6.4		ug/m3			01/06/24 02:58	1.76
Benzyl chloride	ND		21		ug/m3			01/06/24 02:58	1.76
Bromodichloromethane	ND		13		ug/m3			01/06/24 02:58	1.76
Bromoform	ND	*+	21		ug/m3			01/06/24 02:58	1.76
Bromomethane	ND		7.8		ug/m3			01/06/24 02:58	1.76
Butane	ND		24		ug/m3			01/06/24 02:58	1.76
Carbon disulfide	ND		12		ug/m3			01/06/24 02:58	1.76
Carbon tetrachloride	ND		13		ug/m3			01/06/24 02:58	1.76
Chlorobenzene	ND		9.2		ug/m3			01/06/24 02:58	1.76
Chlorodifluoromethane	**21**		7.1		ug/m3			01/06/24 02:58	1.76
Chloroethane	**22**		5.3		ug/m3			01/06/24 02:58	1.76
Chloroform	**21**		9.8		ug/m3			01/06/24 02:58	1.76
Chloromethane	ND		21		ug/m3			01/06/24 02:58	1.76
cis-1,2-Dichloroethene	ND		7.9		ug/m3			01/06/24 02:58	1.76
cis-1,3-Dichloropropene	ND		18		ug/m3			01/06/24 02:58	1.76
Cumene	ND		20		ug/m3			01/06/24 02:58	1.76
Cyclohexane	ND		14		ug/m3			01/06/24 02:58	1.76
Decane	ND		58		ug/m3			01/06/24 02:58	1.76
Dibromochloromethane	ND		17		ug/m3			01/06/24 02:58	1.76
Dibromomethane	ND		28		ug/m3			01/06/24 02:58	1.76
Dichlorodifluoromethane	**79**		9.9		ug/m3			01/06/24 02:58	1.76
Dodecane	ND		70		ug/m3			01/06/24 02:58	1.76
Ethyl ether	ND		61		ug/m3			01/06/24 02:58	1.76
Ethylbenzene	ND		8.7		ug/m3			01/06/24 02:58	1.76
Heptane	ND		16		ug/m3			01/06/24 02:58	1.76
Hexachlorobutadiene	ND		110		ug/m3			01/06/24 02:58	1.76
Hexane	ND		14		ug/m3			01/06/24 02:58	1.76
Methyl tert-butyl ether	ND		36		ug/m3			01/06/24 02:58	1.76
Methylene Chloride	ND		35		ug/m3			01/06/24 02:58	1.76
m-Xylene & p-Xylene	ND		8.7		ug/m3			01/06/24 02:58	1.76
Naphthalene	ND		21		ug/m3			01/06/24 02:58	1.76
Nonane	ND		21		ug/m3			01/06/24 02:58	1.76
Octane	ND		19		ug/m3			01/06/24 02:58	1.76
o-Xylene	ND		8.7		ug/m3			01/06/24 02:58	1.76
Pentane	ND		74		ug/m3			01/06/24 02:58	1.76
Propylbenzene	ND		20		ug/m3			01/06/24 02:58	1.76

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-34939-1

Client Sample ID: G231221-BZ-006
Date Collected: 12/21/23 15:51
Date Received: 12/27/23 09:30
Sample Container: Summa Canister 6L

Lab Sample ID: 140-34939-6
Matrix: Air

Method: EPA TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	Result	Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Styrene	ND		8.5		ug/m3			01/06/24 02:58	1.76
Tetrachloroethene	**22**		14		ug/m3			01/06/24 02:58	1.76
Toluene	ND		38		ug/m3			01/06/24 02:58	1.76
trans-1,2-Dichloroethene	ND		7.9		ug/m3			01/06/24 02:58	1.76
trans-1,3-Dichloropropene	ND		9.1		ug/m3			01/06/24 02:58	1.76
Trichloroethene	ND		11		ug/m3			01/06/24 02:58	1.76
Trichlorofluoromethane	**82**		11		ug/m3			01/06/24 02:58	1.76
Undecane	ND		64		ug/m3			01/06/24 02:58	1.76
Vinyl acetate	ND		35		ug/m3			01/06/24 02:58	1.76
Vinyl chloride	**27**		10		ug/m3			01/06/24 02:58	1.76

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
4-Bromofluorobenzene (Surr)	*82*		*60 - 140*		*01/06/24 02:58*	*1.76*

Default Detection Limits

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-34939-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Analyte	RL	MDL	Units
1,1,1-Trichloroethane	0.20	0.072	ppb v/v
1,1,1-Trichloroethane	1.1	0.39	ug/m3
1,1,2,2-Tetrachloroethane	0.20	0.035	ppb v/v
1,1,2,2-Tetrachloroethane	1.4	0.24	ug/m3
1,1,2-Trichloro-1,2,2-trifluoroethane	0.20	0.024	ppb v/v
1,1,2-Trichloro-1,2,2-trifluoroethane	1.5	0.18	ug/m3
1,1,2-Trichloroethane	0.20	0.038	ppb v/v
1,1,2-Trichloroethane	1.1	0.21	ug/m3
1,1-Dichloroethane	0.20	0.027	ppb v/v
1,1-Dichloroethane	0.81	0.11	ug/m3
1,1-Dichloroethene	0.20	0.032	ppb v/v
1,1-Dichloroethene	0.79	0.13	ug/m3
1,2,4-Trichlorobenzene	1.0	0.089	ppb v/v
1,2,4-Trichlorobenzene	7.4	0.66	ug/m3
1,2,4-Trimethylbenzene	0.20	0.050	ppb v/v
1,2,4-Trimethylbenzene	0.98	0.25	ug/m3
1,2-Dibromoethane (EDB)	0.20	0.031	ppb v/v
1,2-Dibromoethane (EDB)	1.5	0.24	ug/m3
1,2-Dichloro-1,1,2,2-tetrafluoroethane	0.20	0.030	ppb v/v
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.4	0.21	ug/m3
1,2-Dichlorobenzene	0.40	0.078	ppb v/v
1,2-Dichlorobenzene	2.4	0.47	ug/m3
1,2-Dichloroethane	0.20	0.025	ppb v/v
1,2-Dichloroethane	0.81	0.10	ug/m3
1,2-Dichloropropane	0.20	0.025	ppb v/v
1,2-Dichloropropane	0.92	0.12	ug/m3
1,3,5-Trimethylbenzene	0.40	0.16	ppb v/v
1,3,5-Trimethylbenzene	2.0	0.79	ug/m3
1,3-Butadiene	0.40	0.048	ppb v/v
1,3-Butadiene	0.88	0.11	ug/m3
1,3-Dichlorobenzene	0.20	0.040	ppb v/v
1,3-Dichlorobenzene	1.2	0.24	ug/m3
1,4-Dichlorobenzene	0.20	0.040	ppb v/v
1,4-Dichlorobenzene	1.2	0.24	ug/m3
2-Butanone (MEK)	1.0	0.18	ppb v/v
2-Butanone (MEK)	2.9	0.53	ug/m3
2-Hexanone	0.50	0.14	ppb v/v
2-Hexanone	2.0	0.57	ug/m3
3-Chloropropene	0.20	0.10	ppb v/v
3-Chloropropene	0.63	0.31	ug/m3
4-Methyl-2-pentanone (MIBK)	1.0	0.14	ppb v/v
4-Methyl-2-pentanone (MIBK)	4.1	0.57	ug/m3
Acetone	7.5	1.4	ppb v/v
Acetone	18	3.3	ug/m3
Acetonitrile	1.0	0.38	ppb v/v
Acetonitrile	1.7	0.64	ug/m3
Acrolein	1.0	0.25	ppb v/v
Acrolein	2.3	0.57	ug/m3
Acrylonitrile	2.0	0.27	ppb v/v
Acrylonitrile	4.3	0.59	ug/m3
Alpha Methyl Styrene	0.40	0.093	ppb v/v
Alpha Methyl Styrene	1.9	0.45	ug/m3
Benzene	0.20	0.033	ppb v/v

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	RL	MDL	Units
Benzene	0.64	0.11	ug/m3
Benzyl chloride	0.40	0.095	ppb v/v
Benzyl chloride	2.1	0.49	ug/m3
Bromodichloromethane	0.20	0.044	ppb v/v
Bromodichloromethane	1.3	0.29	ug/m3
Bromoform	0.20	0.066	ppb v/v
Bromoform	2.1	0.68	ug/m3
Bromomethane	0.20	0.055	ppb v/v
Bromomethane	0.78	0.21	ug/m3
Butane	1.0	0.21	ppb v/v
Butane	2.4	0.50	ug/m3
Carbon disulfide	0.40	0.087	ppb v/v
Carbon disulfide	1.2	0.27	ug/m3
Carbon tetrachloride	0.20	0.032	ppb v/v
Carbon tetrachloride	1.3	0.20	ug/m3
Chlorobenzene	0.20	0.056	ppb v/v
Chlorobenzene	0.92	0.26	ug/m3
Chlorodifluoromethane	0.20	0.055	ppb v/v
Chlorodifluoromethane	0.71	0.19	ug/m3
Chloroethane	0.20	0.079	ppb v/v
Chloroethane	0.53	0.21	ug/m3
Chloroform	0.20	0.036	ppb v/v
Chloroform	0.98	0.18	ug/m3
Chloromethane	1.0	0.16	ppb v/v
Chloromethane	2.1	0.33	ug/m3
cis-1,2-Dichloroethene	0.20	0.025	ppb v/v
cis-1,2-Dichloroethene	0.79	0.099	ug/m3
cis-1,3-Dichloropropene	0.40	0.048	ppb v/v
cis-1,3-Dichloropropene	1.8	0.22	ug/m3
Cumene	0.40	0.043	ppb v/v
Cumene	2.0	0.21	ug/m3
Cyclohexane	0.40	0.093	ppb v/v
Cyclohexane	1.4	0.32	ug/m3
Decane	1.0	0.095	ppb v/v
Decane	5.8	0.55	ug/m3
Dibromochloromethane	0.20	0.034	ppb v/v
Dibromochloromethane	1.7	0.29	ug/m3
Dibromomethane	0.40	0.030	ppb v/v
Dibromomethane	2.8	0.21	ug/m3
Dichlorodifluoromethane	0.20	0.035	ppb v/v
Dichlorodifluoromethane	0.99	0.17	ug/m3
Dodecane	1.0	0.32	ppb v/v
Dodecane	7.0	2.2	ug/m3
Ethyl ether	2.0	0.085	ppb v/v
Ethyl ether	6.1	0.26	ug/m3
Ethylbenzene	0.20	0.033	ppb v/v
Ethylbenzene	0.87	0.14	ug/m3
Heptane	0.40	0.035	ppb v/v
Heptane	1.6	0.14	ug/m3
Hexachlorobutadiene	1.0	0.080	ppb v/v
Hexachlorobutadiene	11	0.85	ug/m3
Hexane	0.40	0.063	ppb v/v
Hexane	1.4	0.22	ug/m3

Default Detection Limits

Client: GHD Services Inc.
Job ID: 140-34939-1
Project/Site: New Richmond Landfill

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Analyte	RL	MDL	Units
Methyl tert-butyl ether	1.0	0.13	ppb v/v
Methyl tert-butyl ether	3.6	0.47	ug/m3
Methylene Chloride	1.0	0.34	ppb v/v
Methylene Chloride	3.5	1.2	ug/m3
m-Xylene & p-Xylene	0.20	0.073	ppb v/v
m-Xylene & p-Xylene	0.87	0.32	ug/m3
Naphthalene	0.40	0.10	ppb v/v
Naphthalene	2.1	0.52	ug/m3
Nonane	0.40	0.11	ppb v/v
Nonane	2.1	0.58	ug/m3
Octane	0.40	0.11	ppb v/v
Octane	1.9	0.51	ug/m3
o-Xylene	0.20	0.038	ppb v/v
o-Xylene	0.87	0.17	ug/m3
Pentane	2.5	0.24	ppb v/v
Pentane	7.4	0.71	ug/m3
Propylbenzene	0.40	0.048	ppb v/v
Propylbenzene	2.0	0.24	ug/m3
Styrene	0.20	0.060	ppb v/v
Styrene	0.85	0.26	ug/m3
Tetrachloroethene	0.20	0.029	ppb v/v
Tetrachloroethene	1.4	0.20	ug/m3
Toluene	1.0	0.057	ppb v/v
Toluene	3.8	0.21	ug/m3
trans-1,2-Dichloroethene	0.20	0.033	ppb v/v
trans-1,2-Dichloroethene	0.79	0.13	ug/m3
trans-1,3-Dichloropropene	0.20	0.049	ppb v/v
trans-1,3-Dichloropropene	0.91	0.22	ug/m3
Trichloroethene	0.20	0.033	ppb v/v
Trichloroethene	1.1	0.18	ug/m3
Trichlorofluoromethane	0.20	0.028	ppb v/v
Trichlorofluoromethane	1.1	0.16	ug/m3
Undecane	1.0	0.12	ppb v/v
Undecane	6.4	0.77	ug/m3
Vinyl acetate	1.0	0.070	ppb v/v
Vinyl acetate	3.5	0.25	ug/m3
Vinyl chloride	0.40	0.065	ppb v/v
Vinyl chloride	1.0	0.17	ug/m3

Surrogate Summary

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-34939-1

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Matrix: Air

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)
		BFB
Lab Sample ID	Client Sample ID	(60-140)
140-34939-1	G231221-BZ-001	88
140-34939-2	G231221-BZ-002	83
140-34939-3	G231221-BZ-003	82
140-34939-4	G231221-BZ-004	83
140-34939-5	G231221-BZ-005	80
140-34939-6	G231221-BZ-006	82
LCS 140-82010/1002	Lab Control Sample	120
MB 140-82010/8	Method Blank	83

Surrogate Legend

BFB = 4-Bromofluorobenzene (Surr)

Method: TO-15 - Volatile Organic Compounds in Ambient Air

Lab Sample ID: MB 140-82010/8
Matrix: Air
Analysis Batch: 82010

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		0.20		ppb v/v			01/05/24 13:29	1
1,1,2,2-Tetrachloroethane	ND		0.20		ppb v/v			01/05/24 13:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		0.20		ppb v/v			01/05/24 13:29	1
1,1,2-Trichloroethane	ND		0.20		ppb v/v			01/05/24 13:29	1
1,1-Dichloroethane	ND		0.20		ppb v/v			01/05/24 13:29	1
1,1-Dichloroethene	ND		0.20		ppb v/v			01/05/24 13:29	1
1,2,4-Trichlorobenzene	ND		1.0		ppb v/v			01/05/24 13:29	1
1,2,4-Trimethylbenzene	ND		0.20		ppb v/v			01/05/24 13:29	1
1,2-Dibromoethane (EDB)	ND		0.20		ppb v/v			01/05/24 13:29	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		0.20		ppb v/v			01/05/24 13:29	1
1,2-Dichlorobenzene	ND		0.40		ppb v/v			01/05/24 13:29	1
1,2-Dichloroethane	ND		0.20		ppb v/v			01/05/24 13:29	1
1,2-Dichloropropane	ND		0.20		ppb v/v			01/05/24 13:29	1
1,3,5-Trimethylbenzene	ND		0.40		ppb v/v			01/05/24 13:29	1
1,3-Butadiene	ND		0.40		ppb v/v			01/05/24 13:29	1
1,3-Dichlorobenzene	ND		0.20		ppb v/v			01/05/24 13:29	1
1,4-Dichlorobenzene	ND		0.20		ppb v/v			01/05/24 13:29	1
2-Butanone (MEK)	ND		1.0		ppb v/v			01/05/24 13:29	1
2-Hexanone	ND		0.50		ppb v/v			01/05/24 13:29	1
3-Chloropropene	ND		0.20		ppb v/v			01/05/24 13:29	1
4-Methyl-2-pentanone (MIBK)	ND		1.0		ppb v/v			01/05/24 13:29	1
Acetone	ND		7.5		ppb v/v			01/05/24 13:29	1
Acetonitrile	ND		1.0		ppb v/v			01/05/24 13:29	1
Acrolein	ND		1.0		ppb v/v			01/05/24 13:29	1
Acrylonitrile	ND		2.0		ppb v/v			01/05/24 13:29	1
Alpha Methyl Styrene	ND		0.40		ppb v/v			01/05/24 13:29	1
Benzene	ND		0.20		ppb v/v			01/05/24 13:29	1
Benzyl chloride	ND		0.40		ppb v/v			01/05/24 13:29	1
Bromodichloromethane	ND		0.20		ppb v/v			01/05/24 13:29	1
Bromoform	ND		0.20		ppb v/v			01/05/24 13:29	1
Bromomethane	ND		0.20		ppb v/v			01/05/24 13:29	1
Butane	ND		1.0		ppb v/v			01/05/24 13:29	1
Carbon disulfide	ND		0.40		ppb v/v			01/05/24 13:29	1
Carbon tetrachloride	ND		0.20		ppb v/v			01/05/24 13:29	1
Chlorobenzene	ND		0.20		ppb v/v			01/05/24 13:29	1
Chlorodifluoromethane	ND		0.20		ppb v/v			01/05/24 13:29	1
Chloroethane	ND		0.20		ppb v/v			01/05/24 13:29	1
Chloroform	ND		0.20		ppb v/v			01/05/24 13:29	1
Chloromethane	ND		1.0		ppb v/v			01/05/24 13:29	1
cis-1,2-Dichloroethene	ND		0.20		ppb v/v			01/05/24 13:29	1
cis-1,3-Dichloropropene	ND		0.40		ppb v/v			01/05/24 13:29	1
Cumene	ND		0.40		ppb v/v			01/05/24 13:29	1
Cyclohexane	ND		0.40		ppb v/v			01/05/24 13:29	1
Decane	ND		1.0		ppb v/v			01/05/24 13:29	1
Dibromochloromethane	ND		0.20		ppb v/v			01/05/24 13:29	1
Dibromomethane	ND		0.40		ppb v/v			01/05/24 13:29	1
Dichlorodifluoromethane	ND		0.20		ppb v/v			01/05/24 13:29	1
Dodecane	ND		1.0		ppb v/v			01/05/24 13:29	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-82010/8
Matrix: Air
Analysis Batch: 82010

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Ethyl ether	ND		2.0		ppb v/v			01/05/24 13:29	1
Ethylbenzene	ND		0.20		ppb v/v			01/05/24 13:29	1
Heptane	ND		0.40		ppb v/v			01/05/24 13:29	1
Hexachlorobutadiene	ND		1.0		ppb v/v			01/05/24 13:29	1
Hexane	ND		0.40		ppb v/v			01/05/24 13:29	1
Methyl tert-butyl ether	ND		1.0		ppb v/v			01/05/24 13:29	1
Methylene Chloride	ND		1.0		ppb v/v			01/05/24 13:29	1
m-Xylene & p-Xylene	ND		0.20		ppb v/v			01/05/24 13:29	1
Naphthalene	ND		0.40		ppb v/v			01/05/24 13:29	1
Nonane	ND		0.40		ppb v/v			01/05/24 13:29	1
Octane	ND		0.40		ppb v/v			01/05/24 13:29	1
o-Xylene	ND		0.20		ppb v/v			01/05/24 13:29	1
Pentane	ND		2.5		ppb v/v			01/05/24 13:29	1
Propylbenzene	ND		0.40		ppb v/v			01/05/24 13:29	1
Styrene	ND		0.20		ppb v/v			01/05/24 13:29	1
Tetrachloroethene	ND		0.20		ppb v/v			01/05/24 13:29	1
Toluene	ND		1.0		ppb v/v			01/05/24 13:29	1
trans-1,2-Dichloroethene	ND		0.20		ppb v/v			01/05/24 13:29	1
trans-1,3-Dichloropropene	ND		0.20		ppb v/v			01/05/24 13:29	1
Trichloroethene	ND		0.20		ppb v/v			01/05/24 13:29	1
Trichlorofluoromethane	ND		0.20		ppb v/v			01/05/24 13:29	1
Undecane	ND		1.0		ppb v/v			01/05/24 13:29	1
Vinyl acetate	ND		1.0		ppb v/v			01/05/24 13:29	1
Vinyl chloride	ND		0.40		ppb v/v			01/05/24 13:29	1

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	ND		1.1		ug/m3			01/05/24 13:29	1
1,1,2,2-Tetrachloroethane	ND		1.4		ug/m3			01/05/24 13:29	1
1,1,2-Trichloro-1,2,2-trifluoroethane	ND		1.5		ug/m3			01/05/24 13:29	1
1,1,2-Trichloroethane	ND		1.1		ug/m3			01/05/24 13:29	1
1,1-Dichloroethane	ND		0.81		ug/m3			01/05/24 13:29	1
1,1-Dichloroethene	ND		0.79		ug/m3			01/05/24 13:29	1
1,2,4-Trichlorobenzene	ND		7.4		ug/m3			01/05/24 13:29	1
1,2,4-Trimethylbenzene	ND		0.98		ug/m3			01/05/24 13:29	1
1,2-Dibromoethane (EDB)	ND		1.5		ug/m3			01/05/24 13:29	1
1,2-Dichloro-1,1,2,2-tetrafluoroethane	ND		1.4		ug/m3			01/05/24 13:29	1
1,2-Dichlorobenzene	ND		2.4		ug/m3			01/05/24 13:29	1
1,2-Dichloroethane	ND		0.81		ug/m3			01/05/24 13:29	1
1,2-Dichloropropane	ND		0.92		ug/m3			01/05/24 13:29	1
1,3,5-Trimethylbenzene	ND		2.0		ug/m3			01/05/24 13:29	1
1,3-Butadiene	ND		0.88		ug/m3			01/05/24 13:29	1
1,3-Dichlorobenzene	ND		1.2		ug/m3			01/05/24 13:29	1
1,4-Dichlorobenzene	ND		1.2		ug/m3			01/05/24 13:29	1
2-Butanone (MEK)	ND		2.9		ug/m3			01/05/24 13:29	1
2-Hexanone	ND		2.0		ug/m3			01/05/24 13:29	1
3-Chloropropene	ND		0.63		ug/m3			01/05/24 13:29	1
4-Methyl-2-pentanone (MIBK)	ND		4.1		ug/m3			01/05/24 13:29	1
Acetone	ND		18		ug/m3			01/05/24 13:29	1
Acetonitrile	ND		1.7		ug/m3			01/05/24 13:29	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: MB 140-82010/8
Matrix: Air
Analysis Batch: 82010

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

Analyte	MB Result	MB Qualifier	RL	MDL	Unit	D	Prepared	Analyzed	Dil Fac
Acrolein	ND		2.3		ug/m3			01/05/24 13:29	1
Acrylonitrile	ND		4.3		ug/m3			01/05/24 13:29	1
Alpha Methyl Styrene	ND		1.9		ug/m3			01/05/24 13:29	1
Benzene	ND		0.64		ug/m3			01/05/24 13:29	1
Benzyl chloride	ND		2.1		ug/m3			01/05/24 13:29	1
Bromodichloromethane	ND		1.3		ug/m3			01/05/24 13:29	1
Bromoform	ND		2.1		ug/m3			01/05/24 13:29	1
Bromomethane	ND		0.78		ug/m3			01/05/24 13:29	1
Butane	ND		2.4		ug/m3			01/05/24 13:29	1
Carbon disulfide	ND		1.2		ug/m3			01/05/24 13:29	1
Carbon tetrachloride	ND		1.3		ug/m3			01/05/24 13:29	1
Chlorobenzene	ND		0.92		ug/m3			01/05/24 13:29	1
Chlorodifluoromethane	ND		0.71		ug/m3			01/05/24 13:29	1
Chloroethane	ND		0.53		ug/m3			01/05/24 13:29	1
Chloroform	ND		0.98		ug/m3			01/05/24 13:29	1
Chloromethane	ND		2.1		ug/m3			01/05/24 13:29	1
cis-1,2-Dichloroethene	ND		0.79		ug/m3			01/05/24 13:29	1
cis-1,3-Dichloropropene	ND		1.8		ug/m3			01/05/24 13:29	1
Cumene	ND		2.0		ug/m3			01/05/24 13:29	1
Cyclohexane	ND		1.4		ug/m3			01/05/24 13:29	1
Decane	ND		5.8		ug/m3			01/05/24 13:29	1
Dibromochloromethane	ND		1.7		ug/m3			01/05/24 13:29	1
Dibromomethane	ND		2.8		ug/m3			01/05/24 13:29	1
Dichlorodifluoromethane	ND		0.99		ug/m3			01/05/24 13:29	1
Dodecane	ND		7.0		ug/m3			01/05/24 13:29	1
Ethyl ether	ND		6.1		ug/m3			01/05/24 13:29	1
Ethylbenzene	ND		0.87		ug/m3			01/05/24 13:29	1
Heptane	ND		1.6		ug/m3			01/05/24 13:29	1
Hexachlorobutadiene	ND		11		ug/m3			01/05/24 13:29	1
Hexane	ND		1.4		ug/m3			01/05/24 13:29	1
Methyl tert-butyl ether	ND		3.6		ug/m3			01/05/24 13:29	1
Methylene Chloride	ND		3.5		ug/m3			01/05/24 13:29	1
m-Xylene & p-Xylene	ND		0.87		ug/m3			01/05/24 13:29	1
Naphthalene	ND		2.1		ug/m3			01/05/24 13:29	1
Nonane	ND		2.1		ug/m3			01/05/24 13:29	1
Octane	ND		1.9		ug/m3			01/05/24 13:29	1
o-Xylene	ND		0.87		ug/m3			01/05/24 13:29	1
Pentane	ND		7.4		ug/m3			01/05/24 13:29	1
Propylbenzene	ND		2.0		ug/m3			01/05/24 13:29	1
Styrene	ND		0.85		ug/m3			01/05/24 13:29	1
Tetrachloroethene	ND		1.4		ug/m3			01/05/24 13:29	1
Toluene	ND		3.8		ug/m3			01/05/24 13:29	1
trans-1,2-Dichloroethene	ND		0.79		ug/m3			01/05/24 13:29	1
trans-1,3-Dichloropropene	ND		0.91		ug/m3			01/05/24 13:29	1
Trichloroethene	ND		1.1		ug/m3			01/05/24 13:29	1
Trichlorofluoromethane	ND		1.1		ug/m3			01/05/24 13:29	1
Undecane	ND		6.4		ug/m3			01/05/24 13:29	1
Vinyl acetate	ND		3.5		ug/m3			01/05/24 13:29	1
Vinyl chloride	ND		1.0		ug/m3			01/05/24 13:29	1

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Surrogate	MB %Recovery	MB Qualifier	Limits	Prepared	Analyzed	Dil Fac
4-Bromofluorobenzene (Surr)	83		60 - 140		01/05/24 13:29	1

Lab Sample ID: LCS 140-82010/1002
Matrix: Air
Analysis Batch: 82010

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	1.60	1.71		ppb v/v		107	70 - 130
1,1,2,2-Tetrachloroethane	1.60	1.91		ppb v/v		119	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	1.60	1.71		ppb v/v		107	70 - 130
1,1,2-Trichloroethane	1.60	1.74		ppb v/v		109	70 - 130
1,1-Dichloroethane	1.60	1.54		ppb v/v		96	70 - 130
1,1-Dichloroethene	1.60	1.27		ppb v/v		80	70 - 130
1,2,4-Trichlorobenzene	1.60	1.41		ppb v/v		88	60 - 140
1,2,4-Trimethylbenzene	1.60	1.77		ppb v/v		110	70 - 130
1,2-Dibromoethane (EDB)	1.60	1.57		ppb v/v		98	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	1.60	1.65		ppb v/v		103	60 - 140
1,2-Dichlorobenzene	1.60	1.93		ppb v/v		120	70 - 130
1,2-Dichloroethane	1.60	1.58		ppb v/v		99	70 - 130
1,2-Dichloropropane	1.60	1.66		ppb v/v		104	70 - 130
1,3,5-Trimethylbenzene	1.60	1.87		ppb v/v		117	70 - 130
1,3-Butadiene	1.60	1.40		ppb v/v		87	60 - 140
1,3-Dichlorobenzene	1.60	1.89		ppb v/v		118	70 - 130
1,4-Dichlorobenzene	1.60	1.83		ppb v/v		114	70 - 130
2-Butanone (MEK)	1.60	1.35		ppb v/v		85	60 - 140
2-Hexanone	1.60	1.53		ppb v/v		96	60 - 140
3-Chloropropene	1.60	1.06		ppb v/v		66	60 - 140
4-Methyl-2-pentanone (MIBK)	1.60	1.53		ppb v/v		96	60 - 140
Acetone	1.60	1.80	J	ppb v/v		112	60 - 140
Acetonitrile	1.60	1.66		ppb v/v		103	60 - 140
Acrolein	1.60	1.20		ppb v/v		75	60 - 140
Acrylonitrile	1.60	1.56		ppb v/v		97	60 - 140
Alpha Methyl Styrene	1.60	1.50		ppb v/v		94	60 - 140
Benzene	1.60	1.67		ppb v/v		104	70 - 130
Benzyl chloride	1.60	1.46		ppb v/v		91	70 - 130
Bromodichloromethane	1.60	1.85		ppb v/v		116	70 - 130
Bromoform	1.60	2.30	*+	ppb v/v		144	60 - 140
Bromomethane	1.60	1.38		ppb v/v		86	70 - 130
Butane	1.60	1.63		ppb v/v		102	60 - 140
Carbon disulfide	1.60	1.57		ppb v/v		98	70 - 130
Carbon tetrachloride	1.60	1.93		ppb v/v		121	70 - 130
Chlorobenzene	1.60	1.72		ppb v/v		108	70 - 130
Chlorodifluoromethane	1.60	1.76		ppb v/v		110	60 - 140
Chloroethane	1.60	1.45		ppb v/v		91	70 - 130
Chloroform	1.60	1.69		ppb v/v		106	70 - 130
Chloromethane	1.60	1.58		ppb v/v		99	60 - 140
cis-1,2-Dichloroethene	1.60	1.28		ppb v/v		80	70 - 130
cis-1,3-Dichloropropene	1.60	1.57		ppb v/v		98	70 - 130
Cumene	1.60	1.68		ppb v/v		105	70 - 130
Cyclohexane	1.60	1.40		ppb v/v		88	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-82010/1002
Matrix: Air
Analysis Batch: 82010

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Decane	1.60	1.73		ppb v/v		108	60 - 140
Dibromochloromethane	1.60	1.96		ppb v/v		122	70 - 130
Dibromomethane	1.60	1.63		ppb v/v		102	70 - 130
Dichlorodifluoromethane	1.60	1.96		ppb v/v		122	60 - 140
Dodecane	1.60	1.58		ppb v/v		99	60 - 140
Ethyl ether	1.60	1.26		ppb v/v		79	60 - 140
Ethylbenzene	1.60	1.52		ppb v/v		95	70 - 130
Heptane	1.60	1.38		ppb v/v		87	70 - 130
Hexachlorobutadiene	1.60	1.51		ppb v/v		95	60 - 140
Hexane	1.60	1.53		ppb v/v		96	70 - 130
Methyl tert-butyl ether	1.60	1.19		ppb v/v		75	60 - 140
Methylene Chloride	1.60	1.57		ppb v/v		98	70 - 130
m-Xylene & p-Xylene	3.20	4.03		ppb v/v		126	70 - 130
Naphthalene	1.60	1.60		ppb v/v		100	60 - 140
Nonane	1.60	1.70		ppb v/v		106	60 - 140
Octane	1.60	1.50		ppb v/v		94	70 - 130
o-Xylene	1.60	1.77		ppb v/v		111	70 - 130
Pentane	1.60	1.38		ppb v/v		86	70 - 130
Propylbenzene	1.60	1.73		ppb v/v		108	70 - 130
Styrene	1.60	1.57		ppb v/v		98	70 - 130
Tetrachloroethene	1.60	1.72		ppb v/v		108	70 - 130
Toluene	1.60	1.46		ppb v/v		91	70 - 130
trans-1,2-Dichloroethene	1.60	1.42		ppb v/v		89	70 - 130
trans-1,3-Dichloropropene	1.60	1.29		ppb v/v		81	70 - 130
Trichloroethene	1.60	1.66		ppb v/v		104	70 - 130
Trichlorofluoromethane	1.60	1.82		ppb v/v		114	60 - 140
Undecane	1.60	1.67		ppb v/v		104	60 - 140
Vinyl acetate	1.60	1.07		ppb v/v		67	60 - 140
Vinyl chloride	1.60	1.43		ppb v/v		89	70 - 130

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	8.7	9.35		ug/m3		107	70 - 130
1,1,2,2-Tetrachloroethane	11	13.1		ug/m3		119	70 - 130
1,1,2-Trichloro-1,2,2-trifluoroethane	12	13.1		ug/m3		107	70 - 130
1,1,2-Trichloroethane	8.7	9.50		ug/m3		109	70 - 130
1,1-Dichloroethane	6.5	6.22		ug/m3		96	70 - 130
1,1-Dichloroethene	6.3	5.05		ug/m3		80	70 - 130
1,2,4-Trichlorobenzene	12	10.5		ug/m3		88	60 - 140
1,2,4-Trimethylbenzene	7.9	8.69		ug/m3		110	70 - 130
1,2-Dibromoethane (EDB)	12	12.1		ug/m3		98	70 - 130
1,2-Dichloro-1,1,2,2-tetrafluoroethane	11	11.6		ug/m3		103	60 - 140
1,2-Dichlorobenzene	9.6	11.6		ug/m3		120	70 - 130
1,2-Dichloroethane	6.5	6.39		ug/m3		99	70 - 130
1,2-Dichloropropane	7.4	7.68		ug/m3		104	70 - 130
1,3,5-Trimethylbenzene	7.9	9.20		ug/m3		117	70 - 130
1,3-Butadiene	3.5	3.09		ug/m3		87	60 - 140
1,3-Dichlorobenzene	9.6	11.3		ug/m3		118	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-82010/1002
Matrix: Air
Analysis Batch: 82010

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
1,4-Dichlorobenzene	9.6	11.0		ug/m3		114	70 - 130
2-Butanone (MEK)	4.7	3.99		ug/m3		85	60 - 140
2-Hexanone	6.6	6.29		ug/m3		96	60 - 140
3-Chloropropene	5.0	3.32		ug/m3		66	60 - 140
4-Methyl-2-pentanone (MIBK)	6.6	6.27		ug/m3		96	60 - 140
Acetone	3.8	4.27	J	ug/m3		112	60 - 140
Acetonitrile	2.7	2.78		ug/m3		103	60 - 140
Acrolein	3.7	2.76		ug/m3		75	60 - 140
Acrylonitrile	3.5	3.38		ug/m3		97	60 - 140
Alpha Methyl Styrene	7.7	7.27		ug/m3		94	60 - 140
Benzene	5.1	5.32		ug/m3		104	70 - 130
Benzyl chloride	8.3	7.55		ug/m3		91	70 - 130
Bromodichloromethane	11	12.4		ug/m3		116	70 - 130
Bromoform	17	23.8	*+	ug/m3		144	60 - 140
Bromomethane	6.2	5.34		ug/m3		86	70 - 130
Butane	3.8	3.88		ug/m3		102	60 - 140
Carbon disulfide	5.0	4.90		ug/m3		98	70 - 130
Carbon tetrachloride	10	12.1		ug/m3		121	70 - 130
Chlorobenzene	7.4	7.93		ug/m3		108	70 - 130
Chlorodifluoromethane	5.7	6.22		ug/m3		110	60 - 140
Chloroethane	4.2	3.83		ug/m3		91	70 - 130
Chloroform	7.8	8.26		ug/m3		106	70 - 130
Chloromethane	3.3	3.27		ug/m3		99	60 - 140
cis-1,2-Dichloroethene	6.3	5.09		ug/m3		80	70 - 130
cis-1,3-Dichloropropene	7.3	7.10		ug/m3		98	70 - 130
Cumene	7.9	8.28		ug/m3		105	70 - 130
Cyclohexane	5.5	4.84		ug/m3		88	70 - 130
Decane	9.3	10.0		ug/m3		108	60 - 140
Dibromochloromethane	14	16.7		ug/m3		122	70 - 130
Dibromomethane	11	11.6		ug/m3		102	70 - 130
Dichlorodifluoromethane	7.9	9.67		ug/m3		122	60 - 140
Dodecane	11	11.0		ug/m3		99	60 - 140
Ethyl ether	4.9	3.83		ug/m3		79	60 - 140
Ethylbenzene	6.9	6.58		ug/m3		95	70 - 130
Heptane	6.6	5.68		ug/m3		87	70 - 130
Hexachlorobutadiene	17	16.2		ug/m3		95	60 - 140
Hexane	5.6	5.40		ug/m3		96	70 - 130
Methyl tert-butyl ether	5.8	4.30		ug/m3		75	60 - 140
Methylene Chloride	5.6	5.47		ug/m3		98	70 - 130
m-Xylene & p-Xylene	14	17.5		ug/m3		126	70 - 130
Naphthalene	8.4	8.40		ug/m3		100	60 - 140
Nonane	8.4	8.90		ug/m3		106	60 - 140
Octane	7.5	7.03		ug/m3		94	70 - 130
o-Xylene	6.9	7.70		ug/m3		111	70 - 130
Pentane	4.7	4.07		ug/m3		86	70 - 130
Propylbenzene	7.9	8.52		ug/m3		108	70 - 130
Styrene	6.8	6.70		ug/m3		98	70 - 130
Tetrachloroethene	11	11.7		ug/m3		108	70 - 130
Toluene	6.0	5.51		ug/m3		91	70 - 130

Method: TO-15 - Volatile Organic Compounds in Ambient Air (Continued)

Lab Sample ID: LCS 140-82010/1002
Matrix: Air
Analysis Batch: 82010

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
trans-1,2-Dichloroethene	6.3	5.62		ug/m3		89	70 - 130
trans-1,3-Dichloropropene	7.3	5.88		ug/m3		81	70 - 130
Trichloroethene	8.6	8.93		ug/m3		104	70 - 130
Trichlorofluoromethane	9.0	10.3		ug/m3		114	60 - 140
Undecane	10	10.7		ug/m3		104	60 - 140
Vinyl acetate	5.6	3.78		ug/m3		67	60 - 140
Vinyl chloride	4.1	3.64		ug/m3		89	70 - 130

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
4-Bromofluorobenzene (Surr)	*120*		*60 - 140*

QC Association Summary

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-34939-1

Air - GC/MS VOA

Analysis Batch: 82010

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
140-34939-1	G231221-BZ-001	Total/NA	Air	TO-15	
140-34939-2	G231221-BZ-002	Total/NA	Air	TO-15	
140-34939-3	G231221-BZ-003	Total/NA	Air	TO-15	
140-34939-4	G231221-BZ-004	Total/NA	Air	TO-15	
140-34939-5	G231221-BZ-005	Total/NA	Air	TO-15	
140-34939-6	G231221-BZ-006	Total/NA	Air	TO-15	
MB 140-82010/8	Method Blank	Total/NA	Air	TO-15	
LCS 140-82010/1002	Lab Control Sample	Total/NA	Air	TO-15	

Lab Chronicle

Client: GHD Services Inc.
Job ID: 140-34939-1
Project/Site: New Richmond Landfill

Client Sample ID: G231221-BZ-001
Lab Sample ID: 140-34939-1
Date Collected: 12/21/23 15:21
Matrix: Air
Date Received: 12/27/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	20 mL	500 mL	82010	01/05/24 22:50	S1K	EET KNX
	Instrument ID: MG									

Client Sample ID: G231221-BZ-002
Lab Sample ID: 140-34939-2
Date Collected: 12/21/23 15:29
Matrix: Air
Date Received: 12/27/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1.97	39.4 mL	500 mL	82010	01/05/24 23:40	S1K	EET KNX
	Instrument ID: MG									

Client Sample ID: G231221-BZ-003
Lab Sample ID: 140-34939-3
Date Collected: 12/21/23 15:31
Matrix: Air
Date Received: 12/27/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	20 mL	500 mL	82010	01/06/24 00:29	S1K	EET KNX
	Instrument ID: MG									

Client Sample ID: G231221-BZ-004
Lab Sample ID: 140-34939-4
Date Collected: 12/21/23 15:39
Matrix: Air
Date Received: 12/27/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		2.43	48.6 mL	500 mL	82010	01/06/24 01:17	S1K	EET KNX
	Instrument ID: MG									

Client Sample ID: G231221-BZ-005
Lab Sample ID: 140-34939-5
Date Collected: 12/21/23 15:46
Matrix: Air
Date Received: 12/27/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1.72	34.4 mL	500 mL	82010	01/06/24 02:08	S1K	EET KNX
	Instrument ID: MG									

Client Sample ID: G231221-BZ-006
Lab Sample ID: 140-34939-6
Date Collected: 12/21/23 15:51
Matrix: Air
Date Received: 12/27/23 09:30

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1.76	35.2 mL	500 mL	82010	01/06/24 02:58	S1K	EET KNX
	Instrument ID: MG									

Lab Chronicle

Client: GHD Services Inc.
Job ID: 140-34939-1
Project/Site: New Richmond Landfill

Client Sample ID: Method Blank
Lab Sample ID: MB 140-82010/8
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	200 mL	500 mL	82010	01/05/24 13:29	S1K	EET KNX
	Instrument ID: MG									

Client Sample ID: Lab Control Sample
Lab Sample ID: LCS 140-82010/1002
Date Collected: N/A
Matrix: Air
Date Received: N/A

Prep Type	Batch Type	Batch Method	Run	Dil Factor	Initial Amount	Final Amount	Batch Number	Prepared or Analyzed	Analyst	Lab
Total/NA	Analysis	TO-15		1	500 mL	500 mL	82010	01/05/24 09:01	S1K	EET KNX
	Instrument ID: MG									

Laboratory References:
EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 140-34939-1
Project/Site: New Richmond Landfill

Laboratory: Eurofins Knoxville

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	998044300	08-31-24

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	1,1,1-Trichloroethane
TO-15		Air	1,1,2,2-Tetrachloroethane
TO-15		Air	1,1,2-Trichloro-1,2,2-trifluoroethane
TO-15		Air	1,1,2-Trichloroethane
TO-15		Air	1,1-Dichloroethane
TO-15		Air	1,1-Dichloroethene
TO-15		Air	1,2,4-Trichlorobenzene
TO-15		Air	1,2,4-Trimethylbenzene
TO-15		Air	1,2-Dibromoethane (EDB)
TO-15		Air	1,2-Dichloro-1,1,2,2-tetrafluoroethane
TO-15		Air	1,2-Dichlorobenzene
TO-15		Air	1,2-Dichloroethane
TO-15		Air	1,2-Dichloropropane
TO-15		Air	1,3,5-Trimethylbenzene
TO-15		Air	1,3-Butadiene
TO-15		Air	1,3-Dichlorobenzene
TO-15		Air	1,4-Dichlorobenzene
TO-15		Air	2-Butanone (MEK)
TO-15		Air	2-Hexanone
TO-15		Air	3-Chloropropene
TO-15		Air	4-Methyl-2-pentanone (MIBK)
TO-15		Air	Acetone
TO-15		Air	Acetonitrile
TO-15		Air	Acrolein
TO-15		Air	Acrylonitrile
TO-15		Air	Alpha Methyl Styrene
TO-15		Air	Benzene
TO-15		Air	Benzyl chloride
TO-15		Air	Bromodichloromethane
TO-15		Air	Bromoform
TO-15		Air	Bromomethane
TO-15		Air	Butane
TO-15		Air	Carbon disulfide
TO-15		Air	Carbon tetrachloride
TO-15		Air	Chlorobenzene
TO-15		Air	Chlorodifluoromethane
TO-15		Air	Chloroethane
TO-15		Air	Chloroform
TO-15		Air	Chloromethane
TO-15		Air	cis-1,2-Dichloroethene
TO-15		Air	cis-1,3-Dichloropropene
TO-15		Air	Cumene
TO-15		Air	Cyclohexane
TO-15		Air	Decane
TO-15		Air	Dibromochloromethane

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 140-34939-1
Project/Site: New Richmond Landfill

Laboratory: Eurofins Knoxville (Continued)

Unless otherwise noted, all analytes for this laboratory were covered under each accreditation/certification below.

Authority	Program	Identification Number	Expiration Date

The following analytes are included in this report, but the laboratory is not certified by the governing authority. This list may include analytes for which the agency does not offer certification.

Analysis Method	Prep Method	Matrix	Analyte
TO-15		Air	Dibromomethane
TO-15		Air	Dichlorodifluoromethane
TO-15		Air	Dodecane
TO-15		Air	Ethyl ether
TO-15		Air	Ethylbenzene
TO-15		Air	Heptane
TO-15		Air	Hexachlorobutadiene
TO-15		Air	Hexane
TO-15		Air	Methyl tert-butyl ether
TO-15		Air	Methylene Chloride
TO-15		Air	m-Xylene & p-Xylene
TO-15		Air	Naphthalene
TO-15		Air	Nonane
TO-15		Air	Octane
TO-15		Air	o-Xylene
TO-15		Air	Pentane
TO-15		Air	Propylbenzene
TO-15		Air	Styrene
TO-15		Air	Tetrachloroethene
TO-15		Air	Toluene
TO-15		Air	trans-1,2-Dichloroethene
TO-15		Air	trans-1,3-Dichloropropene
TO-15		Air	Trichloroethene
TO-15		Air	Trichlorofluoromethane
TO-15		Air	Undecane
TO-15		Air	Vinyl acetate
TO-15		Air	Vinyl chloride

Method Summary

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-34939-1

Method	Method Description	Protocol	Laboratory
TO-15	Volatile Organic Compounds in Ambient Air	EPA	EET KNX

Protocol References:

EPA = US Environmental Protection Agency

Laboratory References:

EET KNX = Eurofins Knoxville, 5815 Middlebrook Pike, Knoxville, TN 37921, TEL (865)291-3000

Sample Summary

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job ID: 140-34939-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received	Asset ID
140-34939-1	G231221-BZ-001	Air	12/21/23 15:21	12/27/23 09:30	Air Canister (6-Liter) #10716
140-34939-2	G231221-BZ-002	Air	12/21/23 15:29	12/27/23 09:30	Air Canister (6-Liter) #09876
140-34939-3	G231221-BZ-003	Air	12/21/23 15:31	12/27/23 09:30	Air Canister (6-Liter) #34000065
140-34939-4	G231221-BZ-004	Air	12/21/23 15:39	12/27/23 09:30	Air Canister (6-Liter) #11217
140-34939-5	G231221-BZ-005	Air	12/21/23 15:46	12/27/23 09:30	Air Canister (6-Liter) #12107
140-34939-6	G231221-BZ-006	Air	12/21/23 15:51	12/27/23 09:30	Air Canister (6-Liter) #34002100

Eurofins TestAmerica, Knoxville
5815 Middlebrook Pike

Knoxville, TN 37921-5947
phone 865.291.3000 fax 865.584.4315

Canister Samples Chain of Custody Record

TestAmerica Laboratories, Inc. assumes no liability with respect to the collection and shipment of these samples.

eurofins | Environment Testing TestAmerica

TestAmerica Laboratories, Inc. d/b/a Eurofins TestAmerica

Client Contact Information		Client Project Manager: Tom Holoday	Samples Collected By: Bill Zuidema	COC No: 1 of 1 COCs
Company Name: GHD Services Inc		Phone: 651-639-0913		TALS Project #:
Address: 900 Long Lake Rd STE 200		Email: Grant.Anderson@GHD.com		For Lab Use Only: Walk-in Client: Lab Sampling:
City/State/Zip: St Paul, MN 55112		Site Contact:		Job / SDG No.:
Phone: 651-639-0913		Tel/Fax		(See below for Add'l Items)
FAX:		Analysis Turnaround Time		
Project Name: New Richmond Landfill		Standard (Specific): X		
Site/Location: New Richmond, WI		Rush (Specifiy):		
P O # 048038				

Sample Identification	Sample Start Date	Time Start	Sample End Date	Time Stop	Canister Vacuum in Field, "Hg (Start)	Canister Vacuum in Field, "Hg (Stop)	Flow Controller ID	Canister ID	TO-14/15 (Standard / Low Level)	TO-15 SIM	EPA 3C	EPA 25C	ASTM D-1946	EPA 15/16	Other (Please specify in notes section)	Sample Type	Indoor Air/Ambient Air	Sub-Slab	Soil Gas	Soil Vapor Extraction (SVE)	Landfill Gas	Other (Please specify in notes section)	Sample Specific Notes:
G231221-BZ-001	12-21-23	1520	12-21-23	1521	-28	-10	-	34705-A-5															
G231221-BZ-002	12-21-23	1528	12-21-23	1529	-29	-10	-	34705-A-11															
G231221-BZ-003	12-21-23	1530	12-21-23	1531	-29	-10	-	34705-A-6															
G231221-BZ-004	12-21-23	1538	12-21-23	1539	-28	-10	-	34705-A-4															
G231221-BZ-005	12-21-23	1545	12-21-23	1546	-29	-10	-	34705-A-10															
G231221-BZ-006	12-21-23	1550	12-21-23	1551	-28	-10	-	34705-A-13															

Temperature (Fahrenheit)		
	Interior	Ambient
Start		
Stop		

Pressure (inches of Hg)		
	Interior	Ambient
Start		
Stop		

Custody Seal Intact
Received Ambient
DH 12/27/23
1 Box FedEx 7884 5615 5835 2DAY
6 Cans / 6 Flows / 1 Gauge

Special Instructions/QC Requirements & Comments:
Contact Grant Anderson with any questions - 612-524-6837

Samples Shipped by: Bill Zuidema	Date / Time: 12-22-2023	Samples Received by: Dawn Heck ETAKNX 12/27/23 9:30	
Samples Relinquished by:	Date / Time:	Received by:	
Relinquished by:	Date / Time:	Received by:	
Lab Use Only: Shipper Name:	Opened by:	Condition:	

140-34939 Chain of Custody

Form No. CA-C-WI-003, Rev. 2.23, dated 5/4/2020

Page 47 of 50

1/9/2024

Loc: 140
34939

EUROFINS KNOXVILLE SAMPLE RECEIPT/CONDITION UPON RECEIPT ANOMALY CHECKLIST Log In Number:

Review Items	Yes	No	NA	If No, what was the problem?
1. Are the shipping containers intact?	✓			☐ **Containers, Broken**
2. Were ambient air containers received intact?			✓	☑ Checked in lab
3. The coolers/containers custody seal if present, is it intact?	✓			☐ Yes ☐ NA
4. Is the cooler temperature within limits? (> freezing temp. of water to 6 °C, VOST: 10°C) Thermometer ID :_____ Correction factor: _____			✓	☐ **Cooler Out of Temp, Client Contacted, Proceed/Cancel** ☐ **Cooler Out of Temp, Same Day Receipt**
5. Were all of the sample containers received intact?	✓			☐ **Containers, Broken**
6. Were samples received in appropriate containers?	✓			☐ **Containers, Improper; Client Contacted; Proceed/Cancel**
7. Do sample container labels match COC? (IDs, Dates, Times)	✓			☐ **COC & Samples Do Not Match** ☐ **COC Incorrect/Incomplete** ☐ **COC Not Received**
8. Were all of the samples listed on the COC received?	✓			☐ **Sample Received, Not on COC** ☐ **Sample on COC, Not Received**
9. Is the date/time of sample collection noted?	✓			☐ **COC; No Date/Time; Client Contacted**
10. Was the sampler identified on the COC?	✓			☐ **Sampler Not Listed on COC**
11. Is the client and project name/# identified?	✓			☐ **COC Incorrect/Incomplete**
12. Are tests/parameters listed for each sample?	✓	✓		☐ **COC No tests on COC**
13. Is the matrix of the samples noted?	✓			☐ **COC Incorrect/Incomplete**
14. Was COC relinquished? (Signed/Dated/Timed)	✓			☐ **COC Incorrect/Incomplete**
15. Were samples received within holding time?	✓			☐ **Holding Time - Receipt**
16. Were samples received with correct chemical preservative (excluding Encore)?			✓	☐ **pH Adjusted, pH Included (See box 16A)** ☐ **Incorrect Preservative**
17. Were VOA samples received without headspace?			✓	☐ **Headspace (VOA only)**
18. Did you check for residual chlorine, if necessary? (e.g. 1613B, 1668) Chlorine test strip lot number:_____			✓	☐ **Residual Chlorine**
19. For 1613B water samples is pH<9?			✓	☐ If no, notify lab to adjust
20. For rad samples was sample activity info. Provided?			✓	☐ Project missing info

Comments/Actions Taken

12,

Labeling Verified by: **Date:**

pH test strip lot number:

	Box 16A: pH Preservation	Box 18A: Residual Chlorine
Preservative:		
Lot Number:		
Exp Date:		
Analyst:		
Date:		
Time:		

Project #: 14001850 PM Instructions: _____

Sample Receiving Associate: Dawn Hicks Date: 12/27/23

QA026R33.doc, 11/10/23

1/9/2024

Eurofins Knoxville - Air Canister Initial Pressure Check

Gauge ID: G5
Date/Time: 12/29/23 1035

Analyst	Sample ID	Pressure @ Receipt (-in Hg or +psig)/initial pressurisation (if applicable)	Asset #	Cleaning Job	Cert Type	Size (L)	Comments
JPD	140-34939-a-1	-3.5	10716	140-34705-a-5	B	6	
JPD	140-34939-a-2	-10.1/4.5	09876	140-34705-a-11	B	6	
JPD	140-34939-a-3	-2.2	34000065	140-34705-a-6	B	6	
JPD	140-34939-a-4	-12.4/6.2	11217	140-34705-a-4	B	6	
JPD	140-34939-a-5	-10.6/1.6	12107	140-34705-a-10	B	6	
JPD	140-34939-a-6	-7.1/5.0	34002100	140-34705-a-13	B	6	

Summa Canister Dilution Worksheet

Client: GHD Services Inc.
Project/Site: New Richmond Landfill

Job No.: 140-34939-1

Lab Sample ID	Canister Volume (L)	Preadjusted Pressure ("Hg)	Preadjusted Pressure (atm)	Preadjusted Volume (L)	Adjusted Pressure (psig)	Adjusted Pressure (atm)	Adjusted Volume (L)	Initial Volume (mL)	Dilution Factor	Final Dilution Factor	Pressure Gauge ID	Date	Analyst Initals
140-34939-2	6	-10.1	0.66	3.97	4.5	1.31	7.84		1.97	1.97		12/29/23 10:39	JPD
140-34939-4	6	-12.4	0.59	3.51	6.2	1.42	8.53		2.43	2.43		12/29/23 10:42	JPD
140-34939-5	6	-10.6	0.65	3.87	1.6	1.11	6.65		1.72	1.72		12/29/23 10:42	JPD
140-34939-6	6	-7.1	0.76	4.58	5.0	1.34	8.04		1.76	1.76		12/29/23 10:44	JPD

Formulae:

Preadjusted Volume (L) = ((Preadjusted Pressure ("Hg) + 29.92 "Hg) * Vol L) / 29.92 "Hg
Adjusted Volume (L) = ((Adjusted Pressure (psig) + 14.7 psig)* Vol L) / 14.7 psig
Dilution Factor = Adjusted Volume (L) / Preadjusted Volume (L)

Where:

29.92 "Hg = Standard atmospheric pressure in inches of Mercury (“Hg)
14.7 psig = Standard atmospheric pressure in pounds per square inch gauge (psig)

Data Verification Report

November 30, 2023

To	Tom Hobday, GHD	**Project No.**	048038-70-01
Copy To	Ryan Aamot, GHD	**Email**	grant.anderson@ghd.com
From	Grant Anderson/mg/9	**Contact No.**	612-524-6836
Project Name	New Richmond Landfill		
Subject	Analytical Results and Data Verification Groundwater and Residential Well Sampling Event New Richmond Landfill Site New Richmond, Wisconsin October 2023		

The services undertaken by GHD in connection with preparing this report were limited to those specifically detailed in the report and are subject to the scope limitations set out in the report.

1. Introduction

This document details a data verification of analytical results for groundwater and residential well samples collected at the New Richmond Landfill Site during October 2023. Samples were submitted to Eurofins Chicago, located in University Park, Illinois. A sample collection and analysis summary is presented in Table 1. The validated analytical results are summarized in Table 2. A summary of the analytical methodology is presented in Table 3.

Standard GHD report deliverables were submitted by the laboratory. The final results and supporting quality assurance/quality control (QA/QC) data were assessed. Evaluation of the data was based on information obtained from the chain of custody forms, finished report forms, method blank data, recovery data from surrogate spikes, laboratory control samples (LCS)/matrix spikes (MS) and field QA/QC samples.

The QA/QC criteria by which these data have been assessed are outlined in the analytical method referenced in Table 3 and applicable guidance from the documents entitled:

1. Quality Assurance Project Plan (QAPP), New Richmond Landfill, WDNR License #2492"; April 2008, Conestoga Rovers & Associates, Report 7
2. "National Functional Guidelines for Organic Superfund Methods Data Review", EPA 540-R-20-005, November 2020

Item 2. will subsequently be referred to as the "Guidelines" in this report.

2. Sample Holding Time and Preservation

The sample holding time criterion for the analyses is summarized in Table 3. Sample chain of custody documents and the analytical report were used to determine sample holding times. All samples were prepared and analyzed within the required holding time.

All samples were properly preserved, delivered on ice, and stored by the laboratory at the required temperature (0-6°C).

3. Laboratory Method Blank Analyses

Method blanks are prepared from a purified matrix and analyzed with investigative samples to determine the existence and magnitude of sample contamination introduced during the analytical procedures.

Laboratory method blanks were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

All method blank results were non-detect, indicating that laboratory contamination was not a factor for this investigation.

4. Surrogate Spike Recoveries

In accordance with the methods employed, all samples, blanks, and QC samples analyzed for organics are spiked with surrogate compounds prior to sample analysis. Surrogate recoveries provide a means to evaluate the effects of laboratory performance on individual sample matrices.

All samples submitted for volatile organic compound (VOC) determinations were spiked with the appropriate number of surrogate compounds prior to sample analysis.

Surrogate recoveries were assessed against laboratory control limits. All surrogate recoveries met the above criteria.

5. Laboratory Control Sample Analyses

LCS are prepared and analyzed as samples to assess the analytical efficiencies of the methods employed, independent of sample matrix effects.

LCS were analyzed at a minimum frequency of 1 per 20 investigative samples and/or 1 per analytical batch.

The LCS contained all compounds of interest. LCS recoveries were assessed per the "Guidelines”. All LCS recoveries were within the laboratory control limits, demonstrating acceptable analytical accuracy.

6. Matrix Spike/Matrix Spike Duplicate (MS/MSD) Analyses

To evaluate the effects of sample matrices on the preparation process, measurement procedures, and accuracy of a particular analysis, samples are spiked with known concentrations of the analytes of concern and analyzed as MS/MSD samples. The relative percent difference (RPD) between the MS and MSD is used to assess analytical precision.

MS/MSD analyses were performed as specified in Table 1.

The MS/MSD samples were spiked with all compounds of interest. All percent recoveries and RPD values were within the laboratory control limits, demonstrating acceptable analytical accuracy and precision.

7. Field QA/QC Samples

The field QA/QC consisted of one trip blank sample, one rinsate blank sample and one field duplicate sample set.

Trip Blank Sample Analysis

To evaluate potential contamination from sample collection, transportation, storage, and analytical activities, one trip blank sample was submitted to the laboratory for VOC analysis. All results were non-detect for the compounds of interest.

Rinsate Blank Sample Analysis

To assess field decontamination procedures and cleanliness of sample containers, one rinsate blank was submitted for analysis, as identified in Table 1. All results were non-detect for the analytes of interest.

Field Duplicate Sample Analysis

To assess the analytical and sampling protocol precision, one field duplicate sample set was collected and submitted "blind" to the laboratory, as specified in Table 1. The RPDs associated with these duplicate samples must be less than 50 percent. If the reported concentration in either the investigative sample or its duplicate is less than five times the reporting limit (RL), the evaluation criteria is one times the RL value.

All field duplicate results met the above criteria demonstrating acceptable sampling and analytical precision.

8. Analyte Reporting

The laboratory reported detected results down to the laboratory's sample-specific method detection limit (MDL) for each analyte. Positive analyte detections less than the RL but greater than the MDL were qualified as estimated (J) in Table 2 unless qualified otherwise in this memorandum. Non-detect results were presented as non-detect at the RL in Table 2.

9. Conclusion

Based on the assessment detailed in the foregoing, the data summarized in Table 2 are acceptable without qualification.

Regards,

Grant Anderson
Digital Intelligence-Data Management-Data Validator

Encl.

Table 1

Sample Collection and Analysis Summary
Groundwater and Residential Well Sampling Event
New Richmond Landfill Site
New Richmond, Wisconsin
October 2023

Sample Identification	Location	Matrix	Collection Date (mm/dd/yyyy)	Collection Time (hr:min)	Analysis/Parameters	Comments
W-231010-RA-01	MW19	water	10/10/2023	10:25	VOC	
W-231010-RA-02	MW19	water	10/10/2023	00:00	VOC	Duplicate (RA-01)
W-231010-RA-03	MW19A	water	10/10/2023	11:00	VOC	
W-231010-RA-04	2056 Cty Rd C	water	10/10/2023	11:12	VOC	MS/MSD
W-231010-RA-05	MW17	water	10/10/2023	12:30	VOC	
W-231010-RA-06	MW17A	water	10/10/2023	12:48	VOC	
W-231010-RA-07	MW17A	water	10/10/2023	12:50	VOC	Rinsate Blank
W-231010-RA-08	MW18	water	10/10/2023	13:40	VOC	
W-231010-RA-09	2055 Cty Rd C	water	10/10/2023	13:45	VOC	
W-231011-RA-10	MW9	water	10/11/2023	10:22	VOC	
W-231011-RA-11	MW16	water	10/11/2023	11:27	VOC	
W-231011-RA-12	MW16A	water	10/11/2023	13:47	VOC	
W-231012-RA-13	MW10A	water	10/12/2023	09:56	VOC	
W-231012-RA-14	MW10	water	10/12/2023	10:09	VOC	
W-231012-RA-15	MW1	water	10/12/2023	10:17	VOC	
W-231012-RA-16	MW2	water	10/12/2023	10:33	VOC	
TRIP BLANK	Lab	water	10/10/2023	00:00	VOC	Trip Blank

Notes:
VOC - Volatile Organic Compounds
MS/MSD - Matrix Spike/Matrix Spike Duplicate

Table 2

Validated Analytical Results Summary
Groundwater and Residential Well Sampling Event
New Richmond Landfill Site
New Richmond, Wisconsin
October 2023

Location ID:		2055 Cty Rd C	2056 Cty Rd C	MW1	MW2	MW9	MW10	MW10A	MW16	MW16A	MW17	MW17A	MW18
Sample Name:		W-231010-RA-09	W-231010-RA-04	W-231012-RA-15	W-231012-RA-16	W-231011-RA-10	W-231012-RA-14	W-231012-RA-13	W-231011-RA-11	W-231011-RA-12	W-231010-RA-05	W-231010-RA-06	W-231010-RA-08
Sample Date:		10/10/2023	10/10/2023	10/12/2023	10/12/2023	10/11/2023	10/12/2023	10/12/2023	10/11/2023	10/11/2023	10/10/2023	10/10/2023	10/10/2023
Parameters	**Unit**												
Volatile Organic Compounds													
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	4.5	1.3	4.3	1.0 U	4.3	6.6	1.0 U	4.3	2.4	7.8
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	7.6	2.2	3.8	1.0 U	6.8	8.2	1.0 U	6.1	1.0 U	3.1
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.69 J	1.9	1.0 U	1.3	1.0 U	2.6
1,2,3-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Acetone	µg/L	10 U	5.8 J	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Benzene	µg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Carbon disulfide	µg/L	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chlorobromomethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	2.0 U	2.0 U	2.2	2.0	2.0 U	2.0 U	2.0 U	0.65 J	2.0 U	2.0 U	2.0 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U	3.0 U
Ethylbenzene	µg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
m&p-Xylenes	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U
o-Xylene	µg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.2	1.0 U	1.0 U	1.0 U	1.0 U
Tetrahydrofuran	µg/L	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U	10 U
Toluene	µg/L	0.50 U	4.4	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U	0.50 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Notes:
U - Not detected at the associated reporting limit
J – Estimated concentration

Table 2

Validated Analytical Results Summary
Groundwater and Residential Well Sampling Event
New Richmond Landfill Site
New Richmond, Wisconsin
October 2023

Location ID:		**MW19**	**MW19**	**MW19A**
Sample Name:		**W-231010-RA-01**	**W-231010-RA-02**	**W-231010-RA-03**
Sample Date:		**10/10/2023**	**10/10/2023**	**10/10/2023**
			Duplicate	
Parameters	**Unit**			
Volatile Organic Compounds				
1,1,1-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1,2,2-Tetrachloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1,2-Trichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,1-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U
1,2,3-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2,4-Trichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2,4-Trimethylbenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dibromo-3-chloropropane (DBCP)	µg/L	5.0 U	5.0 U	5.0 U
1,2-Dibromoethane (Ethylene dibromide)	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichloroethane	µg/L	1.0 U	1.0 U	1.0 U
1,2-Dichloropropane	µg/L	1.0 U	1.0 U	1.0 U
1,3,5-Trimethylbenzene	µg/L	1.0 U	1.0 U	1.0 U
1,3-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
1,4-Dichlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
2-Butanone (Methyl ethyl ketone) (MEK)	µg/L	5.0 U	5.0 U	5.0 U
2-Hexanone	µg/L	5.0 U	5.0 U	5.0 U
4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	µg/L	5.0 U	5.0 U	5.0 U
Acetone	µg/L	10 U	10 U	10 U
Benzene	µg/L	0.50 U	0.50 U	0.50 U
Bromodichloromethane	µg/L	1.0 U	1.0 U	1.0 U
Bromoform	µg/L	1.0 U	1.0 U	1.0 U
Bromomethane (Methyl bromide)	µg/L	3.0 U	3.0 U	3.0 U
Carbon disulfide	µg/L	2.0 U	2.0 U	2.0 U
Carbon tetrachloride	µg/L	1.0 U	1.0 U	1.0 U
Chlorobenzene	µg/L	1.0 U	1.0 U	1.0 U
Chlorobromomethane	µg/L	1.0 U	1.0 U	1.0 U
Chloroethane	µg/L	5.0 U	5.0 U	5.0 U
Chloroform (Trichloromethane)	µg/L	2.0 U	2.0 U	2.0 U
Chloromethane (Methyl chloride)	µg/L	5.0 U	5.0 U	5.0 U
cis-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U
cis-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Dibromochloromethane	µg/L	1.0 U	1.0 U	1.0 U
Dichlorodifluoromethane (CFC-12)	µg/L	3.0 U	3.0 U	3.0 U
Ethylbenzene	µg/L	0.50 U	0.50 U	0.50 U
Isopropyl benzene	µg/L	1.0 U	1.0 U	1.0 U
m&p-Xylenes	µg/L	1.0 U	1.0 U	1.0 U
Methyl tert butyl ether (MTBE)	µg/L	1.0 U	1.0 U	1.0 U
Methylene chloride	µg/L	5.0 U	5.0 U	5.0 U
o-Xylene	µg/L	0.50 U	0.50 U	0.50 U
Styrene	µg/L	1.0 U	1.0 U	1.0 U
Tetrachloroethene	µg/L	1.0 U	1.0 U	1.0 U
Tetrahydrofuran	µg/L	10 U	10 U	10 U
Toluene	µg/L	0.50 U	0.50 U	0.50 U
trans-1,2-Dichloroethene	µg/L	1.0 U	1.0 U	1.0 U
trans-1,3-Dichloropropene	µg/L	1.0 U	1.0 U	1.0 U
Trichloroethene	µg/L	0.50 U	0.50 U	0.50 U
Trichlorofluoromethane (CFC-11)	µg/L	1.0 U	1.0 U	1.0 U
Trifluorotrichloroethane (CFC-113)	µg/L	1.0 U	1.0 U	1.0 U
Vinyl chloride	µg/L	1.0 U	1.0 U	1.0 U

Notes:
U - Not detected at the associated reporting limit
J – Estimated concentration

Table 3

Analytical Method and Holding Time
Groundwater and Residential Well Sampling Event
New Richmond Landfill Site
New Richmond, Wisconsin
October 2023

			Holding Time	
Parameter	**Method**	**Matrix**	**Collection to Extraction (Days)**	**Collection or Extraction to Analysis (Days)**
Volatile Organic Compounds (VOC)	SW-846 8260D	Water	-	14

Method Reference:
SW-846 - "Test Methods for Evaluating Solid Waste, Physical/Chemical Methods", SW-846, Third Edition, 1986, with subsequent revisions

eurofins | Environment Testing

ANALYTICAL REPORT

PREPARED FOR

Attn: Mr. Grant Anderson
GHD Services Inc.
900 Long Lake Road
Suite 200
New Brighton, Minnesota 55112

Generated 10/25/2023 11:07:21 AM

JOB DESCRIPTION

New Richmond - 048038

JOB NUMBER

500-241042-1

Eurofins Chicago
2417 Bond Street
University Park IL 60484

See page two for job notes and contact information.

Eurofins Chicago

Job Notes

This report may not be reproduced except in full, and with written approval from the laboratory. The results relate only to the samples tested. For questions please contact the Project Manager at the e-mail address or telephone number listed on this page.

The test results in this report relate only to the samples as received by the laboratory and will meet all requirements of the methodology, with any exceptions noted. This report shall not be reproduced except in full, without the express written approval of the laboratory. All questions should be directed to the Eurofins Chicago Project Manager.

Authorization

Generated
10/25/2023 11:07:21 AM

Authorized for release by
Carlene McCutcheon, Senior Project Manager
Carlene.McCutcheon@et.eurofinsus.com
(708)325-6562

Table of Contents

Job ID: 500-241042-1

Laboratory: Eurofins Chicago

Narrative

Job Narrative
500-241042-1

Receipt
The samples were received on 10/13/2023 9:10 AM. Unless otherwise noted below, the samples arrived in good condition, and where required, properly preserved and on ice. The temperature of the cooler at receipt was 1.8º C.

GC/MS VOA
Method 8260D: The continuing calibration verification (CCV) associated with the following had compounds outside 20% drift for method 8260D. Where applicable, a standard was analyzed at the reporting limit (CCVL) and analyses were able to continue, as low failing compounds were detected. Any detects for these out of control compounds should be considered estimates.W-231010-RA-01 (500-241042-1), W-231010-RA-02 (500-241042-2), W-231010-RA-03 (500-241042-3), W-231010-RA-04 (500-241042-4), W-231010-RA-05 (500-241042-5), W-231010-RA-06 (500-241042-6), W-231010-RA-07 (500-241042-7), W-231010-RA-08 (500-241042-8), W-231010-RA-09 (500-241042-9), W-231011-RA-10 (500-241042-10), W-231011-RA-11 (500-241042-11), W-231011-RA-12 (500-241042-12), W-231012-RA-13 (500-241042-13), W-231012-RA-14 (500-241042-14), W-231012-RA-15 (500-241042-15), W-231012-RA-16 (500-241042-16) and TRIP BLANK (500-241042-17).

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.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-01 — Lab Sample ID: 500-241042-1

No Detections.

Client Sample ID: W-231010-RA-02 — Lab Sample ID: 500-241042-2

No Detections.

Client Sample ID: W-231010-RA-03 — Lab Sample ID: 500-241042-3

No Detections.

Client Sample ID: W-231010-RA-04 — Lab Sample ID: 500-241042-4

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
Acetone	5.8	J ^c	10	1.7	ug/L	1		8260D	Total/NA
Toluene	4.4		0.50	0.15	ug/L	1		8260D	Total/NA

Client Sample ID: W-231010-RA-05 — Lab Sample ID: 500-241042-5

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	4.3		1.0	0.38	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	6.1		1.0	0.41	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	1.3		1.0	0.39	ug/L	1		8260D	Total/NA

Client Sample ID: W-231010-RA-06 — Lab Sample ID: 500-241042-6

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	2.4		1.0	0.38	ug/L	1		8260D	Total/NA

Client Sample ID: W-231010-RA-07 — Lab Sample ID: 500-241042-7

No Detections.

Client Sample ID: W-231010-RA-08 — Lab Sample ID: 500-241042-8

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	7.8		1.0	0.38	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	3.1		1.0	0.41	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	2.6		1.0	0.39	ug/L	1		8260D	Total/NA

Client Sample ID: W-231010-RA-09 — Lab Sample ID: 500-241042-9

No Detections.

Client Sample ID: W-231011-RA-10 — Lab Sample ID: 500-241042-10

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	4.3		1.0	0.38	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	3.8		1.0	0.41	ug/L	1		8260D	Total/NA

Client Sample ID: W-231011-RA-11 — Lab Sample ID: 500-241042-11

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	6.6		1.0	0.38	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	8.2		1.0	0.41	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	1.9		1.0	0.39	ug/L	1		8260D	Total/NA
Chloroform	0.65	J	2.0	0.37	ug/L	1		8260D	Total/NA
Tetrachloroethene	1.2		1.0	0.37	ug/L	1		8260D	Total/NA

This Detection Summary does not include radiochemical test results.

Detection Summary

Client: GHD Services Inc.
Job ID: 500-241042-1
Project/Site: New Richmond - 048038

Client Sample ID: W-231011-RA-12 — Lab Sample ID: 500-241042-12

No Detections.

Client Sample ID: W-231012-RA-13 — Lab Sample ID: 500-241042-13

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	4.3		1.0	0.38	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	6.8		1.0	0.41	ug/L	1		8260D	Total/NA
1,1-Dichloroethene	0.69	J	1.0	0.39	ug/L	1		8260D	Total/NA

Client Sample ID: W-231012-RA-14 — Lab Sample ID: 500-241042-14

No Detections.

Client Sample ID: W-231012-RA-15 — Lab Sample ID: 500-241042-15

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	4.5		1.0	0.38	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	7.6		1.0	0.41	ug/L	1		8260D	Total/NA
Chloroform	2.2		2.0	0.37	ug/L	1		8260D	Total/NA

Client Sample ID: W-231012-RA-16 — Lab Sample ID: 500-241042-16

Analyte	Result	Qualifier	LOQ	LOD	Unit	Dil Fac	D	Method	Prep Type
1,1,1-Trichloroethane	1.3		1.0	0.38	ug/L	1		8260D	Total/NA
1,1-Dichloroethane	2.2		1.0	0.41	ug/L	1		8260D	Total/NA
Chloroform	2.0		2.0	0.37	ug/L	1		8260D	Total/NA

Client Sample ID: TRIP BLANK — Lab Sample ID: 500-241042-17

No Detections.

This Detection Summary does not include radiochemical test results.

Method Summary

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Method	Method Description	Protocol	Laboratory
8260D	Volatile Organic Compounds by GC/MS	SW846	EET CHI
5030B	Purge and Trap	SW846	EET CHI

Protocol References:

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

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Sample Summary

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Lab Sample ID	Client Sample ID	Matrix	Collected	Received
500-241042-1	W-231010-RA-01	Water	10/10/23 10:25	10/13/23 09:10
500-241042-2	W-231010-RA-02	Water	10/10/23 00:00	10/13/23 09:10
500-241042-3	W-231010-RA-03	Water	10/10/23 11:00	10/13/23 09:10
500-241042-4	W-231010-RA-04	Water	10/10/23 11:12	10/13/23 09:10
500-241042-5	W-231010-RA-05	Water	10/10/23 12:30	10/13/23 09:10
500-241042-6	W-231010-RA-06	Water	10/10/23 12:48	10/13/23 09:10
500-241042-7	W-231010-RA-07	Water	10/10/23 12:50	10/13/23 09:10
500-241042-8	W-231010-RA-08	Water	10/10/23 13:40	10/13/23 09:10
500-241042-9	W-231010-RA-09	Water	10/10/23 13:45	10/13/23 09:10
500-241042-10	W-231011-RA-10	Water	10/11/23 10:22	10/13/23 09:10
500-241042-11	W-231011-RA-11	Water	10/11/23 11:27	10/13/23 09:10
500-241042-12	W-231011-RA-12	Water	10/11/23 13:47	10/13/23 09:10
500-241042-13	W-231012-RA-13	Water	10/12/23 09:56	10/13/23 09:10
500-241042-14	W-231012-RA-14	Water	10/12/23 10:09	10/13/23 09:10
500-241042-15	W-231012-RA-15	Water	10/12/23 10:17	10/13/23 09:10
500-241042-16	W-231012-RA-16	Water	10/12/23 10:33	10/13/23 09:10
500-241042-17	TRIP BLANK	Water	10/10/23 00:00	10/13/23 09:10

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-01
Date Collected: 10/10/23 10:25
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/19/23 23:26	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/19/23 23:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/19/23 23:26	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/19/23 23:26	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/19/23 23:26	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/19/23 23:26	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/19/23 23:26	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/19/23 23:26	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/19/23 23:26	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/19/23 23:26	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/19/23 23:26	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/19/23 23:26	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/19/23 23:26	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/19/23 23:26	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/19/23 23:26	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/19/23 23:26	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/19/23 23:26	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/19/23 23:26	1
Acetone	<1.7	^c	10	1.7	ug/L			10/19/23 23:26	1
Benzene	<0.15		0.50	0.15	ug/L			10/19/23 23:26	1
Bromoform	<0.48		1.0	0.48	ug/L			10/19/23 23:26	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/19/23 23:26	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/19/23 23:26	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/19/23 23:26	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/19/23 23:26	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/19/23 23:26	1
Chloroform	<0.37		2.0	0.37	ug/L			10/19/23 23:26	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/19/23 23:26	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/19/23 23:26	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/19/23 23:26	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/19/23 23:26	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/19/23 23:26	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/19/23 23:26	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/19/23 23:26	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/19/23 23:26	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/19/23 23:26	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/19/23 23:26	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/19/23 23:26	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/19/23 23:26	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/19/23 23:26	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/19/23 23:26	1
Styrene	<0.39		1.0	0.39	ug/L			10/19/23 23:26	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/19/23 23:26	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/19/23 23:26	1
Toluene	<0.15		0.50	0.15	ug/L			10/19/23 23:26	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/19/23 23:26	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/19/23 23:26	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/19/23 23:26	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/19/23 23:26	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-01
Date Collected: 10/10/23 10:25
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-1
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/19/23 23:26	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/19/23 23:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*112*		*75 - 126*		*10/19/23 23:26*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*		*10/19/23 23:26*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 120*		*10/19/23 23:26*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*10/19/23 23:26*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-02
Date Collected: 10/10/23 00:00
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-2
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/19/23 23:50	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/19/23 23:50	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/19/23 23:50	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/19/23 23:50	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/19/23 23:50	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/19/23 23:50	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/19/23 23:50	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/19/23 23:50	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/19/23 23:50	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/19/23 23:50	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/19/23 23:50	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/19/23 23:50	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/19/23 23:50	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/19/23 23:50	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/19/23 23:50	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/19/23 23:50	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/19/23 23:50	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/19/23 23:50	1
Acetone	<1.7	^c	10	1.7	ug/L			10/19/23 23:50	1
Benzene	<0.15		0.50	0.15	ug/L			10/19/23 23:50	1
Bromoform	<0.48		1.0	0.48	ug/L			10/19/23 23:50	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/19/23 23:50	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/19/23 23:50	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/19/23 23:50	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/19/23 23:50	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/19/23 23:50	1
Chloroform	<0.37		2.0	0.37	ug/L			10/19/23 23:50	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/19/23 23:50	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/19/23 23:50	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/19/23 23:50	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/19/23 23:50	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/19/23 23:50	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/19/23 23:50	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/19/23 23:50	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/19/23 23:50	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/19/23 23:50	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/19/23 23:50	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/19/23 23:50	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/19/23 23:50	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/19/23 23:50	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/19/23 23:50	1
Styrene	<0.39		1.0	0.39	ug/L			10/19/23 23:50	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/19/23 23:50	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/19/23 23:50	1
Toluene	<0.15		0.50	0.15	ug/L			10/19/23 23:50	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/19/23 23:50	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/19/23 23:50	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/19/23 23:50	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/19/23 23:50	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-02
Date Collected: 10/10/23 00:00
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-2
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/19/23 23:50	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/19/23 23:50	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*113*		*75 - 126*		*10/19/23 23:50*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 124*		*10/19/23 23:50*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 120*		*10/19/23 23:50*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*10/19/23 23:50*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-03
Date Collected: 10/10/23 11:00
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/20/23 00:13	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 00:13	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 00:13	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 00:13	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/20/23 00:13	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/20/23 00:13	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 00:13	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 00:13	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 00:13	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 00:13	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 00:13	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 00:13	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 00:13	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 00:13	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 00:13	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 00:13	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 00:13	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 00:13	1
Acetone	<1.7	^c	10	1.7	ug/L			10/20/23 00:13	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 00:13	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 00:13	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 00:13	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 00:13	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 00:13	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 00:13	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 00:13	1
Chloroform	<0.37		2.0	0.37	ug/L			10/20/23 00:13	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 00:13	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 00:13	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 00:13	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 00:13	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 00:13	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 00:13	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 00:13	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 00:13	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 00:13	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 00:13	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 00:13	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 00:13	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 00:13	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 00:13	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 00:13	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/20/23 00:13	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 00:13	1
Toluene	<0.15		0.50	0.15	ug/L			10/20/23 00:13	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 00:13	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 00:13	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 00:13	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 00:13	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-03
Date Collected: 10/10/23 11:00
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-3
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 00:13	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 00:13	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*115*		*75 - 126*		*10/20/23 00:13*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*		*10/20/23 00:13*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 120*		*10/20/23 00:13*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*10/20/23 00:13*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-04
Date Collected: 10/10/23 11:12
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/20/23 05:12	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 05:12	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 05:12	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 05:12	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/20/23 05:12	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/20/23 05:12	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 05:12	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 05:12	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 05:12	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 05:12	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 05:12	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 05:12	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 05:12	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 05:12	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 05:12	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 05:12	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 05:12	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 05:12	1
Acetone	**5.8**	**J ^c**	10	1.7	ug/L			10/20/23 05:12	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 05:12	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 05:12	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 05:12	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 05:12	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 05:12	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 05:12	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 05:12	1
Chloroform	<0.37		2.0	0.37	ug/L			10/20/23 05:12	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 05:12	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 05:12	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 05:12	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 05:12	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 05:12	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 05:12	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 05:12	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 05:12	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 05:12	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 05:12	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 05:12	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 05:12	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 05:12	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 05:12	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 05:12	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/20/23 05:12	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 05:12	1
Toluene	**4.4**		0.50	0.15	ug/L			10/20/23 05:12	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 05:12	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 05:12	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 05:12	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 05:12	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-04
Date Collected: 10/10/23 11:12
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-4
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 05:12	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 05:12	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*118*		*75 - 126*		*10/20/23 05:12*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*		*10/20/23 05:12*	*1*
Dibromofluoromethane (Surr)	*113*		*75 - 120*		*10/20/23 05:12*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*10/20/23 05:12*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-05
Date Collected: 10/10/23 12:30
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**4.3**		1.0	0.38	ug/L			10/20/23 00:36	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 00:36	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 00:36	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 00:36	1
1,1-Dichloroethane	**6.1**		1.0	0.41	ug/L			10/20/23 00:36	1
1,1-Dichloroethene	**1.3**		1.0	0.39	ug/L			10/20/23 00:36	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 00:36	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 00:36	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 00:36	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 00:36	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 00:36	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 00:36	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 00:36	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 00:36	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 00:36	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 00:36	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 00:36	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 00:36	1
Acetone	<1.7	^c	10	1.7	ug/L			10/20/23 00:36	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 00:36	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 00:36	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 00:36	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 00:36	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 00:36	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 00:36	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 00:36	1
Chloroform	<0.37		2.0	0.37	ug/L			10/20/23 00:36	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 00:36	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 00:36	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 00:36	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 00:36	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 00:36	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 00:36	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 00:36	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 00:36	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 00:36	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 00:36	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 00:36	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 00:36	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 00:36	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 00:36	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 00:36	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/20/23 00:36	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 00:36	1
Toluene	<0.15		0.50	0.15	ug/L			10/20/23 00:36	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 00:36	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 00:36	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 00:36	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 00:36	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-05
Date Collected: 10/10/23 12:30
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-5
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 00:36	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 00:36	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*		*10/20/23 00:36*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*		*10/20/23 00:36*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 120*		*10/20/23 00:36*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*10/20/23 00:36*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-06
Date Collected: 10/10/23 12:48
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	2.4		1.0	0.38	ug/L			10/20/23 00:59	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 00:59	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 00:59	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 00:59	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/20/23 00:59	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/20/23 00:59	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 00:59	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 00:59	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 00:59	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 00:59	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 00:59	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 00:59	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 00:59	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 00:59	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 00:59	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 00:59	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 00:59	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 00:59	1
Acetone	<1.7	^c	10	1.7	ug/L			10/20/23 00:59	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 00:59	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 00:59	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 00:59	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 00:59	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 00:59	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 00:59	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 00:59	1
Chloroform	<0.37		2.0	0.37	ug/L			10/20/23 00:59	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 00:59	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 00:59	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 00:59	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 00:59	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 00:59	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 00:59	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 00:59	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 00:59	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 00:59	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 00:59	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 00:59	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 00:59	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 00:59	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 00:59	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 00:59	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/20/23 00:59	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 00:59	1
Toluene	<0.15		0.50	0.15	ug/L			10/20/23 00:59	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 00:59	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 00:59	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 00:59	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 00:59	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-06
Date Collected: 10/10/23 12:48
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-6
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 00:59	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 00:59	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*		*10/20/23 00:59*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*		*10/20/23 00:59*	*1*
Dibromofluoromethane (Surr)	*111*		*75 - 120*		*10/20/23 00:59*	*1*
Toluene-d8 (Surr)	*100*		*75 - 120*		*10/20/23 00:59*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-07
Date Collected: 10/10/23 12:50
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/20/23 01:22	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 01:22	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 01:22	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 01:22	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/20/23 01:22	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/20/23 01:22	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 01:22	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 01:22	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 01:22	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 01:22	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 01:22	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 01:22	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 01:22	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 01:22	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 01:22	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 01:22	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 01:22	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 01:22	1
Acetone	<1.7	^c	10	1.7	ug/L			10/20/23 01:22	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 01:22	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 01:22	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 01:22	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 01:22	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 01:22	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 01:22	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 01:22	1
Chloroform	<0.37		2.0	0.37	ug/L			10/20/23 01:22	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 01:22	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 01:22	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 01:22	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 01:22	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 01:22	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 01:22	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 01:22	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 01:22	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 01:22	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 01:22	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 01:22	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 01:22	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 01:22	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 01:22	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 01:22	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/20/23 01:22	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 01:22	1
Toluene	<0.15		0.50	0.15	ug/L			10/20/23 01:22	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 01:22	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 01:22	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 01:22	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 01:22	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-07
Date Collected: 10/10/23 12:50
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-7
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 01:22	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 01:22	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*116*		*75 - 126*		*10/20/23 01:22*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*		*10/20/23 01:22*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 120*		*10/20/23 01:22*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*10/20/23 01:22*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-08
Date Collected: 10/10/23 13:40
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**7.8**		1.0	0.38	ug/L			10/20/23 01:45	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 01:45	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 01:45	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 01:45	1
1,1-Dichloroethane	**3.1**		1.0	0.41	ug/L			10/20/23 01:45	1
1,1-Dichloroethene	**2.6**		1.0	0.39	ug/L			10/20/23 01:45	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 01:45	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 01:45	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 01:45	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 01:45	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 01:45	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 01:45	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 01:45	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 01:45	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 01:45	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 01:45	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 01:45	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 01:45	1
Acetone	<1.7	^c	10	1.7	ug/L			10/20/23 01:45	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 01:45	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 01:45	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 01:45	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 01:45	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 01:45	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 01:45	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 01:45	1
Chloroform	<0.37		2.0	0.37	ug/L			10/20/23 01:45	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 01:45	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 01:45	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 01:45	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 01:45	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 01:45	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 01:45	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 01:45	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 01:45	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 01:45	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 01:45	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 01:45	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 01:45	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 01:45	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 01:45	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 01:45	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/20/23 01:45	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 01:45	1
Toluene	<0.15		0.50	0.15	ug/L			10/20/23 01:45	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 01:45	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 01:45	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 01:45	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 01:45	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-08
Date Collected: 10/10/23 13:40
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-8
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 01:45	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 01:45	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 126*		*10/20/23 01:45*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 124*		*10/20/23 01:45*	*1*
Dibromofluoromethane (Surr)	*111*		*75 - 120*		*10/20/23 01:45*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*10/20/23 01:45*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-09
Date Collected: 10/10/23 13:45
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/20/23 02:08	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 02:08	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 02:08	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 02:08	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/20/23 02:08	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/20/23 02:08	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 02:08	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 02:08	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 02:08	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 02:08	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 02:08	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 02:08	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 02:08	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 02:08	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 02:08	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 02:08	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 02:08	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 02:08	1
Acetone	<1.7	^c	10	1.7	ug/L			10/20/23 02:08	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 02:08	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 02:08	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 02:08	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 02:08	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 02:08	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 02:08	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 02:08	1
Chloroform	<0.37		2.0	0.37	ug/L			10/20/23 02:08	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 02:08	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 02:08	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 02:08	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 02:08	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 02:08	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 02:08	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 02:08	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 02:08	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 02:08	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 02:08	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 02:08	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 02:08	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 02:08	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 02:08	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 02:08	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/20/23 02:08	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 02:08	1
Toluene	<0.15		0.50	0.15	ug/L			10/20/23 02:08	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 02:08	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 02:08	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 02:08	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 02:08	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-09
Date Collected: 10/10/23 13:45
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-9
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 02:08	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 02:08	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*		*10/20/23 02:08*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*		*10/20/23 02:08*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 120*		*10/20/23 02:08*	*1*
Toluene-d8 (Surr)	*99*		*75 - 120*		*10/20/23 02:08*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231011-RA-10
Date Collected: 10/11/23 10:22
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-10
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**4.3**		1.0	0.38	ug/L			10/20/23 02:31	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 02:31	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 02:31	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 02:31	1
1,1-Dichloroethane	**3.8**		1.0	0.41	ug/L			10/20/23 02:31	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/20/23 02:31	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 02:31	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 02:31	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 02:31	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 02:31	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 02:31	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 02:31	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 02:31	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 02:31	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 02:31	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 02:31	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 02:31	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 02:31	1
Acetone	<1.7	^c	10	1.7	ug/L			10/20/23 02:31	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 02:31	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 02:31	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 02:31	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 02:31	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 02:31	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 02:31	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 02:31	1
Chloroform	<0.37		2.0	0.37	ug/L			10/20/23 02:31	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 02:31	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 02:31	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 02:31	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 02:31	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 02:31	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 02:31	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 02:31	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 02:31	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 02:31	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 02:31	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 02:31	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 02:31	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 02:31	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 02:31	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 02:31	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/20/23 02:31	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 02:31	1
Toluene	<0.15		0.50	0.15	ug/L			10/20/23 02:31	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 02:31	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 02:31	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 02:31	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 02:31	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231011-RA-10
Date Collected: 10/11/23 10:22
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-10
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 02:31	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 02:31	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 126*		*10/20/23 02:31*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*		*10/20/23 02:31*	*1*
Dibromofluoromethane (Surr)	*108*		*75 - 120*		*10/20/23 02:31*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*10/20/23 02:31*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231011-RA-11

Date Collected: 10/11/23 11:27
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-11

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**6.6**		1.0	0.38	ug/L			10/20/23 02:54	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 02:54	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 02:54	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 02:54	1
1,1-Dichloroethane	**8.2**		1.0	0.41	ug/L			10/20/23 02:54	1
1,1-Dichloroethene	**1.9**		1.0	0.39	ug/L			10/20/23 02:54	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 02:54	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 02:54	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 02:54	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 02:54	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 02:54	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 02:54	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 02:54	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 02:54	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 02:54	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 02:54	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 02:54	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 02:54	1
Acetone	<1.7	^c	10	1.7	ug/L			10/20/23 02:54	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 02:54	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 02:54	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 02:54	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 02:54	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 02:54	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 02:54	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 02:54	1
Chloroform	**0.65**	**J**	2.0	0.37	ug/L			10/20/23 02:54	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 02:54	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 02:54	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 02:54	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 02:54	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 02:54	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 02:54	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 02:54	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 02:54	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 02:54	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 02:54	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 02:54	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 02:54	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 02:54	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 02:54	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 02:54	1
Tetrachloroethene	**1.2**		1.0	0.37	ug/L			10/20/23 02:54	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 02:54	1
Toluene	<0.15		0.50	0.15	ug/L			10/20/23 02:54	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 02:54	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 02:54	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 02:54	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 02:54	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231011-RA-11
Date Collected: 10/11/23 11:27
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-11
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 02:54	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 02:54	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*120*		*75 - 126*		*10/20/23 02:54*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 124*		*10/20/23 02:54*	*1*
Dibromofluoromethane (Surr)	*113*		*75 - 120*		*10/20/23 02:54*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*10/20/23 02:54*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231011-RA-12

Date Collected: 10/11/23 13:47
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-12

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/20/23 03:17	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 03:17	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 03:17	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 03:17	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/20/23 03:17	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/20/23 03:17	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 03:17	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 03:17	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 03:17	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 03:17	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 03:17	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 03:17	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 03:17	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 03:17	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 03:17	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 03:17	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 03:17	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 03:17	1
Acetone	<1.7	^c	10	1.7	ug/L			10/20/23 03:17	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 03:17	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 03:17	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 03:17	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 03:17	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 03:17	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 03:17	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 03:17	1
Chloroform	<0.37		2.0	0.37	ug/L			10/20/23 03:17	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 03:17	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 03:17	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 03:17	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 03:17	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 03:17	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 03:17	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 03:17	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 03:17	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 03:17	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 03:17	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 03:17	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 03:17	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 03:17	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 03:17	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 03:17	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/20/23 03:17	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 03:17	1
Toluene	<0.15		0.50	0.15	ug/L			10/20/23 03:17	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 03:17	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 03:17	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 03:17	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 03:17	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231011-RA-12
Date Collected: 10/11/23 13:47
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-12
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 03:17	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 03:17	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*75 - 126*		*10/20/23 03:17*	*1*
4-Bromofluorobenzene (Surr)	*98*		*72 - 124*		*10/20/23 03:17*	*1*
Dibromofluoromethane (Surr)	*112*		*75 - 120*		*10/20/23 03:17*	*1*
Toluene-d8 (Surr)	*96*		*75 - 120*		*10/20/23 03:17*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231012-RA-13

Date Collected: 10/12/23 09:56
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-13

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**4.3**		1.0	0.38	ug/L			10/20/23 03:40	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 03:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 03:40	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 03:40	1
1,1-Dichloroethane	**6.8**		1.0	0.41	ug/L			10/20/23 03:40	1
1,1-Dichloroethene	**0.69**	**J**	1.0	0.39	ug/L			10/20/23 03:40	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 03:40	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 03:40	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 03:40	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 03:40	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 03:40	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 03:40	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 03:40	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 03:40	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 03:40	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 03:40	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 03:40	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 03:40	1
Acetone	<1.7	^c	10	1.7	ug/L			10/20/23 03:40	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 03:40	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 03:40	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 03:40	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 03:40	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 03:40	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 03:40	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 03:40	1
Chloroform	<0.37		2.0	0.37	ug/L			10/20/23 03:40	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 03:40	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 03:40	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 03:40	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 03:40	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 03:40	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 03:40	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 03:40	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 03:40	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 03:40	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 03:40	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 03:40	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 03:40	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 03:40	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 03:40	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 03:40	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/20/23 03:40	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 03:40	1
Toluene	<0.15		0.50	0.15	ug/L			10/20/23 03:40	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 03:40	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 03:40	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 03:40	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 03:40	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231012-RA-13
Date Collected: 10/12/23 09:56
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-13
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 03:40	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 03:40	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 126*		*10/20/23 03:40*	*1*
4-Bromofluorobenzene (Surr)	*101*		*72 - 124*		*10/20/23 03:40*	*1*
Dibromofluoromethane (Surr)	*112*		*75 - 120*		*10/20/23 03:40*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*10/20/23 03:40*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231012-RA-14

Date Collected: 10/12/23 10:09
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-14

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/20/23 04:03	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 04:03	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 04:03	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 04:03	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/20/23 04:03	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/20/23 04:03	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 04:03	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 04:03	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 04:03	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 04:03	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 04:03	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 04:03	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 04:03	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 04:03	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 04:03	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 04:03	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 04:03	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 04:03	1
Acetone	<1.7	^c	10	1.7	ug/L			10/20/23 04:03	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 04:03	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 04:03	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 04:03	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 04:03	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 04:03	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 04:03	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 04:03	1
Chloroform	<0.37		2.0	0.37	ug/L			10/20/23 04:03	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 04:03	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 04:03	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 04:03	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 04:03	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 04:03	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 04:03	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 04:03	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 04:03	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 04:03	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 04:03	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 04:03	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 04:03	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 04:03	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 04:03	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 04:03	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/20/23 04:03	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 04:03	1
Toluene	<0.15		0.50	0.15	ug/L			10/20/23 04:03	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 04:03	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 04:03	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 04:03	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 04:03	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231012-RA-14
Date Collected: 10/12/23 10:09
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-14
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 04:03	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 04:03	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*117*		*75 - 126*		*10/20/23 04:03*	*1*
4-Bromofluorobenzene (Surr)	*102*		*72 - 124*		*10/20/23 04:03*	*1*
Dibromofluoromethane (Surr)	*112*		*75 - 120*		*10/20/23 04:03*	*1*
Toluene-d8 (Surr)	*96*		*75 - 120*		*10/20/23 04:03*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231012-RA-15
Date Collected: 10/12/23 10:17
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-15
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**4.5**		1.0	0.38	ug/L			10/20/23 04:26	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 04:26	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 04:26	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 04:26	1
1,1-Dichloroethane	**7.6**		1.0	0.41	ug/L			10/20/23 04:26	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/20/23 04:26	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 04:26	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 04:26	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 04:26	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 04:26	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 04:26	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 04:26	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 04:26	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 04:26	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 04:26	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 04:26	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 04:26	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 04:26	1
Acetone	<1.7	^c	10	1.7	ug/L			10/20/23 04:26	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 04:26	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 04:26	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 04:26	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 04:26	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 04:26	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 04:26	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 04:26	1
Chloroform	**2.2**		2.0	0.37	ug/L			10/20/23 04:26	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 04:26	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 04:26	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 04:26	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 04:26	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 04:26	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 04:26	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 04:26	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 04:26	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 04:26	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 04:26	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 04:26	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 04:26	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 04:26	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 04:26	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 04:26	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/20/23 04:26	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 04:26	1
Toluene	<0.15		0.50	0.15	ug/L			10/20/23 04:26	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 04:26	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 04:26	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 04:26	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 04:26	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231012-RA-15
Date Collected: 10/12/23 10:17
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-15
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 04:26	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 04:26	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*121*		*75 - 126*		*10/20/23 04:26*	*1*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*		*10/20/23 04:26*	*1*
Dibromofluoromethane (Surr)	*116*		*75 - 120*		*10/20/23 04:26*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*10/20/23 04:26*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231012-RA-16
Date Collected: 10/12/23 10:33
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-16
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	**1.3**		1.0	0.38	ug/L			10/20/23 04:49	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/20/23 04:49	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/20/23 04:49	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/20/23 04:49	1
1,1-Dichloroethane	**2.2**		1.0	0.41	ug/L			10/20/23 04:49	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/20/23 04:49	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/20/23 04:49	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/20/23 04:49	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/20/23 04:49	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/20/23 04:49	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/20/23 04:49	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/20/23 04:49	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/20/23 04:49	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/20/23 04:49	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/20/23 04:49	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/20/23 04:49	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/20/23 04:49	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/20/23 04:49	1
Acetone	<1.7	^c	10	1.7	ug/L			10/20/23 04:49	1
Benzene	<0.15		0.50	0.15	ug/L			10/20/23 04:49	1
Bromoform	<0.48		1.0	0.48	ug/L			10/20/23 04:49	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/20/23 04:49	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/20/23 04:49	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/20/23 04:49	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/20/23 04:49	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/20/23 04:49	1
Chloroform	**2.0**		2.0	0.37	ug/L			10/20/23 04:49	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/20/23 04:49	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/20/23 04:49	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/20/23 04:49	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/20/23 04:49	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/20/23 04:49	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/20/23 04:49	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/20/23 04:49	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/20/23 04:49	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/20/23 04:49	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/20/23 04:49	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/20/23 04:49	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/20/23 04:49	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/20/23 04:49	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/20/23 04:49	1
Styrene	<0.39		1.0	0.39	ug/L			10/20/23 04:49	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/20/23 04:49	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/20/23 04:49	1
Toluene	<0.15		0.50	0.15	ug/L			10/20/23 04:49	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/20/23 04:49	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/20/23 04:49	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/20/23 04:49	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/20/23 04:49	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231012-RA-16
Date Collected: 10/12/23 10:33
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-16
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/20/23 04:49	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/20/23 04:49	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*119*		*75 - 126*		*10/20/23 04:49*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*		*10/20/23 04:49*	*1*
Dibromofluoromethane (Surr)	*111*		*75 - 120*		*10/20/23 04:49*	*1*
Toluene-d8 (Surr)	*97*		*75 - 120*		*10/20/23 04:49*	*1*

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: TRIP BLANK

Date Collected: 10/10/23 00:00
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-17

Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/19/23 23:04	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/19/23 23:04	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/19/23 23:04	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/19/23 23:04	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/19/23 23:04	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/19/23 23:04	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/19/23 23:04	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/19/23 23:04	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/19/23 23:04	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/19/23 23:04	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/19/23 23:04	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/19/23 23:04	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/19/23 23:04	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/19/23 23:04	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/19/23 23:04	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/19/23 23:04	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/19/23 23:04	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/19/23 23:04	1
Acetone	<1.7	^c	10	1.7	ug/L			10/19/23 23:04	1
Benzene	<0.15		0.50	0.15	ug/L			10/19/23 23:04	1
Bromoform	<0.48		1.0	0.48	ug/L			10/19/23 23:04	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/19/23 23:04	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/19/23 23:04	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/19/23 23:04	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/19/23 23:04	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/19/23 23:04	1
Chloroform	<0.37		2.0	0.37	ug/L			10/19/23 23:04	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/19/23 23:04	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/19/23 23:04	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/19/23 23:04	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/19/23 23:04	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/19/23 23:04	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/19/23 23:04	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/19/23 23:04	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/19/23 23:04	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/19/23 23:04	1
2-Butanone (MEK)	<2.1	^c	5.0	2.1	ug/L			10/19/23 23:04	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/19/23 23:04	1
Methyl tert-butyl ether	<0.39	^c	1.0	0.39	ug/L			10/19/23 23:04	1
Methylene Chloride	<1.6	^c	5.0	1.6	ug/L			10/19/23 23:04	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/19/23 23:04	1
Styrene	<0.39		1.0	0.39	ug/L			10/19/23 23:04	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/19/23 23:04	1
Tetrahydrofuran	<1.9	^c	10	1.9	ug/L			10/19/23 23:04	1
Toluene	<0.15		0.50	0.15	ug/L			10/19/23 23:04	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/19/23 23:04	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/19/23 23:04	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/19/23 23:04	1
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/19/23 23:04	1

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: TRIP BLANK
Date Collected: 10/10/23 00:00
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-17
Matrix: Water

Method: SW846 8260D - Volatile Organic Compounds by GC/MS (Continued)

Analyte	Result	Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/19/23 23:04	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/19/23 23:04	1

Surrogate	*%Recovery*	*Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*		*10/19/23 23:04*	*1*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*		*10/19/23 23:04*	*1*
Dibromofluoromethane (Surr)	*109*		*75 - 120*		*10/19/23 23:04*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*10/19/23 23:04*	*1*

Definitions/Glossary

Client: GHD Services Inc.
Job ID: 500-241042-1
Project/Site: New Richmond - 048038

Qualifiers

GC/MS VOA

Qualifier	Qualifier Description
^c	CCV Recovery is outside acceptance limits.
J	Reported value was between the limit of detection and the limit of quantitation.

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

QC Association Summary

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

GC/MS VOA

Analysis Batch: 737990

Lab Sample ID	Client Sample ID	Prep Type	Matrix	Method	Prep Batch
500-241042-1	W-231010-RA-01	Total/NA	Water	8260D	
500-241042-2	W-231010-RA-02	Total/NA	Water	8260D	
500-241042-3	W-231010-RA-03	Total/NA	Water	8260D	
500-241042-4	W-231010-RA-04	Total/NA	Water	8260D	
500-241042-5	W-231010-RA-05	Total/NA	Water	8260D	
500-241042-6	W-231010-RA-06	Total/NA	Water	8260D	
500-241042-7	W-231010-RA-07	Total/NA	Water	8260D	
500-241042-8	W-231010-RA-08	Total/NA	Water	8260D	
500-241042-9	W-231010-RA-09	Total/NA	Water	8260D	
500-241042-10	W-231011-RA-10	Total/NA	Water	8260D	
500-241042-11	W-231011-RA-11	Total/NA	Water	8260D	
500-241042-12	W-231011-RA-12	Total/NA	Water	8260D	
500-241042-13	W-231012-RA-13	Total/NA	Water	8260D	
500-241042-14	W-231012-RA-14	Total/NA	Water	8260D	
500-241042-15	W-231012-RA-15	Total/NA	Water	8260D	
500-241042-16	W-231012-RA-16	Total/NA	Water	8260D	
500-241042-17	TRIP BLANK	Total/NA	Water	8260D	
MB 500-737990/6	Method Blank	Total/NA	Water	8260D	
LCS 500-737990/3	Lab Control Sample	Total/NA	Water	8260D	
500-241042-4 MS	W-231010-RA-04	Total/NA	Water	8260D	
500-241042-4 MSD	W-231010-RA-04	Total/NA	Water	8260D	

Surrogate Summary

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

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

Matrix: Water

Prep Type: Total/NA

		Percent Surrogate Recovery (Acceptance Limits)			
		DCA	BFB	DBFM	TOL
Lab Sample ID	Client Sample ID	(75-126)	(72-124)	(75-120)	(75-120)
500-241042-1	W-231010-RA-01	112	100	108	98
500-241042-2	W-231010-RA-02	113	101	109	97
500-241042-3	W-231010-RA-03	115	100	108	100
500-241042-4	W-231010-RA-04	118	99	113	97
500-241042-4 MS	W-231010-RA-04	113	99	104	101
500-241042-4 MSD	W-231010-RA-04	113	100	105	98
500-241042-5	W-231010-RA-05	114	100	108	98
500-241042-6	W-231010-RA-06	114	99	111	100
500-241042-7	W-231010-RA-07	116	98	109	99
500-241042-8	W-231010-RA-08	117	101	111	99
500-241042-9	W-231010-RA-09	114	100	110	99
500-241042-10	W-231011-RA-10	117	99	108	98
500-241042-11	W-231011-RA-11	120	97	113	97
500-241042-12	W-231011-RA-12	121	98	112	96
500-241042-13	W-231012-RA-13	119	101	112	97
500-241042-14	W-231012-RA-14	117	102	112	96
500-241042-15	W-231012-RA-15	121	99	116	97
500-241042-16	W-231012-RA-16	119	100	111	97
500-241042-17	TRIP BLANK	114	100	109	98
LCS 500-737990/3	Lab Control Sample	101	95	100	104
MB 500-737990/6	Method Blank	114	97	110	98

Surrogate Legend

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

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

Lab Sample ID: MB 500-737990/6
Matrix: Water
Analysis Batch: 737990

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
1,1,1-Trichloroethane	<0.38		1.0	0.38	ug/L			10/19/23 22:40	1
1,1,2,2-Tetrachloroethane	<0.40		1.0	0.40	ug/L			10/19/23 22:40	1
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		1.0	0.46	ug/L			10/19/23 22:40	1
1,1,2-Trichloroethane	<0.35		1.0	0.35	ug/L			10/19/23 22:40	1
1,1-Dichloroethane	<0.41		1.0	0.41	ug/L			10/19/23 22:40	1
1,1-Dichloroethene	<0.39		1.0	0.39	ug/L			10/19/23 22:40	1
1,2,3-Trichlorobenzene	<0.46		1.0	0.46	ug/L			10/19/23 22:40	1
1,2,4-Trichlorobenzene	<0.34		1.0	0.34	ug/L			10/19/23 22:40	1
1,2,4-Trimethylbenzene	<0.36		1.0	0.36	ug/L			10/19/23 22:40	1
1,2-Dibromo-3-Chloropropane	<2.0		5.0	2.0	ug/L			10/19/23 22:40	1
1,2-Dichlorobenzene	<0.33		1.0	0.33	ug/L			10/19/23 22:40	1
1,2-Dichloroethane	<0.39		1.0	0.39	ug/L			10/19/23 22:40	1
1,2-Dichloropropane	<0.43		1.0	0.43	ug/L			10/19/23 22:40	1
1,3,5-Trimethylbenzene	<0.25		1.0	0.25	ug/L			10/19/23 22:40	1
1,3-Dichlorobenzene	<0.40		1.0	0.40	ug/L			10/19/23 22:40	1
1,4-Dichlorobenzene	<0.36		1.0	0.36	ug/L			10/19/23 22:40	1
2-Hexanone	<1.6		5.0	1.6	ug/L			10/19/23 22:40	1
Bromochloromethane	<0.43		1.0	0.43	ug/L			10/19/23 22:40	1
Acetone	<1.7		10	1.7	ug/L			10/19/23 22:40	1
Benzene	<0.15		0.50	0.15	ug/L			10/19/23 22:40	1
Bromoform	<0.48		1.0	0.48	ug/L			10/19/23 22:40	1
Bromomethane	<0.80		3.0	0.80	ug/L			10/19/23 22:40	1
Carbon disulfide	<0.45		2.0	0.45	ug/L			10/19/23 22:40	1
Carbon tetrachloride	<0.38		1.0	0.38	ug/L			10/19/23 22:40	1
Chlorobenzene	<0.39		1.0	0.39	ug/L			10/19/23 22:40	1
Chloroethane	<0.51		5.0	0.51	ug/L			10/19/23 22:40	1
Chloroform	<0.37		2.0	0.37	ug/L			10/19/23 22:40	1
Chloromethane	<0.32		5.0	0.32	ug/L			10/19/23 22:40	1
cis-1,2-Dichloroethene	<0.41		1.0	0.41	ug/L			10/19/23 22:40	1
cis-1,3-Dichloropropene	<0.42		1.0	0.42	ug/L			10/19/23 22:40	1
Dichlorobromomethane	<0.37		1.0	0.37	ug/L			10/19/23 22:40	1
Dichlorodifluoromethane	<0.67		3.0	0.67	ug/L			10/19/23 22:40	1
Ethylbenzene	<0.18		0.50	0.18	ug/L			10/19/23 22:40	1
Ethylene Dibromide	<0.39		1.0	0.39	ug/L			10/19/23 22:40	1
m-Xylene & p-Xylene	<0.18		1.0	0.18	ug/L			10/19/23 22:40	1
Isopropylbenzene	<0.39		1.0	0.39	ug/L			10/19/23 22:40	1
2-Butanone (MEK)	<2.1		5.0	2.1	ug/L			10/19/23 22:40	1
4-Methyl-2-pentanone (MIBK)	<2.2		5.0	2.2	ug/L			10/19/23 22:40	1
Methyl tert-butyl ether	<0.39		1.0	0.39	ug/L			10/19/23 22:40	1
Methylene Chloride	<1.6		5.0	1.6	ug/L			10/19/23 22:40	1
o-Xylene	<0.22		0.50	0.22	ug/L			10/19/23 22:40	1
Styrene	<0.39		1.0	0.39	ug/L			10/19/23 22:40	1
Tetrachloroethene	<0.37		1.0	0.37	ug/L			10/19/23 22:40	1
Tetrahydrofuran	<1.9		10	1.9	ug/L			10/19/23 22:40	1
Toluene	<0.15		0.50	0.15	ug/L			10/19/23 22:40	1
trans-1,2-Dichloroethene	<0.35		1.0	0.35	ug/L			10/19/23 22:40	1
trans-1,3-Dichloropropene	<0.36		1.0	0.36	ug/L			10/19/23 22:40	1
Trichloroethene	<0.16		0.50	0.16	ug/L			10/19/23 22:40	1

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

Lab Sample ID: MB 500-737990/6
Matrix: Water
Analysis Batch: 737990

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

Analyte	MB Result	MB Qualifier	LOQ	LOD	Unit	D	Prepared	Analyzed	Dil Fac
Trichlorofluoromethane	<0.43		1.0	0.43	ug/L			10/19/23 22:40	1
Vinyl chloride	<0.20		1.0	0.20	ug/L			10/19/23 22:40	1
Chlorodibromomethane	<0.49		1.0	0.49	ug/L			10/19/23 22:40	1

Surrogate	*MB %Recovery*	*MB Qualifier*	*Limits*	*Prepared*	*Analyzed*	*Dil Fac*
1,2-Dichloroethane-d4 (Surr)	*114*		*75 - 126*		*10/19/23 22:40*	*1*
4-Bromofluorobenzene (Surr)	*97*		*72 - 124*		*10/19/23 22:40*	*1*
Dibromofluoromethane (Surr)	*110*		*75 - 120*		*10/19/23 22:40*	*1*
Toluene-d8 (Surr)	*98*		*75 - 120*		*10/19/23 22:40*	*1*

Lab Sample ID: LCS 500-737990/3
Matrix: Water
Analysis Batch: 737990

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	50.0	49.2		ug/L		98	70 - 125
1,1,2,2-Tetrachloroethane	50.0	43.0		ug/L		86	62 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	50.0	46.7		ug/L		93	70 - 123
1,1,2-Trichloroethane	50.0	44.0		ug/L		88	71 - 130
1,1-Dichloroethane	50.0	45.7		ug/L		91	70 - 125
1,1-Dichloroethene	50.0	44.1		ug/L		88	67 - 122
1,2,3-Trichlorobenzene	50.0	47.5		ug/L		95	51 - 145
1,2,4-Trichlorobenzene	50.0	47.6		ug/L		95	57 - 137
1,2,4-Trimethylbenzene	50.0	46.7		ug/L		93	70 - 123
1,2-Dibromo-3-Chloropropane	50.0	46.3		ug/L		93	56 - 123
1,2-Dichlorobenzene	50.0	47.2		ug/L		94	70 - 125
1,2-Dichloroethane	50.0	48.5		ug/L		97	68 - 127
1,2-Dichloropropane	50.0	45.6		ug/L		91	67 - 130
1,3,5-Trimethylbenzene	50.0	48.1		ug/L		96	70 - 123
1,3-Dichlorobenzene	50.0	46.6		ug/L		93	70 - 125
1,4-Dichlorobenzene	50.0	46.3		ug/L		93	70 - 120
2-Hexanone	50.0	37.9		ug/L		76	54 - 146
Bromochloromethane	50.0	43.2		ug/L		86	65 - 122
Acetone	50.0	35.6		ug/L		71	40 - 143
Benzene	50.0	45.3		ug/L		91	70 - 120
Bromoform	50.0	50.1		ug/L		100	56 - 132
Bromomethane	50.0	47.5		ug/L		95	40 - 152
Carbon disulfide	50.0	45.6		ug/L		91	66 - 120
Carbon tetrachloride	50.0	52.5		ug/L		105	59 - 133
Chlorobenzene	50.0	48.1		ug/L		96	70 - 120
Chloroethane	50.0	41.2		ug/L		82	48 - 136
Chloroform	50.0	44.8		ug/L		90	70 - 120
Chloromethane	50.0	52.1		ug/L		104	56 - 152
cis-1,2-Dichloroethene	50.0	43.3		ug/L		87	70 - 125
cis-1,3-Dichloropropene	50.0	48.0		ug/L		96	64 - 127
Dichlorobromomethane	50.0	46.2		ug/L		92	69 - 120
Dichlorodifluoromethane	50.0	46.4		ug/L		93	40 - 159
Ethylbenzene	50.0	47.7		ug/L		95	70 - 123

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

Lab Sample ID: LCS 500-737990/3
Matrix: Water
Analysis Batch: 737990

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

Analyte	Spike Added	LCS Result	LCS Qualifier	Unit	D	%Rec	%Rec Limits
Ethylene Dibromide	50.0	45.5		ug/L		91	70 - 125
m-Xylene & p-Xylene	50.0	47.0		ug/L		94	70 - 125
Isopropylbenzene	50.0	45.3		ug/L		91	70 - 126
2-Butanone (MEK)	50.0	38.5		ug/L		77	46 - 144
4-Methyl-2-pentanone (MIBK)	50.0	38.3		ug/L		77	55 - 139
Methyl tert-butyl ether	50.0	39.2		ug/L		78	55 - 123
Methylene Chloride	50.0	40.1		ug/L		80	69 - 125
o-Xylene	50.0	47.8		ug/L		96	70 - 120
Styrene	50.0	46.9		ug/L		94	70 - 120
Tetrachloroethene	50.0	48.8		ug/L		98	70 - 128
Tetrahydrofuran	100	63.7		ug/L		64	59 - 139
Toluene	50.0	44.0		ug/L		88	70 - 125
trans-1,2-Dichloroethene	50.0	44.2		ug/L		88	70 - 125
trans-1,3-Dichloropropene	50.0	48.4		ug/L		97	62 - 128
Trichloroethene	50.0	47.2		ug/L		94	70 - 125
Trichlorofluoromethane	50.0	56.1		ug/L		112	55 - 128
Vinyl chloride	50.0	49.6		ug/L		99	64 - 126
Chlorodibromomethane	50.0	50.2		ug/L		100	68 - 125

Surrogate	*LCS %Recovery*	*LCS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*101*		*75 - 126*
4-Bromofluorobenzene (Surr)	*95*		*72 - 124*
Dibromofluoromethane (Surr)	*100*		*75 - 120*
Toluene-d8 (Surr)	*104*		*75 - 120*

Lab Sample ID: 500-241042-4 MS
Matrix: Water
Analysis Batch: 737990

Client Sample ID: W-231010-RA-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
1,1,1-Trichloroethane	<0.38		50.0	41.7		ug/L		83	70 - 125
1,1,2,2-Tetrachloroethane	<0.40		50.0	43.0		ug/L		86	62 - 140
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		50.0	37.7		ug/L		75	70 - 123
1,1,2-Trichloroethane	<0.35		50.0	43.7		ug/L		87	71 - 130
1,1-Dichloroethane	<0.41		50.0	43.2		ug/L		86	70 - 125
1,1-Dichloroethene	<0.39		50.0	37.9		ug/L		76	67 - 122
1,2,3-Trichlorobenzene	<0.46		50.0	40.6		ug/L		81	51 - 145
1,2,4-Trichlorobenzene	<0.34		50.0	38.5		ug/L		77	57 - 137
1,2,4-Trimethylbenzene	<0.36		50.0	41.2		ug/L		82	70 - 123
1,2-Dibromo-3-Chloropropane	<2.0		50.0	45.2		ug/L		90	56 - 123
1,2-Dichlorobenzene	<0.33		50.0	43.4		ug/L		87	70 - 125
1,2-Dichloroethane	<0.39		50.0	48.1		ug/L		96	68 - 127
1,2-Dichloropropane	<0.43		50.0	43.5		ug/L		87	67 - 130
1,3,5-Trimethylbenzene	<0.25		50.0	41.0		ug/L		82	70 - 123
1,3-Dichlorobenzene	<0.40		50.0	41.7		ug/L		83	70 - 125
1,4-Dichlorobenzene	<0.36		50.0	41.2		ug/L		82	70 - 120
2-Hexanone	<1.6		50.0	35.5		ug/L		71	54 - 146
Bromochloromethane	<0.43		50.0	42.7		ug/L		85	65 - 122

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

Lab Sample ID: 500-241042-4 MS
Matrix: Water
Analysis Batch: 737990

Client Sample ID: W-231010-RA-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MS Result	MS Qualifier	Unit	D	%Rec	%Rec Limits
Acetone	5.8	J ^c	50.0	39.0		ug/L		66	40 - 143
Benzene	<0.15		50.0	41.6		ug/L		83	70 - 120
Bromoform	<0.48		50.0	49.1		ug/L		98	56 - 132
Bromomethane	<0.80		50.0	48.7		ug/L		97	40 - 152
Carbon disulfide	<0.45		50.0	40.0		ug/L		80	66 - 120
Carbon tetrachloride	<0.38		50.0	43.7		ug/L		87	59 - 133
Chlorobenzene	<0.39		50.0	44.3		ug/L		89	70 - 120
Chloroethane	<0.51		50.0	42.9		ug/L		86	48 - 136
Chloroform	<0.37		50.0	43.2		ug/L		86	70 - 120
Chloromethane	<0.32		50.0	49.8		ug/L		100	56 - 152
cis-1,2-Dichloroethene	<0.41		50.0	40.3		ug/L		81	70 - 125
cis-1,3-Dichloropropene	<0.42		50.0	43.6		ug/L		87	64 - 127
Dichlorobromomethane	<0.37		50.0	46.3		ug/L		93	69 - 120
Dichlorodifluoromethane	<0.67		50.0	44.9		ug/L		90	40 - 159
Ethylbenzene	<0.18		50.0	40.1		ug/L		80	70 - 123
Ethylene Dibromide	<0.39		50.0	44.3		ug/L		89	70 - 125
m-Xylene & p-Xylene	<0.18		50.0	40.4		ug/L		81	70 - 125
Isopropylbenzene	<0.39		50.0	38.5		ug/L		77	70 - 126
2-Butanone (MEK)	<2.1	^c	50.0	34.0		ug/L		68	46 - 144
4-Methyl-2-pentanone (MIBK)	<2.2		50.0	34.6		ug/L		69	55 - 139
Methyl tert-butyl ether	<0.39	^c	50.0	38.2		ug/L		76	55 - 123
Methylene Chloride	<1.6	^c	50.0	39.6		ug/L		79	69 - 125
o-Xylene	<0.22		50.0	41.9		ug/L		84	70 - 120
Styrene	<0.39		50.0	42.6		ug/L		85	70 - 120
Tetrachloroethene	<0.37		50.0	39.5		ug/L		79	70 - 128
Tetrahydrofuran	<1.9	^c	100	62.2		ug/L		62	59 - 139
Toluene	4.4		50.0	46.8		ug/L		85	70 - 125
trans-1,2-Dichloroethene	<0.35		50.0	40.3		ug/L		81	70 - 125
trans-1,3-Dichloropropene	<0.36		50.0	45.3		ug/L		91	62 - 128
Trichloroethene	<0.16		50.0	40.1		ug/L		80	70 - 125
Trichlorofluoromethane	<0.43		50.0	50.3		ug/L		101	55 - 128
Vinyl chloride	<0.20		50.0	49.7		ug/L		99	64 - 126
Chlorodibromomethane	<0.49		50.0	49.8		ug/L		100	68 - 125

Surrogate	*MS %Recovery*	*MS Qualifier*	*Limits*
1,2-Dichloroethane-d4 (Surr)	*113*		*75 - 126*
4-Bromofluorobenzene (Surr)	*99*		*72 - 124*
Dibromofluoromethane (Surr)	*104*		*75 - 120*
Toluene-d8 (Surr)	*101*		*75 - 120*

Lab Sample ID: 500-241042-4 MSD
Matrix: Water
Analysis Batch: 737990

Client Sample ID: W-231010-RA-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,1-Trichloroethane	<0.38		50.0	46.7		ug/L		93	70 - 125	11	20
1,1,2,2-Tetrachloroethane	<0.40		50.0	49.2		ug/L		98	62 - 140	13	20
1,1,2-Trichloro-1,2,2-trifluoroethane	<0.46		50.0	40.7		ug/L		81	70 - 123	8	20

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

Lab Sample ID: 500-241042-4 MSD
Matrix: Water
Analysis Batch: 737990

Client Sample ID: W-231010-RA-04
Prep Type: Total/NA

Analyte	Sample Result	Sample Qualifier	Spike Added	MSD Result	MSD Qualifier	Unit	D	%Rec	%Rec Limits	RPD	RPD Limit
1,1,2-Trichloroethane	<0.35		50.0	46.2		ug/L		92	71 - 130	6	20
1,1-Dichloroethane	<0.41		50.0	47.3		ug/L		95	70 - 125	9	20
1,1-Dichloroethene	<0.39		50.0	40.5		ug/L		81	67 - 122	7	20
1,2,3-Trichlorobenzene	<0.46		50.0	46.6		ug/L		93	51 - 145	14	20
1,2,4-Trichlorobenzene	<0.34		50.0	42.3		ug/L		85	57 - 137	9	20
1,2,4-Trimethylbenzene	<0.36		50.0	45.3		ug/L		91	70 - 123	10	20
1,2-Dibromo-3-Chloropropane	<2.0		50.0	52.8		ug/L		106	56 - 123	16	20
1,2-Dichlorobenzene	<0.33		50.0	48.3		ug/L		97	70 - 125	11	20
1,2-Dichloroethane	<0.39		50.0	54.5		ug/L		109	68 - 127	13	20
1,2-Dichloropropane	<0.43		50.0	48.8		ug/L		98	67 - 130	11	20
1,3,5-Trimethylbenzene	<0.25		50.0	45.3		ug/L		91	70 - 123	10	20
1,3-Dichlorobenzene	<0.40		50.0	45.3		ug/L		91	70 - 125	8	20
1,4-Dichlorobenzene	<0.36		50.0	45.6		ug/L		91	70 - 120	10	20
2-Hexanone	<1.6		50.0	39.8		ug/L		80	54 - 146	11	20
Bromochloromethane	<0.43		50.0	49.0		ug/L		98	65 - 122	14	20
Acetone	5.8	J ^c	50.0	41.4		ug/L		71	40 - 143	6	20
Benzene	<0.15		50.0	45.6		ug/L		91	70 - 120	9	20
Bromoform	<0.48		50.0	52.4		ug/L		105	56 - 132	7	20
Bromomethane	<0.80		50.0	51.8		ug/L		104	40 - 152	6	20
Carbon disulfide	<0.45		50.0	43.3		ug/L		87	66 - 120	8	20
Carbon tetrachloride	<0.38		50.0	47.1		ug/L		94	59 - 133	7	20
Chlorobenzene	<0.39		50.0	47.0		ug/L		94	70 - 120	6	20
Chloroethane	<0.51		50.0	42.8		ug/L		86	48 - 136	0	20
Chloroform	<0.37		50.0	48.5		ug/L		97	70 - 120	11	20
Chloromethane	<0.32		50.0	52.5		ug/L		105	56 - 152	5	20
cis-1,2-Dichloroethene	<0.41		50.0	45.0		ug/L		90	70 - 125	11	20
cis-1,3-Dichloropropene	<0.42		50.0	47.9		ug/L		96	64 - 127	9	20
Dichlorobromomethane	<0.37		50.0	50.5		ug/L		101	69 - 120	9	20
Dichlorodifluoromethane	<0.67		50.0	44.2		ug/L		88	40 - 159	2	20
Ethylbenzene	<0.18		50.0	43.6		ug/L		87	70 - 123	8	20
Ethylene Dibromide	<0.39		50.0	48.2		ug/L		96	70 - 125	8	20
m-Xylene & p-Xylene	<0.18		50.0	42.6		ug/L		85	70 - 125	5	20
Isopropylbenzene	<0.39		50.0	42.9		ug/L		86	70 - 126	11	20
2-Butanone (MEK)	<2.1	^c	50.0	40.9		ug/L		82	46 - 144	18	20
4-Methyl-2-pentanone (MIBK)	<2.2		50.0	39.4		ug/L		79	55 - 139	13	20
Methyl tert-butyl ether	<0.39	^c	50.0	43.9		ug/L		88	55 - 123	14	20
Methylene Chloride	<1.6	^c	50.0	44.0		ug/L		88	69 - 125	10	20
o-Xylene	<0.22		50.0	44.6		ug/L		89	70 - 120	6	20
Styrene	<0.39		50.0	46.4		ug/L		93	70 - 120	9	20
Tetrachloroethene	<0.37		50.0	42.1		ug/L		84	70 - 128	6	20
Tetrahydrofuran	<1.9	^c	100	75.8		ug/L		76	59 - 139	20	20
Toluene	4.4		50.0	46.1		ug/L		83	70 - 125	2	20
trans-1,2-Dichloroethene	<0.35		50.0	44.6		ug/L		89	70 - 125	10	20
trans-1,3-Dichloropropene	<0.36		50.0	48.9		ug/L		98	62 - 128	8	20
Trichloroethene	<0.16		50.0	45.9		ug/L		92	70 - 125	13	20
Trichlorofluoromethane	<0.43		50.0	50.7		ug/L		101	55 - 128	1	20
Vinyl chloride	<0.20		50.0	51.0		ug/L		102	64 - 126	3	20
Chlorodibromomethane	<0.49		50.0	52.9		ug/L		106	68 - 125	6	20

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

Lab Sample ID: 500-241042-4 MSD
Matrix: Water
Analysis Batch: 737990

Client Sample ID: W-231010-RA-04
Prep Type: Total/NA

Surrogate	MSD %Recovery	MSD Qualifier	Limits
1,2-Dichloroethane-d4 (Surr)	*113*		*75 - 126*
4-Bromofluorobenzene (Surr)	*100*		*72 - 124*
Dibromofluoromethane (Surr)	*105*		*75 - 120*
Toluene-d8 (Surr)	*98*		*75 - 120*

Lab Chronicle

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-01
Lab Sample ID: 500-241042-1
Date Collected: 10/10/23 10:25
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/19/23 23:26

Client Sample ID: W-231010-RA-02
Lab Sample ID: 500-241042-2
Date Collected: 10/10/23 00:00
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/19/23 23:50

Client Sample ID: W-231010-RA-03
Lab Sample ID: 500-241042-3
Date Collected: 10/10/23 11:00
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 00:13

Client Sample ID: W-231010-RA-04
Lab Sample ID: 500-241042-4
Date Collected: 10/10/23 11:12
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 05:12

Client Sample ID: W-231010-RA-05
Lab Sample ID: 500-241042-5
Date Collected: 10/10/23 12:30
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 00:36

Client Sample ID: W-231010-RA-06
Lab Sample ID: 500-241042-6
Date Collected: 10/10/23 12:48
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 00:59

Client Sample ID: W-231010-RA-07
Lab Sample ID: 500-241042-7
Date Collected: 10/10/23 12:50
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 01:22

Lab Chronicle

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231010-RA-08
Lab Sample ID: 500-241042-8
Date Collected: 10/10/23 13:40
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 01:45

Client Sample ID: W-231010-RA-09
Lab Sample ID: 500-241042-9
Date Collected: 10/10/23 13:45
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 02:08

Client Sample ID: W-231011-RA-10
Lab Sample ID: 500-241042-10
Date Collected: 10/11/23 10:22
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 02:31

Client Sample ID: W-231011-RA-11
Lab Sample ID: 500-241042-11
Date Collected: 10/11/23 11:27
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 02:54

Client Sample ID: W-231011-RA-12
Lab Sample ID: 500-241042-12
Date Collected: 10/11/23 13:47
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 03:17

Client Sample ID: W-231012-RA-13
Lab Sample ID: 500-241042-13
Date Collected: 10/12/23 09:56
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 03:40

Client Sample ID: W-231012-RA-14
Lab Sample ID: 500-241042-14
Date Collected: 10/12/23 10:09
Matrix: Water
Date Received: 10/13/23 09:10

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 04:03

Lab Chronicle

Client: GHD Services Inc.
Project/Site: New Richmond - 048038

Job ID: 500-241042-1

Client Sample ID: W-231012-RA-15
Date Collected: 10/12/23 10:17
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-15
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 04:26

Client Sample ID: W-231012-RA-16
Date Collected: 10/12/23 10:33
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-16
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/20/23 04:49

Client Sample ID: TRIP BLANK
Date Collected: 10/10/23 00:00
Date Received: 10/13/23 09:10

Lab Sample ID: 500-241042-17
Matrix: Water

Prep Type	Batch Type	Batch Method	Run	Dilution Factor	Batch Number	Analyst	Lab	Prepared or Analyzed
Total/NA	Analysis	8260D		1	737990	PMF	EET CHI	10/19/23 23:04

Laboratory References:

EET CHI = Eurofins Chicago, 2417 Bond Street, University Park, IL 60484, TEL (708)534-5200

Accreditation/Certification Summary

Client: GHD Services Inc.
Job ID: 500-241042-1
Project/Site: New Richmond - 048038

Laboratory: Eurofins Chicago

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

Authority	Program	Identification Number	Expiration Date
Wisconsin	State	999580010	08-31-24

Chain of Custody Record

667971

Environment Testing America

Address _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

500-241042 COC

TAL-8210

Client Contact	Project Manager: Grant Anderson	Site Contact:	Date:	
Company Name GHD	Tel/Email: Grant.Anderson@GHD.com	Lab Contact:	Carrier:	1 of 2 COCs
Address 900 Long Lake RD Suite 200	Analysis Turnaround Time			Sampler:
City/State/Zip New Brighton, MN, 55112	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client:
Fax	☐ 2 weeks			Lab Sampling
Project Name	☐ 1 week			
Site	☐ 2 days			Job / SDG No 500-241042
P O #	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260	PFAS														Sample Specific Notes
1	W-23l0l0-RA-01	10-10-23	1025	Grab	GW	3			X															
2	W-23l0l0-RA-02		-		GW	3			X															
3	W-23l0l0-RA-03		1100		GW	3			X															
4	W-23l0l0-RA-04		1112		GW	9			X	X														
5	W-23l0l0-RA-05		1230		GW	3			X															
6	W-23l0l0-RA-06		1248		GW	3			X															
7	W-23l0l0-RA-07		1250		GW	3			X															
8	W-23l0l0-RA-08		1340		GW	3			X															
9	W-23l0l0-RA-09		1345		GW	3			X															
10	W-23l0l1-RA-10	10-11-23	1022		GW	3			X															
11	W-23l0l1-RA-11	10-11-23	1127		GW	3			X															
12	W-23l0l1-RA-12	10-11-23	1347		GW	3			X															

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____ 2

Possible Hazard Identification.
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd 1.8 Corr'd 1.8 | Therm ID No _____

Relinquished by	Company	Date/Time	Received by	Company	Date/Time
	GHD	10-12-23			
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time
					10/13/23 0910

10/25/2023

Chain of Custody Record

667972

eurofins | Environment Testing America

Address _____

Regulatory Program: ☐ DW ☐ NPDES ☐ RCRA ☐ Other

TAL-8210

Client Contact	Project Manager: Grant Anderson	Site Contact:	Date:	COC No
Company Name GHD	Tel/Email: Grant.Anderson@ghd.com	Lab Contact	Carrier:	2 of 2 COCs
Address 900 Long Lake RD, Suite 200	Analysis Turnaround Time			Sampler
City/State/Zip New Brighton, MN, 55112	☐ CALENDAR DAYS ☐ WORKING DAYS			For Lab Use Only:
Phone	TAT if different from Below _____			Walk-in Client.
Fax	☐ 2 weeks			Lab Sampling
Project Name	☐ 1 week			
Site	☐ 2 days			Job / SDG No 500-241042
P O #	☐ 1 day			

	Sample Identification	Sample Date	Sample Time	Sample Type (C=Comp, G=Grab)	Matrix	# of Cont.	Filtered Sample (Y/N)	Perform MS / MSD (Y/N)	8260													Sample Specific Notes
	~~W-231012-RA-TB~~ TC																					
13	W-231012-RA-13	10-12-23	0956	Grab	GW	3			X													
14	W-231012-RA-14	10-12-23	1009	Grab	GW	3			X													
15	W-231012-RA-15	10-12-23	1017	Grab	GW	3			X													
16	W-231012-RA-16	10-12-23	1033	Grab	GW	3			X													
17	Trip Blank	—	—			2			X													

Preservation Used: 1= Ice, 2= HCl; 3= H2SO4; 4=HNO3; 5=NaOH; 6= Other _____

Possible Hazard Identification:
Are any samples from a listed EPA Hazardous Waste? Please List any EPA Waste Codes for the sample in the Comments Section if the lab is to dispose of the sample

☐ Non-Hazard ☐ Flammable ☐ Skin Irritant ☐ Poison B ☐ Unknown

Sample Disposal (A fee may be assessed if samples are retained longer than 1 month)

☐ Return to Client ☐ Disposal by Lab ☐ Archive for _____ Months

Special Instructions/QC Requirements & Comments:

Custody Seals Intact ☐ Yes ☐ No | Custody Seal No | Cooler Temp (°C) Obs'd _____ Corr'd _____ Therm ID No _____

	Company	Date/Time		Company	Date/Time
Relinquished by	GHD	10-12-23	Received by		
Relinquished by	Company	Date/Time	Received by	Company	Date/Time
Relinquished by	Company	Date/Time	Received in Laboratory by	Company	Date/Time 10/13/23 0910

RYAN AAMOT
GHD SERVICES INC.
900 LONG LAKE ROAD
SUITE 200
NEW BRIGHTON, MN 55112
UNITED STATES US

ACTWGT: 20.00 LB MAN
CAD: 0675905/CAFE3513

TO SHIPPING DEPT 2
EUROFINS CHICAGO
2417 BOND ST

UNIVERSITY PARK IL 60484
(708) 534-6200
INV:
PO:
REF:
DEPT:

RMA:

FedEx Express

FedEx
TRK# 0221 7051 7811 9860

FRI - 13 OCT 10:30A
PRIORITY OVERNIGHT

AC JOTA

60484
IL-US ORD

500-241042 Waybi

36qf

Login Sample Receipt Checklist

Client: GHD Services Inc.

Job Number: 500-241042-1

Login Number: 241042
List Number: 1
Creator: James, Jeff A

List Source: Eurofins Chicago

Question	Answer	Comment
Radioactivity wasn't checked or is </= background as measured by a survey meter.	True	
The cooler's custody seal, if present, is intact.	True	
Sample custody seals, if present, are 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	1.8
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 containers received 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	
Containers requiring zero headspace have no headspace or bubble is <6mm (1/4").	N/A	
Multiphasic samples are not present.	True	
Samples do not require splitting or compositing.	True	
Residual Chlorine Checked.	N/A	

Appendix C

Historical Groundwater Monitoring Analytical Results

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	ES PAL ug/L	1,1,1-Trichloroethane 200 40 ug/L	1,1,2-Trichloroethane 5 0.5 ug/L	1,1-Dichloroethane 850 85 ug/L	1,1-Dichloroethene 7 0.7 ug/L	1,2-Dibromo-3-chloropropane (DBCP) 0.2 0.02 ug/L	1,2-Dichlorobenzene 600 60 ug/L	1,2-Dichloroethane 5 0.5 ug/L	1,2-Dichloropropane 5 0.5 ug/L	Acetone 9000 1800 ug/L	Benzene 5 0.5 ug/L	Bromodichloromethane 0.6 0.06 ug/L	Carbon Disulfide - - -	Carbon tetrachloride 5 0.5 ug/L	Chloroethane 400 80 ug/L	Chloroform (Trichloromethane) 6 0.6 ug/L	Chloromethane (Methyl chloride) 30 3 ug/L	cis-1,2-Dichloroethene 70 7 ug/L	4-Methyl-2-pentanone (Methyl isobutyl ketone) 500 50 ug/L	Methylene chloride 5 0.5 ug/L	Tetrachloroethene 5 0.5 ug/L	Tetrahydrofuran 50 10 ug/L	Toluene 800 160 ug/L	trans-1,3-Dichloropropene 0.4 0.04 ug/L	Trichloroethene 5 0.5 ug/L	Vinyl chloride 0.2 0.02 ug/L
APPLE RIVER DOWN	5/4/10			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
APPLE RIVER UP	5/4/10			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW1	4/26/99			**170**	<6.1	1100	77	<4.1		<3.7	<3.5		<2.7	<3.0	<1.0	<3.4	420	<3.5	<6.1	200		18	5.5			<4.3	<3.7	**12**
MW1	10/13/99			35	<4.7	860	<4.7	<12		6.9	<3.4		<4.4	<4.1	<1.0	<9.0	450	<4.1	<4.4	130		12	<4.1			<2.6	<4.9	**8.8**
MW1	9/20/00			**52**	<2.3	**690**	49	<6.2		6.8	**3.4**		**2.2**	<2.0	<1.0	<4.5	510	<2.0	<2.2	110		7.9	**2.1**			<1.3	**3.5**	**7.5**
MW1	12/20/00			**119**	<9.0	**606**	56.7	<25		<15	<15		<15	<6.0	<1.0	<15	565	<7.0	<17	128		<50	<15			<9.0	<10	<12
MW1	3/21/01			**62**	<2.3	**600**	44	<6.2		7.1	**3.6**		**2.2**	<2.0	<1.0	<4.5	410	<2.0	3	130		**4.9**	**2.8**			<1.3	5.5	**11**
MW1	12/4/03			**79**	<3.4	**310**	17	<5.2		<5.0	<4.8		<5.6	<4.8	<1.0	<4.4	530	<5.3	<4.5	**30**	**53**	6.2	<4.5	<16		<5.8	<5.4	<4.4
MW1	12/4/03	D		**85**	<3.4	**320**	18	<5.2		<5.0	<4.8		<5.6	<4.8	<1.0	<4.4	550	<5.3	<4.5	**31**	<11	<5.9	<4.5	<16		48	<5.4	<4.4
MW1	9/24/04			24	<3.5	**300**	<6.0	<6.2		<3.3	<3.1		**3.6**	<4.7	<1.0	<3.8	520	<3.1	**21**	**10**	**92**	5.9	<3.4	**21**		<3.7	<2.9	<4.1
MW1	9/24/04	D		25	<3.5	**330**	**6.1**	<6.2		<3.3	<3.1		<2.9	<4.7	<1.0	<3.8	560	<3.1	<3.0	**10**	**97**	**5**	<3.4	<13		<3.7	<2.9	<4.1
MW1	8/10/05			27	<4.9	**140**	**5.2**	<7.6		<4.8	<3.7		<3.6	<3.5	<1.0	<3.7	510	<2.6	<4.4	4.9	**270**	10	<4.4	**37**		<6.0	<3.2	<5.0
MW1	9/28/05			21	<4.9	**130**	<4.8	<7.6		<4.8	<3.7		<3.6	<3.5	<1.0	<3.7	610	<2.6	<4.4	<4.5	**260**	<6.4	<4.4	**36**		<6.0	<3.2	<5.0
MW1	4/12/07			**76**	<5.1	**470**	<5.2	<14		<4.7	<6.0		<2.7	<6.4	<1.0	<5.4	<37	<4.2	<12	<6.5	**62**	<10	<6.6	<21		<4.9	<9.6	<4.5
MW1	2/19/09			2.8 J	<4.0	**140**	<4.0	<8.0		<4.0	**1.2 J**		<4.0	<4.0	<1.0	<4.0	63	<4.0	<4.0	<4.0	<40	**1.8 J**	<4.0	7.6 J		<4.0	<4.0	<4.0
MW1	5/4/09			0.86	<3.3	**120**	<3.3	<6.7		<3.3	**1.2**		<3.3	<3.3	<1.0	<3.3	56	<3.3	<3.3	<3.3	<33	<3.3	<3.3	8.5		<3.3	<3.3	<3.3
MW1	8/10/09			1.2	<1.0	33	<1.0	<2.0		<1.0	0.46 J		<1.0	<1.0	<1.0	<1.0	4.2	<1.0	<1.0	<1.0	<10	<1.0	<1.0	5.2		<1.0	0.4 J	<1.0
MW1	11/5/14			6	<1.4	36	1 J	<2.9		<1.4	0.36 J		<1.4	<1.4	<1.0	<1.4	<1.4	**1.9**	<1.4	<1.4	<14	<1.4	**0.54 J**	1.8 J		<1.4	**0.64 J**	<1.4
MW1	5/13/15			3.9	<1.0	16	**0.71 J**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**1.6**	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	0.24 J	<1.0
MW1	11/5/15			5.1	<1.0	12	**0.95 J**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**1.7**	<1.0	<1.0	<10	<1.0	0.43 J	<5.0		<1.0	0.25 J	<1.0
MW1	11/7/16			6.3	<1.0	6.4	**0.92 J**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	1.6	<1.0	<1.0	<10	<1.0	0.46 J	<5.0		<1.0	<1.0	<1.0
MW1	5/18/17			7	<1.0	7.6	**0.92**	<2.0		<1.0	<1.0		<1.0	<1.0	<2.0	<1.0	<1.0	2.2	<1.0	<1.0	<10	<1.0	0.45 J	<5.0		<1.0	<1.0	<1.0
MW1	10/30/17			4.7	<1.0	6	**0.6 J**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	1.8 J	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW1	5/4/18			5.7	<1.0	6.6	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**1.8 J**	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW1	11/14/18			4.5	<1.0	15	1	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**1.7 J**	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	0.48 J	<1.0
MW1	11/13/19			3.4	<1.0	19	**1.1**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**1.3 J**	<1.0	<1.0	<5.0	<5.0	0.42 J	<10		<1.0	0.37 J	<1.0
MW1	5/20/20			4.2	<1.0	16	**1.2**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**1.3 J**	<1.0	<1.0	<5.0	<5.0	0.42 J	<10		<1.0	0.33 J	<1.0
MW1	11/16/21			6.7	<1.0	15	**1.4**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0 J	**2.0**	<1.0	<1.0	<5.0	**1.9 J**	**0.65 J**	<10	<0.50	<1.0	0.21 J	<1.0
MW1	5/26/22			3.3	<1.0	10	**0.93 J**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10 J	<0.50	<1.0	0.20 J	<1.0
MW1	11/9/22			3.4	<1.0	9.2	**0.88 J**	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	**1.4**	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW1	09/19/2023			<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	<2.0	<5.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW1	10/12/2023			4.5	<1.0	7.6	<1.0	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	**2.2**	<5.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW1A	12/4/03			4	<1.4	**110**	<2.6	<2.1		**2.1**	<1.9		<2.3	<1.9	<1.0	<1.8	**84**	<2.1	<1.8	<2.2	**100**	<2.4	<1.8	**34**		<2.3	<2.2	<1.8
MW1A	9/24/04			1.1	<0.14	1.8	<0.24	<0.25		<0.13	<0.13		<0.12	<0.19	<1.0	<0.15	3.9	<0.12	<0.12	<0.13	4.8	0.13	<0.13	<0.53		<0.15	<0.12	<0.16
MW1A	8/10/05			1.6	<2.0	23	<1.9	<3.0		<1.9	<1.5		<1.4	<1.4	<1.0	<1.5	47	<1.0	<1.7	<1.8	**60**	**4.9**	<1.8	**19**		<2.4	<1.3	<2.0
MW1A	4/5/07			<1.8	<2.1	9.7	<2.1	<5.6		<1.9	<2.4		<1.1	<2.5	<1.0	<2.2	<15	<1.7	<4.7	<2.6	39	<4.0	<2.6	78		<1.9	<3.8	<1.8
MW1A	7/19/07			<5.0	<5.0	6.1	<5.0	<10		<5.0	<5.0		<5.0	<5.0	<1.0	<5.0	46	<5.0	<5.0	<5.0	**69**	<5.0	<5.0	**34**		<5.0	<5.0	<5.0
MW1A	5/9/08			<1.0	<1.0	0.34 J	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	5.9	<1.0	<1.0	<1.0	7.9 J	<1.0	<1.0	3.6 J		<1.0	<1.0	<1.0
MW1A	8/7/08			<2.0	<2.0	5.9	<2.0	<4.0		**0.68 J**	0.37 J		<2.0	<2.0	<1.0	<2.0	34	<2.0	<2.0	<2.0	39	<2.0	<2.0	<20		<2.0	<2.0	<2.0
MW1A	11/13/08			<1.0	<1.0	0.41 J	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	3.8	<1.0	<1.0	<1.0	4.1 J	<1.0	<1.0	0.8 J		<1.0	<1.0	<1.0
MW1A	2/19/09			<1.0	<1.0	0.22 J	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.7	<1.0	<1.0	<1.0	2.1 J	<1.0	<1.0	0.95 J		<1.0	<1.0	<1.0
MW1A	5/6/09			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.73	<1.0	<1.0	<1.0	0.71	<1.0	<1.0	0.51		<1.0	<1.0	<1.0
MW1A	8/12/09			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1.2 J	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW1A	11/12/09			<2.5	<2.5	1.7 J	<2.5	<5.0		<2.5	<2.5		<2.5	<2.5	<1.0	<2.5	11 J	<2.5	<2.5	<2.5	24 J	<2.5	<2.5	3.5 J		<2.5	<2.5	<2.5
MW1A	2/16/10			<17	<17	6.2 J	<17	<33		<17	<17		<17	<17	<1.0	<17	30	<17	<17	<17	**61 J**	<17	<17	**20 J**		<17	<17	<17
MW1A	5/5/10			<5.0	<5.0	2.9 J	<5.0	<10		<5.0	<5.0		<5.0	<5.0	<1.0	<5.0	30	<5.0	<5.0	<5.0	**100**	<5.0	<5.0	**44**		<5.0	<5.0	<5.0
MW1A	11/17/10			<1.0	<1.0	3.4	<1.0	<2.0		0.77 J	0.31 J		<1.0	<1.0	<1.0	<1.0	16	<1.0	<1.0	<1.0	**61**	<1.0	<1.0	**29**		<1.0	<1.0	<1.0
MW1A	5/11/11			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	0.75 J	<1.0	0.32 J	**1.3**	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW1A	11/9/11			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**1.2**	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	ES PAL ug/L	1,1,1-Trichloroethane 200 40	1,1,2-Trichloroethane 5 0.5	1,1-Dichloroethane 850 85	1,1-Dichloroethene 7 0.7	1,2-Dibromo-3-chloropropane (DBCP) 0.2 0.02	1,2-Dichlorobenzene 600 60	1,2-Dichloroethane 5 0.5	1,2-Dichloropropane 5 0.5	Acetone 9000 1800	Benzene 5 0.5	Bromodichloromethane 0.6 0.06	Carbon Disulfide - -	Carbon tetrachloride 5 0.5	Chloroethane 400 80	Chloroform (Trichloromethane) 6 0.6	Chloromethane (Methyl chloride) 30 3	cis-1,2-Dichloroethene 70 7	4-Methyl-2-pentanone (Methyl isobutyl ketone) 500 50	Methylene chloride 5 0.5	Tetrachloroethene 5 0.5	Tetrahydrofuran 50 10	Toluene 800 160	trans-1,3-Dichloropropene 0.4 0.04	Trichloroethene 5 0.5	Vinyl chloride 0.2 0.02
MW1A	5/10/12			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW1A	11/7/12			<1.0	<1.0	1.2	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	2.7	<1.0	<1.0	<1.0	<10	<1.0	<1.0	1.7 J		<1.0	<1.0	<1.0
MW1A	11/1/17			<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW1B	12/4/03			0.27	<0.14	<0.22	<0.26	<0.21		<0.2	<0.19		<0.23	<0.19	<1.0	<0.18	<1.0	<0.21	<0.18	<0.22	<0.46	<0.24	<0.18	<0.65		<0.23	<0.22	<0.18
MW1B	9/24/04			0.61	<0.14	0.15	<0.24	<0.25		<0.13	<0.13		0.36	<0.19	<1.0	<0.15	<0.68	<0.12	0.41	<0.13	0.53	<0.1	<0.13	<0.53		<0.15	<0.12	<0.16
MW1B	8/10/05			0.55	<0.39	4.5	<0.38	<0.61		<0.39	<0.29		<0.28	<0.28	<1.0	<0.29	15	<0.2	<0.35	<0.36	11	**0.84**	<0.35	6.9		<0.48	<0.25	<0.4
MW1B	4/5/07			<0.37	<0.41	<0.25	<0.42	<1.1		**1.1**	<0.48		<0.21	<0.51	<1.0	<0.43	<3.0	<0.34	<0.95	<0.52	**71**	**0.83**	<0.52	**40**		<0.39	<0.76	<0.36
MW1B	7/23/07			<1.7	<1.7	<1.7	<1.7	<3.3		<1.7	<1.7		<1.7	<1.7	<1.0	<1.7	48	<1.7	<1.7	<1.7	**94**	<1.7	<1.7	**47**		<1.7	<1.7	<1.7
MW1B	5/9/08			<1.0	<1.0	<1.0	<1.0	<2.0		0.22 J	<1.0		<1.0	<1.0	<1.0	<1.0	12	<1.0	<1.0	<1.0	13	<1.0	<1.0	8.4		<1.0	<1.0	<1.0
MW1B	8/7/08			<1.7	<1.7	<1.7	<1.7	<3.3		**0.68 J**	<1.7		<1.7	<1.7	<1.0	<1.7	41	<1.7	<1.7	<1.7	**79**	<1.7	<1.7	**34**		<1.7	<1.7	<1.7
MW1B	11/13/08			<1.0	<1.0	<1.0	<1.0	<2.0		0.23 J	<1.0		<1.0	<1.0	<1.0	<1.0	15	<1.0	<1.0	<1.0	23	<1.0	<1.0	7.6		<1.0	<1.0	<1.0
MW1B	2/27/09			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.5	**1.2**	<1.0	<1.0	1 J	**0.73 J**	<1.0	0.57 J		<1.0	<1.0	<1.0
MW1B	5/4/09			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.4	**0.74**	<1.0	<1.0	0.34	<1.0	<1.0	0.59		<1.0	<1.0	<1.0
MW1B	8/12/09			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	2.7	**1.1**	<1.0	<1.0	3.2 J	<1.5	<1.0	2.3 J		<1.0	<1.0	<1.0
MW1B	11/12/09			<1.0	<1.0	<1.0	<1.0	<2.0		**0.5 J**	<1.0		<1.0	<1.0	<1.0	<1.0	14 J	**0.75 J**	<1.0	<1.0	44	<1.0	<1.0	**16**		<1.0	<1.0	<1.0
MW1B	2/16/10			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	16	<1.0	<1.0	<1.0	16	<1.0	<1.0	**19**		<1.0	<1.0	<1.0
MW1B	5/5/10			<1.0	<1.0	<1.0	<1.0	<2.0		0.22 J	<1.0		<1.0	<1.0	<1.0	<1.0	3.8	**1.1**	<1.0	<1.0	1.9 J	0.35 J	<1.0	<5.0		<1.0	<1.0	<1.0
MW1B	11/17/10			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.38 J	**1.5**	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW1B	5/11/11			<1.0	<1.0	2.6	<1.0	<2.0		0.36 J	<1.0		<1.0	<1.0	<1.0	<1.0	11	<1.0	<1.0	<1.0	19	<1.0	<1.0	**12**		<1.0	<1.0	<1.0
MW1B	11/9/11			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW1B	5/9/12			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	0.31	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW1B	11/6/12			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW1B	11/1/17			<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW2	4/26/99			460	<3.0	82	33	12		<1.8	<1.7		<1.4	<1.5	<1.0	<1.7	<2.7	13	<3.0	<1.4		**2.6**	60			<2.1	**2.1**	<1.0
MW2	10/13/99			300	<0.94	74	<0.94	<2.5		<1.1	**0.81**		<0.88	<0.82	<1.0	<1.8	<1.3	10	<0.88	<0.92		**1.1**	35			<0.52	**1.9**	<0.34
MW2	9/20/00			290	<0.94	80	20	<2.5		<1.1	**1.2**		<0.88	<0.82	<1.0	<1.8	<1.3	11	<0.88	<0.92		<0.76	34			<0.52	**1.7**	<0.34
MW2	12/20/00			396	<0.9	**107**	32.2	<2.5		<1.5	<1.5		<1.5	<0.6	<1.0	38.7	<1.5	13.5	<1.7	<1.5		<5.0	53.5			<0.9	**2.82**	<1.2
MW2	3/21/01			320	<0.94	77	22	<2.5		<1.1	**1.3**		<0.88	<0.82	<1.0	<1.8	<1.3	8.1	<0.88	<0.92		<0.76	30			<0.52	**1.6**	<0.34
MW2	09/19/2023			<1.0	<1.0	14	<1.0	<5.0	0.60 J	<1.0	<1.0	<10	0.49 J	<1.0	<2.0	<1.0	1.1 J	<2.0	<5.0	**42**	<5.0	<5.0	<1.0	4.3 J	<0.50	<1.0	**0.52**	**0.90 J**
MW2	10/12/2023			1.3	<1.0	2.2	<1.0	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	**2**	<5.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW2A	12/4/03			<0.23	<0.14	<0.22	<0.26	<0.21		<0.2	<0.19		<0.23	<0.19	<1.0	<0.18	<1.0	<0.21	<0.18	<0.22	<0.46	<0.24	<0.18	<0.65		<0.23	<0.22	<0.18
MW2A	12/4/03	D		<0.23	<0.14	<0.22	<0.26	<0.21		<0.2	<0.19		0.24	<0.19	<1.0	<0.18	<1.0	<0.21	<0.18	<0.22	<0.46	<0.24	<0.18	<0.65		<0.23	<0.22	<0.18
MW2A	9/23/04			<0.14	<0.14	<0.13	<0.24	<0.25		<0.13	<0.13		0.21	<0.19	<1.0	<0.15	<0.68	<0.12	0.43	<0.13	0.9	<0.1	<0.13	<0.53		<0.15	<0.12	<0.16
MW2A	8/8/05			<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.19	<0.51		<0.24	<0.13	<0.2
MW2A	4/5/07			<0.18	<0.16	<0.21	<0.24	<0.17		<0.15	<0.23		<0.21	<0.17	<1.0	<0.22	<0.88	<0.2	<0.15	<0.21	<0.24	<0.4	<0.21	<0.47		<0.15	<0.2	<0.17
MW2A	7/19/07			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	5/9/08			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	5/9/08	D		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	8/6/08			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	11/13/08			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	2/19/09			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	5/6/09			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	8/12/09			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	11/12/09			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	2/17/10			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	5/5/10			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	11/17/10			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	5/11/11			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	11/9/11			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon tetrachloride	Chloroethane	Chloroform (Trichloromethane)	Chloromethane (Methyl chloride)	cis-1,2-Dichloroethene	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	Methylene chloride	Tetrachloroethene	Tetrahydrofuran	Toluene	trans-1,3-Dichloropropene	Trichloroethene	Vinyl chloride
	ES		200	5	850	7	0.2	600	5	5	9000	5	0.6	-	5	400	6	30	70	500	5	5	50	800	0.4	5	0.2
	PAL		40	0.5	85	0.7	0.02	60	0.5	0.5	1800	0.5	0.06	-	0.5	80	0.6	3	7	50	0.5	0.5	10	160	0.04	0.5	0.02
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW2A	5/10/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2A	11/7/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	12/4/03		<0.23	<0.14	<0.22	<0.26	<0.21		<0.2	<0.19		<0.23	<0.19	<1.0	<0.18	<1.0	<0.21	<0.18	<0.22	<0.46	<0.24	<0.18	<0.65		<0.23	<0.22	<0.18
MW2B	9/23/04		<0.14	<0.14	<0.13	<0.24	<0.25		<0.13	<0.13		0.28	<0.19	<1.0	<0.15	<0.68	<0.12	0.86	<0.13	<0.28	<0.1	<0.13	<0.53		<0.15	<0.12	<0.16
MW2B	8/8/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.19	<0.51		<0.24	<0.13	<0.2
MW2B	4/5/07		<0.18	<0.21	<0.13	<0.21	<0.56		<0.19	<0.24		<0.11	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	<0.15	<0.4	<0.26	<0.86		<0.19	<0.38	<0.18
MW2B	7/19/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	5/9/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	8/6/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	11/13/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	11/13/08	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	2/19/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	5/6/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	8/12/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	11/12/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	2/17/10		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	5/5/10		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	11/17/10		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	5/11/11		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	11/9/11		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	5/10/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	11/7/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2B	11/1/17		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW2R	6/16/05		25	<2.0	**110**	<1.9	<3.0		<1.9	<1.5		<1.4	<1.4	<1.0	<1.5	27	**2**	<1.7	<1.8	<6.9	<2.5	<1.8	**27**		<2.4	<1.3	<2.0
MW2R	8/8/05		9.5	<2.0	20	<1.9	<3.0		<1.9	<1.5		<1.4	<1.4	<1.0	<1.5	8.9	<1.0	<1.7	<1.8	<6.9	**3.8**	<1.8	**11**		<2.4	<1.3	<2.0
MW2R	9/28/05		29	<2.0	**170**	**3.3**	<3.0		<1.9	**1.5**		<1.4	<1.4	<1.0	<1.5	63	**2**	<1.7	<1.8	<6.9	<2.5	<1.8	**35**		<2.4	<1.3	<2.0
MW2R	4/5/07		22	<1.6	**140**	<2.4	<1.7		<1.5	<2.3		<2.1	<1.7	<1.0	<2.2	49	<2.0	<1.5	<2.1	6	<4.0	<2.1	**34**		<1.5	<2.0	<1.7
MW2R	7/19/07		23	<5.0	**120**	**1.6 J**	<10		<5.0	**1.1 J**		<5.0	<5.0	<1.0	<5.0	26	<5.0	<5.0	<5.0	3.2 J	<5.0	<5.0	**26**		<5.0	**1.8 J**	<5.0
MW2R	5/9/08		11	**1.4 J**	76	<2.5	<5.0		**0.59 J**	**0.89 J**		<2.5	<2.5	<1.0	<2.5	15	**0.73 J**	<2.5	1.2 J	<25	<2.5	<2.5	**25**		<2.5	<2.5	<2.5
MW2R	8/6/08		22	**1.7 J**	**140**	**1.5 J**	<10		**1.3 J**	**1.6 J**		<5.0	<5.0	<1.0	<5.0	58	**3.1 J**	<5.0	2.3 J	<50	<5.0	<5.0	**47**		<5.0	<5.0	<5.0
MW2R	11/13/08		24	**2 J**	**130**	**1.7 J**	<8.0		**0.96 J**	**1 J**		<4.0	<4.0	<1.0	<4.0	36	**2.5 J**	<4.0	1.3 J	<40	<4.0	<4.0	**20**		<4.0	<4.0	<4.0
MW2R	2/19/09		10	**1.6 J**	72	**1.3 J**	<5.0		**0.98 J**	**0.94 J**		<2.5	<2.5	<1.0	<2.5	19	<2.5	<2.5	0.77 J	<25	<2.5	<2.5	**22**		<2.5	<2.5	<2.5
MW2R	5/6/09		7	**2.1**	68	**0.73**	<4.0		**0.96**	**0.88**		<2.0	<2.0	<1.0	<2.0	7.1	**1.8**	<2.0	0.5	<20	<2.0	<2.0	**32**		<2.0	**0.63**	<2.0
MW2R	8/12/09		3.8	**1.5**	33	0.43 J	<2.0		**0.81 J**	**0.57 J**		<1.0	<1.0	<1.0	<1.0	7.8	**1.2**	<1.0	0.32 J	<10	<1.0	<1.0	**29**		<1.0	**0.55 J**	<1.0
MW2R	11/12/09		3.3	**0.59 J**	14	0.57 J	<2.0		0.46 J	0.26 J		<1.0	<1.0	<1.0	<1.0	5.1 J	0.58 J	<1.0	<1.0	<10	<1.0	<1.0	**12**		<1.0	0.39 J	<1.0
MW2R	2/17/10		3.5	0.49 J	9.5	0.57 J	<2.0		<1.0	0.21 J		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	**14**		<1.0	<1.0	<1.0
MW2R	5/5/10		4.2	0.37 J	8.8	0.56 J	<2.0		<1.0	0.18 J		<1.0	<1.0	<1.0	<1.0	<1.0	0.33 J	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2R	11/17/10		2.9	<1.0	2.3	0.69 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	0.17 J	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2R	5/11/11		0.34 J	0.27 J	2.1	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2R	11/9/11		0.83 J	<1.0	4.2	0.25 J	<2.0		0.24 J	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	0.53 J	<1.0	<1.0	<10	<1.0	<1.0	1.2 J		<1.0	0.28 J	<1.0
MW2R	5/9/12		0.75	<1.0	3	0.26	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.64	<1.0	<1.0	<1.0	<10	<1.0	<1.0	0.91		<1.0	0.26	<1.0
MW2R	11/7/12		0.53 J	<1.0	2.4	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	0.19 J	<1.0
MW2R	11/6/13		0.42 J	<1.0	1	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2R	11/5/14		2.7	<1.0	2.7	0.52 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	0.35 J	<1.0	<1.0	<10	<1.0	0.31 J	0.71 J		<1.0	<1.0	<1.0
MW2R	11/5/15		<1.0	<1.0	2.4	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	0.39 J	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	0.28 J	<1.0
MW2R	11/7/16		0.52 J	<1.0	1	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW2R	11/1/17		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	1.1 J	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW2R	11/15/18		1.3	<1.0	2.5	0.43 J	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**0.77 J**	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	0.27 J	<1.0
MW2R	11/13/19		0.76 J	<1.0	0.94 J	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**1.4 J**	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon tetrachloride	Chloroethane	Chloroform (Trichloromethane)	Chloromethane (Methyl chloride)	cis-1,2-Dichloroethene	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	Methylene chloride	Tetrachloroethene	Tetrahydrofuran	Toluene	trans-1,3-Dichloropropene	Trichloroethene	Vinyl chloride
		ES	200	5	850	7	0.2	600	5	5	9000	5	0.6	-	5	400	6	30	70	500	5	5	50	800	0.4	5	0.2
		PAL	40	0.5	85	0.7	0.02	60	0.5	0.5	1800	0.5	0.06	-	0.5	80	0.6	3	7	50	0.5	0.5	10	160	0.04	0.5	0.02
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW2R	11/12/20		1.2	<1.0	2.2	0.45 J	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**1.7 J**	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	0.18 J	<1.0
MW2R	11/16/21		1.1	<1.0	1.1	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0 J	**2.1**	<1.0	<1.0	<5.0	**1.8 J**	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW2R	11/9/22		1.4	<1.0	2.8	0.60 J	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	**1.7**	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW3	4/26/99		**68**	<0.61	49	**3.4**	<0.41		<0.37	**2**		<0.27	<0.3	<1.0	<0.34	<0.54	**0.64**	<0.61	3.1		<0.36	12			<0.43	**0.87**	<0.2
MW3	10/13/99		**55**	<0.47	31	<0.47	<1.2		<0.54	<0.34		<0.44	<0.41	<1.0	<0.9	<0.63	<0.41	<0.44	1.8		**0.64**	11			<0.26	**0.78**	<0.17
MW3	9/20/00		**55**	<0.47	30	**2.4**	<1.2		<0.54	**1.5**		<0.44	<0.41	<1.0	<0.9	<0.63	0.49	<0.44	1.3		<0.38	9.1			<0.26	**0.8**	<0.17
MW3	12/20/00		**52.7**	<0.09	30.6	**2.3**	<0.25		<0.15	**1.5**		<0.15	<0.06	<1.0	5.04	<0.15	<0.07	<0.17	1.19		<0.5	9.87			<0.09	**0.815**	<0.12
MW3	3/21/01		**63**	<0.47	40	**2.3**	<1.2		<0.54	**2.2**		<0.44	<0.41	<1.0	<0.9	<0.63	0.55	0.53	1.4		<0.38	9.9			<0.26	**1**	<0.17
MW3	12/3/03		13	<0.14	9.8	0.33	<0.21		<0.2	**0.53**		0.29	<0.19	<1.0	<0.18	<1.0	<0.21	<0.18	<0.22	<0.46	<0.24	**1.2**	<0.65		<0.23	<0.22	<0.18
MW3	8/10/05		22	<0.39	11	**1.1**	<0.61		<0.39	**0.58**		<0.28	<0.28	<1.0	<0.29	<1.3	<0.2	<0.35	<0.36	<1.4	<0.51	**2.7**	1.1		<0.48	<0.25	<0.4
MW3	8/10/05	D	21	<0.2	13	**1.3**	<0.3		<0.19	**0.57**		<0.14	<0.14	<1.0	<0.15	<0.63	0.21	<0.17	0.19	<0.69	<0.25	<0.19	1.3		<0.24	<0.13	<0.2
MW3	4/12/07		18	<0.41	13	**1.1**	<1.1		<0.37	**0.8**		<0.21	<0.51	<1.0	<0.43	<3.0	<0.34	<0.95	<0.52	<0.29	<0.8	**4.3**	<1.7		<0.39	<0.76	<0.36
MW3	7/19/07		15	<1.0	9.2	**1.1**	<2.0		<1.0	0.5 J		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	**4.3**	<5.0		<1.0	0.31 J	<1.0
MW3	7/19/07	D	15	<1.0	9.2	**1.2**	<2.0		<1.0	0.49 J		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	**4.4**	<5.0		<1.0	0.34 J	<1.0
MW3	5/6/08		10	<1.0	7.1	**0.75 J**	<2.0		<1.0	0.39 J		<1.0	<1.0	<1.0	<1.0	<1.0	0.19 J	<1.0	<1.0	<10	<1.0	**3**	0.57 J		<1.0	<1.0	<1.0
MW3	8/7/08		8.4	<1.0	3.4	0.64 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	**2.4**	<5.0		<1.0	<1.0	<1.0
MW3	11/13/08		9	<1.0	3.9	**0.84 J**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	**1.8**	<5.0		<1.0	<1.0	<1.0
MW3	2/18/09		6.7	<1.0	3.2	0.57 J	<2.0		<1.0	0.18 J		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	**1.8**	<5.0		<1.0	<1.0	<1.0
MW3	5/4/09		5.5	<1.0	2.7	0.48	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	**1.2**	<5.0		<1.0	<1.0	<1.0
MW3	8/10/09		5	<1.0	1.9	0.34 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	**0.91 J**	<5.0		<1.0	<1.0	<1.0
MW3	8/10/09	D	5.2	<1.0	1.9	0.49 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	**1.1**	<5.0		<1.0	<1.0	<1.0
MW3	11/11/09		3.8	<1.0	1.5	0.41 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	**0.8 J**	<5.0		<1.0	<1.0	<1.0
MW3	2/16/10		3.1	<1.0	1.6	0.39 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	**0.56 J**	<5.0		<1.0	<1.0	<1.0
MW3	2/16/10	D	3.1	<1.0	1.6	0.43 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	**0.53 J**	<5.0		<1.0	<1.0	<1.0
MW3	5/6/10		2.8	<1.0	1.3	0.25 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	0.49 J	<5.0		<1.0	<1.0	<1.0
MW3	11/18/10		1.6	<1.0	0.68 J	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	0.33 J	<5.0		<1.0	<1.0	<1.0
MW3	5/11/11		1.2	<1.0	0.45 J	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW3	11/9/11		0.9 J	<1.0	0.39 J	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW3	5/10/12		0.76	<1.0	0.41	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW3	11/8/12		0.59 J	<1.0	0.21 J	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW3	11/1/17		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<21	<1.0	<10		<1.0	<0.5	<0.5
MW3	09/19/2023		<1.0	<1.0	37	<1.0	<5.0	<1.0	<1.0	**0.72 J**	<10	<0.50	<1.0	<2.0	<1.0	<5.0	<2.0	<5.0	6.9	<5.0	<5.0	**0.59 J**	<10	<0.50	<1.0	**1.1**	<1.0
MW4	4/26/99		<0.3	<0.61	<0.35	<0.43	<0.41		<0.37	<0.35		<0.27	<0.3	<1.0	<0.34	<0.54	<0.35	<0.61	<0.28		<0.36	<0.43			<0.43	<0.37	<0.2
MW4	12/20/00		<0.15	<0.09	<0.15	<0.15	<0.25		<0.15	<0.15		<0.15	<0.06	<1.0	<0.15	<0.15	<0.07	<0.17	<0.15		<0.5	<0.15			<0.09	<0.1	<0.12
MW4	3/21/01		<0.53	<0.47	<0.61	<0.47	<1.2		<0.54	<0.34		<0.44	<0.41	<1.0	<0.9	<0.63	<0.41	<0.44	<0.46		<0.38	<0.41			<0.26	<0.49	<0.17
MW4	12/1/03		0.62	<0.14	<0.22	<0.26	<0.21		<0.2	<0.19		<0.23	<0.19	<1.0	<0.18	<1.0	<0.21	<0.18	<0.22	<0.46	<0.24	<0.18	<0.65		<0.23	<0.22	<0.18
MW4	8/10/05		0.4	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.19	0.93		<0.24	<0.13	<0.2
MW4	4/12/07		0.22	<0.21	<0.13	<0.21	<0.56		<0.19	<0.24		<0.11	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	<0.15	<0.4	<0.26	<0.86		<0.19	<0.38	<0.18
MW4	7/18/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW4	5/6/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW4	09/19/2023		<1.0	<1.0	0.89 J	<1.0	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	**0.87 J**	<5.0	4	<5.0	<5.0	**0.51 J**	<10	<0.50	<1.0	<0.50	<1.0
MW5	4/26/99		0.93	<0.61	<0.35	<0.43	<0.41		<0.37	<0.35		<0.27	<0.3	<1.0	<0.34	<0.54	<0.35	<0.61	<0.28		<0.36	<0.43			<0.43	<0.37	<0.2
MW5	12/20/00		<0.15	<0.09	<0.15	<0.15	<0.25		<0.15	<0.15		<0.15	<0.06	<1.0	<0.15	<0.15	<0.07	<0.17	<0.15		<0.5	<0.15			<0.09	<0.1	<0.12
MW5	3/21/01		<0.53	<0.47	<0.61	<0.47	<1.2		<0.54	<0.34		<0.44	<0.41	<1.0	<0.9	<0.63	<0.41	<0.44	<0.46		<0.38	<0.41			<0.26	<0.49	<0.17
MW5	12/1/03		<0.23	<0.14	<0.22	<0.26	<0.21		<0.2	<0.19		<0.23	<0.19	<1.0	<0.18	<1.0	<0.21	<0.18	<0.22	<0.46	<0.24	<0.18	<0.65		<0.23	<0.22	<0.18
MW5	8/10/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.19	<0.51		<0.24	<0.13	<0.2
MW5	4/12/07		<0.18	<0.21	<0.13	<0.21	<0.56		<0.19	<0.24		<0.11	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	<0.15	<0.4	<0.26	<0.86		<0.19	<0.38	<0.18
MW5	7/18/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW5	5/6/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon tetrachloride	Chloroethane	Chloroform (Trichloromethane)	Chloromethane (Methyl chloride)	cis-1,2-Dichloroethene	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	Methylene chloride	Tetrachloroethene	Tetrahydrofuran	Toluene	trans-1,3-Dichloropropene	Trichloroethene	Vinyl chloride
		ES	200	5	850	7	0.2	600	5	5	9000	5	0.6	-	5	400	6	30	70	500	5	5	50	800	0.4	5	0.2
		PAL	40	0.5	85	0.7	0.02	60	0.5	0.5	1800	0.5	0.06	-	0.5	80	0.6	3	7	50	0.5	0.5	10	160	0.04	0.5	0.02
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW6	4/26/99		<0.3	<0.61	<0.35	<0.43	<0.41		<0.37	<0.35		<0.27	<0.3	<1.0	<0.34	<0.54	<0.35	<0.61	<0.28		<0.36	<0.43			<0.43	<0.37	<0.2
MW6	9/20/00		<0.53	<0.47	<0.61	<0.47	<1.2		<0.54	<0.34		<0.44	<0.41	<1.0	<0.9	<0.63	<0.41	<0.44	<0.46		<0.38	<0.41			<0.26	<0.49	<0.17
MW6	12/20/00		<0.15	<0.09	<0.15	<0.15	<0.25		<0.15	<0.15		<0.15	<0.06	<1.0	<0.15	<0.15	<0.07	<0.17	<0.15		<0.5	<0.15			<0.09	<0.1	<0.12
MW6	3/21/01		<0.53	<0.47	<0.61	<0.47	<1.2		<0.54	<0.34		<0.44	<0.41	<1.0	<0.9	<0.63	<0.41	<0.44	<0.46		<0.38	<0.41			<0.26	<0.49	<0.17
MW6	12/1/03		<0.23	<0.14	<0.22	<0.26	<0.21		<0.2	<0.19		<0.23	<0.19	<1.0	<0.18	<1.0	<0.21	<0.18	<0.22	<0.46	<0.24	<0.18	<0.65		<0.23	<0.22	<0.18
MW6	8/10/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.19	<0.51		<0.24	<0.13	<0.2
MW6	4/12/07		<0.18	<0.21	<0.13	<0.21	<0.56		<0.19	<0.24		<0.11	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	<0.15	<0.4	<0.26	<0.86		<0.19	<0.38	<0.18
MW6	7/18/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	5/6/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	5/6/08	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	8/4/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	11/11/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	2/17/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	5/5/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	8/11/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	11/11/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	2/16/10		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	5/5/10		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	5/10/11		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	11/9/11		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	5/9/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	11/6/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	11/6/13		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	11/5/14		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	11/3/15		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	11/7/16		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW6	10/30/17		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW6	09/19/2023		<1.0	<1.0	3.4	<1.0	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	**1.3 J**	<5.0	4.7	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW7	10/13/99		2.2	<0.47	<0.61	<0.47	<1.2		<0.54	<0.34		<0.44	<0.41	<1.0	<0.9	<0.63	<0.41	<0.44	<0.46		<0.38	<0.41			<0.26	<0.49	<0.17
MW7	12/20/00		**40.1**	<0.09	0.479	**2.65**	<0.25		<0.15	<0.15		<0.15	<0.06	<1.0	**4.1**	<0.15	<0.07	<0.17	<0.15		<0.5	0.335			<0.09	<0.1	<0.12
MW7	3/21/01		28	<0.47	<0.61	**1.2**	<1.2		<0.54	<0.34		<0.44	<0.41	<1.0	<0.9	<0.63	<0.41	<0.44	<0.46		<0.38	<0.41			<0.26	<0.49	<0.17
MW8	12/2/03		0.82	<0.14	<0.22	<0.26	<0.21		<0.2	<0.19		<0.23	<0.19	<1.0	<0.18	<1.0	<0.21	<0.18	<0.22	<0.46	<0.24	<0.18	<0.65		<0.23	<0.22	<0.18
MW8	9/23/04		0.18	<0.14	<0.13	<0.24	<0.25		<0.13	<0.13		0.16	<0.19	<1.0	<0.15	<0.68	<0.12	0.12	<0.13	<0.28	<0.1	<0.13	<0.53		<0.15	<0.12	<0.16
MW8	8/10/05		0.45	<0.2	0.47	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.19	0.96		<0.24	<0.13	<0.2
MW8	4/5/07		<0.18	<0.16	<0.21	<0.24	<0.17		<0.15	<0.23		<0.21	<0.17	<1.0	<0.22	<0.88	<0.2	<0.15	<0.21	<0.24	<0.4	<0.21	<0.47		<0.15	<0.2	<0.17
MW8	7/18/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW8	7/18/07	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW8	5/7/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW8A	12/2/03		<0.23	<0.14	<0.22	<0.26	<0.21		<0.2	<0.19		0.24	<0.19	<1.0	<0.18	<1.0	<0.21	<0.18	<0.22	<0.46	<0.24	**0.86**	<0.65		<0.23	<0.22	<0.18
MW8A	9/23/04		<0.14	<0.14	<0.13	<0.24	<0.25		<0.13	<0.13		0.36	<0.19	<1.0	<0.15	<0.68	<0.12	<0.12	<0.13	1.5	<0.1	<0.13	<0.53		<0.15	<0.12	<0.16
MW8A	8/10/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.19	<0.51		<0.24	<0.13	<0.2
MW8A	4/5/07		<0.18	<0.16	<0.21	<0.24	<0.17		<0.15	<0.23		<0.21	<0.17	<1.0	<0.22	<0.88	<0.2	<0.15	<0.21	<0.24	<0.4	<0.21	<0.47		<0.15	<0.2	<0.17
MW8A	7/18/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW8A	5/7/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW9	12/2/03		310	<3.4	**220**	<6.6	<5.2		<5.0	<4.8		<5.6	<4.8	<1.0	<4.4	<25	9.1	<4.5	**13**	<11	<5.9	31	<16		<5.8	<5.4	<4.4
MW9	9/24/04		350	<3.5	**460**	30	<6.2		<3.3	<3.1		<2.9	<4.7	<1.0	<3.8	<17	16	<3.0	**40**	<7.0	<2.6	35	<13		<3.7	<2.9	<4.1
MW9	8/10/05		410	<4.9	**700**	41	<7.6		<4.8	<3.7		<3.6	<3.5	<1.0	<3.7	<16	13	<4.4	**46**	<17	<6.4	29	<13		<6.0	<3.2	<5.0
MW9	4/12/07		260	<10	**420**	29	<28		<9.4	<12		<5.3	<13	<1.0	<11	<75	15	<24	**29**	<7.3	<20	26	<43		<9.7	<19	<9.0
MW9	7/18/07		37	<4.0	**110**	**2.7 J**	<8.0		<4.0	<4.0		<4.0	<4.0	<1.0	<4.0	<4.0	<4.0	<4.0	4.4	<40	<4.0	<4.0	5.8 J		<4.0	<4.0	<4.0

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	ES PAL ug/L	1,1,1-Trichloroethane 200 40 ug/L	1,1,2-Trichloroethane 5 0.5 ug/L	1,1-Dichloroethane 850 85 ug/L	1,1-Dichloroethene 7 0.7 ug/L	1,2-Dibromo-3-chloropropane (DBCP) 0.2 0.02 ug/L	1,2-Dichlorobenzene 600 60 ug/L	1,2-Dichloroethane 5 0.5 ug/L	1,2-Dichloropropane 5 0.5 ug/L	Acetone 9000 1800 ug/L	Benzene 5 0.5 ug/L	Bromodichloromethane 0.6 0.06 ug/L	Carbon Disulfide - - -	Carbon tetrachloride 5 0.5 ug/L	Chloroethane 400 80 ug/L	Chloroform (Trichloromethane) 6 0.6 ug/L	Chloromethane (Methyl chloride) 30 3 ug/L	cis-1,2-Dichloroethene 70 7 ug/L	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) 500 50 ug/L	Methylene chloride 5 0.5 ug/L	Tetrachloroethene 5 0.5 ug/L	Tetrahydrofuran 50 10 ug/L	Toluene 800 160 ug/L	trans-1,3-Dichloropropene 0.4 0.04 ug/L	Trichloroethene 5 0.5 ug/L	Vinyl chloride 0.2 0.02 ug/L
MW9	5/7/08			**150**	<8.0	**190**	16	<16		<8.0	**1.4 J**		<8.0	<8.0	<1.0	<8.0	<8.0	**4 J**	<8.0	**12**	<80	<8.0	24	3.7 J		<8.0	**2.4 J**	<8.0
MW9	8/6/08			**140**	<5.0	**170**	12	<10		<5.0	**1.1 J**		<5.0	<5.0	<1.0	<5.0	<5.0	7.5	<5.0	**8.5**	<50	<5.0	23	<25		<5.0	**2.3 J**	<5.0
MW9	11/11/08			**86**	<5.0	**120**	9.6	<10		<5.0	<5.0		<5.0	<5.0	<1.0	<5.0	<5.0	**4.7 J**	<5.0	6.2	<50	<5.0	12	<25		<5.0	**1.5 J**	<5.0
MW9	2/19/09			**120**	<5.0	**170**	19	<10		<5.0	<5.0		<5.0	<5.0	<1.0	<5.0	<5.0	<6.3	<5.0	**7.6**	<50	<5.0	22	2.5 J		<5.0	**2.1 J**	<5.0
MW9	5/6/09			**82**	<6.7	**140**	9.8	<13		<6.7	<6.7		<6.7	<6.7	<1.0	<6.7	<6.7	**5.9**	<6.7	5.6	<67	<6.7	11	<33		<6.7	<6.7	<6.7
MW9	8/12/09			**160**	<8.0	**230**	19	<16		<8.0	**1.6 J**		<8.0	<8.0	<1.0	<8.0	<8.0	10	<8.0	**10**	<80	<8.0	18	4.1 J		<8.0	**2.3 J**	<8.0
MW9	11/11/09			**120**	<10	**190**	18	<20		<10	<10		<10	<10	<1.0	<10	<10	8.8 J	<10	**11**	<100	<10	19	<50		<10	<10	<10
MW9	2/15/10			**88**	<0.5	**190**	16	<0.5		<0.5	**1.3 J**		<0.5	<0.5	<1.0	<0.5	<0.5	7.3	<1.0	**9.3**	<0.5	**2.6 J**	15	<0.5		<0.5	**1.9 J**	<0.5
MW9	5/6/10			**120**	<6.7	**230**	21	<13		<6.7	**1.4 J**		<6.7	<6.7	<1.0	<6.7	<6.7	7.6	<6.7	**13**	<67	<6.7	16	7.3 J		<6.7	**1.9 J**	<6.7
MW9	11/18/10			**76**	<5.7	**150**	11	<11		<5.7	<5.7		<5.7	<5.7	<1.0	<5.7	<5.7	**4.9 J**	<5.7	**9.1**	<57	<5.7	11	3 J		<5.7	<5.7	<5.7
MW9	11/18/10	D		**77**	<5.7	**150**	11	<11		<5.7	<5.7		<5.7	<5.7	<1.0	<5.7	<5.7	**4.9 J**	<5.7	**8.7**	<57	<5.7	11	3.7 J		<5.7	<5.7	<5.7
MW9	5/11/11			35	<1.7	58	**4.4**	<3.3		<1.7	0.39 J		<1.7	<1.7	<1.0	<1.7	<1.7	**2.7**	<1.7	2.5	<17	<1.7	5.2	<8.4		<1.7	**0.63 J**	<1.7
MW9	11/9/11			29	<1.0	33	**3.2**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**1.8**	<1.0	1.5	<10	<1.0	5.1	<5.0		<1.0	0.37 J	<1.0
MW9	5/9/12			29	<1.0	35	**4.2**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**1.8**	<1.0	1.7	<10	<1.0	**4.7**	0.66		<1.0	0.49	<1.0
MW9	11/6/12			27	<1.4	38	**5.6**	<2.9		<1.4	<1.4		<1.4	<1.4	<1.0	<1.4	<1.4	**2.1**	<1.4	1.8	<14	<1.4	**4**	<7.2		<1.4	**0.5 J**	<1.4
MW9	11/6/13			9.9	<1.0	13	**2**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**0.92 J**	<1.0	0.72 J	<10	<1.0	**2.4**	<5.0		<1.0	0.21 J	<1.0
MW9	11/6/13	D		11	<1.0	14	**2.2**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**0.97 J**	<1.0	0.77 J	<10	<1.0	**2.5**	<5.0		<1.0	0.22 J	<1.0
MW9	11/5/14			9.4	<1.0	7.9	**1.5**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**0.85 J**	<1.0	0.5 J	<10	<1.0	**1.6**	<5.0		<1.0	0.17 J	<1.0
MW9	11/5/14	D		9.1	<1.0	8.1	**1.5**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**0.83 J**	<1.0	0.47 J	<10	<1.0	**1.6**	<5.0		<1.0	0.17 J	<1.0
MW9	11/3/15			15	<1.0	20	**2.8**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**2**	<1.0	1.1	<10	<1.0	**2.5**	<5.0		<1.0	0.34 J	<1.0
MW9	11/3/15	D		16	<1.0	22	**2.9**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**2.1**	<1.0	1.2	<10	<1.0	**2.7**	<5.0		<1.0	0.31 J	<1.0
MW9	11/7/16			7.1	<1.0	7.2	**1.5**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**0.87 J**	<1.0	0.49 J	<10	<1.0	**1.5**	<5.0		<1.0	<1.0	<1.0
MW9	10/31/17			7.2	<1.0	7.9	1.6	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**1.2 J**	<1.0	0.6 J	<5.0	<5.0	**1.4**	<10		<1.0	<0.5	<0.5
MW9	11/15/18			11	<1.0	17	**2.9**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**2**	<1.0	1	<5.0	<5.0	<2.3	<10		<1.0	0.32 J	<1.0
MW9	11/14/19			7.7	<1.0	9.6	**2.2**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**1 J**	<1.0	0.65 J	<5.0	<5.0	**1.6**	<10		<1.0	0.17 J	<1.0
MW9	11/12/20			4.1	<1.0	3.5	**0.89 J**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**0.79 J**	<1.0	<1.0	<5.0	<5.0	**1.2**	<10		<1.0	<0.5	<1.0
MW9	11/16/21			7.7	<1.0	8.7	**2**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0 J	**1.3 J**	<1.0	0.52 J	<5.0	<5.0	**1.7**	<10	<0.50	<1.0	<0.50	<1.0
MW9	11/8/22			4	<1.0	4	**0.72 J**	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	**0.70 J**	<1.0	<1.0	<5.0	<1.0	**1.1**	<5.0	<1.0	<1.0	<1.0	<1.0
MW9	10/11/2023			4.3	<1.0	3.8	<1.0	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	<2.0	<5.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW9A	12/3/03			<0.23	<0.14	<0.22	<0.26	<0.21		<0.2	<0.19		<0.23	<0.19	<1.0	<0.18	<1.0	<0.21	<0.18	<0.22	<0.46	<0.24	<0.18	<0.65		<0.23	<0.22	<0.18
MW9A	9/24/04			<0.23	<0.14	1	<0.26	<0.21		<0.2	<0.19		<0.23	<0.19	<1.0	<0.18	<1.0	<0.21	<0.18	<0.22	<0.46	<0.24	<0.18	<0.65		<0.23	<0.22	<0.18
MW9A	8/10/05			<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.19	<0.51		<0.24	<0.13	<0.2
MW9A	4/12/07			<0.18	<0.21	<0.13	<0.21	<0.56		<0.19	<0.24		<0.11	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	<0.15	<0.4	<0.26	<0.86		<0.19	<0.38	<0.18
MW9A	7/18/07			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW9A	5/6/08			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	1	<1.0	<10	<1.0	<1.0	0.77 J		<1.0	<1.0	<1.0
MW9A	8/6/08			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW9A	8/6/08	D		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW10	6/15/05			16	<0.39	4	**1.6**	<0.61		<0.39	<0.29		<0.28	<0.28	<1.0	<0.29	<1.3	<0.2	<0.35	0.54	<1.4	<0.51	0.44	<1.0		<0.48	<0.25	<0.4
MW10	8/8/05			23	<0.39	5.8	<0.38	<0.61		<0.39	<0.29		<0.28	<0.28	<1.0	<0.29	<1.3	<0.2	<0.35	<0.36	<1.4	<0.51	**0.52**	<1.0		<0.48	<0.25	<0.4
MW10	4/4/07			37	<0.41	17	**6.1**	<1.1		<0.37	<0.48		<0.21	<0.51	<1.0	<0.43	<3.0	<0.34	<0.95	1.5	<0.29	**3**	**2**	<1.7		<0.39	<0.76	<0.36
MW10	7/19/07			33	<1.0	18	**5.9**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.49 J	<1.0	<1.0	1.5	<10	<1.0	**1.6**	0.44 J		<1.0	<1.0	<1.0
MW10	5/8/08			17	<1.0	14	**2.5**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.54 J	<1.0	<1.0	0.94 J	<10	<1.0	**0.87 J**	0.66 J		<1.0	<1.0	<1.0
MW10	8/5/08			11	<1.0	10	**1.7**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.3 J	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW10	11/12/08			31	<1.0	26	**5.6**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.93 J	0.4 J	0.32 J	1.5	<10	<1.0	**1.2**	<5.0		<1.0	0.32 J	<1.0
MW10	2/18/09			35	<1.4	25	8.5	<2.9		<1.4	<1.4		<1.4	<1.4	<1.0	<1.4	0.68 J	<1.4	<1.4	1.4	<14	<1.4	**1.9**	<7.2		<1.4	0.41 J	<1.4
MW10	5/4/09			**42 J**	<1.0	31	7.1	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.81	0.5	<1.0	1.5	<10	<1.0	**2**	0.7		<1.0	0.43	<1.0
MW10	5/4/09	D		22	<1.4	18	**4**	<2.9		<1.4	<1.4		<1.4	<1.4	<1.0	<1.4	0.62	0.28	<1.4	0.91	<14	<1.4	**1.2**	<7.2		<1.4	<1.4	<1.4
MW10	8/12/09			38	<1.7	27	**5.8**	<3.3		<1.7	<1.7		<1.7	<1.7	<1.0	<1.7	0.6 J	0.51 J	<1.7	1.4 J	<17	<1.7	**1.7**	<8.4		<1.7	<1.7	<1.7
MW10	11/11/09			**50**	<2.5	33	9.6	<5.0		<2.5	<2.5		<2.5	<2.5	<1.0	<2.5	1.1 J	**0.69 J**	<2.5	2.1 J	<25	<2.5	**3.4 J**	<12		<2.5	<2.5	<2.5

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	ES PAL ug/L	1,1,1-Trichloroethane 200 40 ug/L	1,1,2-Trichloroethane 5 0.5 ug/L	1,1-Dichloroethane 850 85 ug/L	1,1-Dichloroethene 7 0.7 ug/L	1,2-Dibromo-3-chloropropane (DBCP) 0.2 0.02 ug/L	1,2-Dichlorobenzene 600 60 ug/L	1,2-Dichloroethane 5 0.5 ug/L	1,2-Dichloropropane 5 0.5 ug/L	Acetone 9000 1800 ug/L	Benzene 5 0.5 ug/L	Bromodichloromethane 0.6 0.06 ug/L	Carbon Disulfide - - -	Carbon tetrachloride 5 0.5 ug/L	Chloroethane 400 80 ug/L	Chloroform (Trichloromethane) 6 0.6 ug/L	Chloromethane (Methyl chloride) 30 3 ug/L	cis-1,2-Dichloroethene 70 7 ug/L	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) 500 50 ug/L	Methylene chloride 5 0.5 ug/L	Tetrachloroethene 5 0.5 ug/L	Tetrahydrofuran 50 10 ug/L	Toluene 800 160 ug/L	trans-1,3-Dichloropropene 0.4 0.04 ug/L	Trichloroethene 5 0.5 ug/L	Vinyl chloride 0.2 0.02 ug/L
MW10	2/16/10			31	<1.0	25	7.2	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.86 J	0.47 J	<1.0	1.4	<10	<1.0	**2.2**	<5.0		<1.0	0.39 J	<1.0
MW10	5/6/10			10	<1.0	8.6	**1.8**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.42 J	<10	<1.0	**0.6 J**	<5.0		<1.0	<1.0	<1.0
MW10	11/17/10			10	<1.0	8.3	**1.6**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.49 J	<10	<1.0	**0.6 J**	<5.0		<1.0	<1.0	<1.0
MW10	5/11/11			11	<1.0	8.2	**2.6**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.44 J	0.18 J	<1.0	0.44 J	<10	<1.0	**0.73 J**	<5.0		<1.0	<1.0	<1.0
MW10	11/10/11			18	<1.0	12	**2.7**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	0.29 J	<1.0	0.64 J	<10	<1.0	**1.5**	<5.0		<1.0	<1.0	<1.0
MW10	5/9/12			**53**	<2.5	40	**9.5**	<5.0		<2.5	<2.5		<2.5	<2.5	<1.0	<2.5	1.7	**0.81**	<2.5	2.3	<25	<2.5	**4.4**	1.1		<2.5	**0.76**	<2.5
MW10	11/9/12			31	<1.0	29	**6.8**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.78 J	0.53 J	<1.0	1.5	<10	<1.0	**2.2**	<5.0		<1.0	0.39 J	<1.0
MW10	11/6/13			5.6	<1.0	6.1	**1.1**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.41 J	<10	<1.0	**0.82 J**	<5.0		<1.0	<1.0	<1.0
MW10	11/6/13	D		6.3	<1.0	6.5	**1.2**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	**0.92 J**	<5.0		<1.0	<1.0	<1.0
MW10	11/6/14			38	<1.0	28	**5.9**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**0.76 J**	<1.0	1.3	<10	<1.0	**3.1**	0.65 J		<1.0	0.47 J	<1.0
MW10	11/4/15			36	<1.0	26	**6.1**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**0.61 J**	<1.0	2.6	<10	<1.0	5.9	<5.0		<1.0	**0.66 J**	<1.0
MW10	5/10/16			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW10	11/9/16			3.5	<1.0	2.6	0.67 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	0.3 J	<5.0		<1.0	<1.0	<1.0
MW10	5/18/17			1.8	<1.0	1.3	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW10	11/1/17			2.9	<1.0	2.5	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW10	5/4/18			2.4	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW10	11/12/18			2.5	<1.0	2.5	0.49 J	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW10	5/16/19			<1.0	<1.0	1.3	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW10	11/14/19			1	<1.0	1	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW10	5/19/20			1.6	<1.0	2.1	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW10	11/12/20			2.4	<1.0	0.96 J	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW10	5/6/21			1	<1.0	1.4	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW10	11/15/21			2	<1.0	2.4	0.48 J	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0 J	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW10	5/27/22			2.6	<1.0	1.2	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10 J	<0.50	<1.0	<0.50	<1.0
MW10	11/9/22			1.1	<1.0	1.3	<1.0	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW10	10/12/2023			<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	<2.0	<5.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW10A	6/15/05			35	<0.98	6.1	**4.7**	<1.5		<0.97	<0.73		<0.71	<0.71	<1.0	<0.74	<3.2	<0.51	<0.87	0.91	<3.5	<1.3	<0.88	<2.6		<1.2	<0.64	<1.0
MW10A	8/8/05			26	<0.98	7.5	**3**	<1.5		<0.97	<0.73		<0.71	<0.71	<1.0	<0.74	<3.2	<0.51	<0.87	<0.9	<3.5	<1.3	<0.88	<2.6		<1.2	<0.64	<1.0
MW10A	4/2/07			**65**	<0.81	20	**6.6**	<0.87		<0.77	<1.1		<1.1	<0.87	<1.0	<1.1	<4.4	<0.99	<0.74	2.2	<1.2	<2.0	7.1	<2.3		<0.75	<0.99	<0.86
MW10A	7/19/07			**61**	<3.3	25	9.8	<6.7		<3.3	<3.3		<3.3	<3.3	<1.0	<3.3	<3.3	<3.3	<3.3	3.5	<33	<3.3	**4.5**	<17		<3.3	<3.3	<3.3
MW10A	5/8/08			**73**	<2.5	26	8	<5.0		<2.5	<2.5		<2.5	<2.5	<1.0	<2.5	<2.5	<2.5	<2.5	3.7	<25	<2.5	10	<12		<2.5	**0.78 J**	<2.5
MW10A	8/5/08			**61**	<2.5	28	15	<5.0		<2.5	<2.5		<2.5	<2.5	<1.0	<2.5	<2.5	**0.63 J**	<2.5	3.4	<25	<2.5	5.7	<12		<2.5	<2.5	<2.5
MW10A	11/12/08			**68**	<2.5	31	14	<5.0		<2.5	<2.5		<2.5	<2.5	<1.0	<2.5	<2.5	**0.61 J**	<2.5	4.1	<25	<2.5	9.1	<12		<2.5	**0.71 J**	<2.5
MW10A	2/18/09			**69**	<2.0	32	18	<4.0		<2.0	<2.0		<2.0	<2.0	<1.0	<2.0	<2.0	<2.0	<2.0	4.1	<20	<2.0	10	<10		<2.0	**0.79 J**	<2.0
MW10A	5/5/09			**72**	<2.5	37	14	<5.0		<2.5	<2.5		<2.5	<2.5	<1.0	<2.5	<2.5	**0.69**	<2.5	4.4	<25	<2.5	8.6	<12		<2.5	**0.82**	<2.5
MW10A	8/12/09			**75**	<2.0	36	13	<4.0		<2.0	<2.0		<2.0	<2.0	<1.0	<2.0	<2.0	**0.63 J**	<2.0	4.4	<20	<2.0	8.9	0.97 J		<2.0	**0.82 J**	<2.0
MW10A	11/11/09			**67**	<2.5	31	14	<5.0		<2.5	<2.5		<2.5	<2.5	<1.0	<2.5	<2.5	**0.64 J**	<2.5	4.4	<25	<2.5	11 J	<12		<2.5	**0.89 J**	<2.5
MW10A	2/16/10			**63 J**	<2.0	35 J	13	<4.0		<2.0	<2.0		<2.0	<2.0	<1.0	<2.0	<2.0	**0.72 J**	<2.0	4.3 J	<20	**0.85 J**	9.5 J	<10		<2.0	**0.83 J**	<2.0
MW10A	5/6/10			**59**	<2.0	36	13	<4.0		<2.0	<2.0		<2.0	<2.0	<1.0	<2.0	<2.0	**0.64 J**	<2.0	4.4	<20	<2.0	7.1	1.4 J		<2.0	**0.75 J**	<2.0
MW10A	11/17/10			**58**	<2.5	33	11	<5.0		<2.5	<2.5		<2.5	<2.5	<1.0	<2.5	<2.5	**0.69 J**	<2.5	4	<25	<2.5	7.7	<12		<2.5	<2.5	<2.5
MW10A	5/11/11			**63**	<1.7	39	15	<3.3		<1.7	<1.7		<1.7	<1.7	<1.0	<1.7	<1.7	**0.84 J**	<1.7	4.5	<17	<1.7	8.9	0.84 J		<1.7	**0.87 J**	<1.7
MW10A	11/10/11			**55**	<1.7	30	9.2	<3.3		<1.7	<1.7		<1.7	<1.7	<1.0	<1.7	<1.7	**0.7 J**	<1.7	3.6	<17	<1.7	8	<8.4		<1.7	**0.78 J**	<1.7
MW10A	5/10/12			**53**	<2.0	34	10	<4.0		<2.0	<2.0		<2.0	<2.0	<1.0	<2.0	<2.0	**0.72**	<2.0	3.8	<20	<2.0	6.3	<10		<2.0	**0.71**	<2.0
MW10A	11/9/12			**43**	<1.7	31	12	<3.3		<1.7	<1.7		<1.7	<1.7	<1.0	<1.7	<1.7	**0.62 J**	<1.7	3.4	<17	<1.7	6.3	<8.4		<1.7	**0.72 J**	<1.7
MW10A	11/6/13			30	<3.3	25	**7**	<6.7		<3.3	<3.3		<3.3	<3.3	<1.0	<3.3	<3.3	0.54 J	<3.3	3 J	<33	<3.3	6.4	<17		<3.3	**0.61 J**	<3.3
MW10A	11/6/14			38	<1.4	29	**6.7**	<2.9		<1.4	<1.4		<1.4	<1.4	<1.0	<1.4	<1.4	**0.72 J**	<1.4	2.9	<14	<1.4	**5.9**	<7.2		<1.4	**0.62 J**	<1.4
MW10A	11/4/15			15	<1.0	10	**2.7**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	0.31 J	<1.0	0.4 J	<10	<1.0	**1.4**	<5.0		<1.0	<1.0	<1.0
MW10A	5/10/16			31	<1.0	26	**5.6**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**0.61 J**	<1.0	**2.7**	<10	<1.0	**5.2**	<5.0		<1.0	**0.63 J**	<1.0
MW10A	11/9/16			26	<1.0	23	**5.4**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	0.58 J	<1.0	**2.2**	<10	<1.0	**4.5**	<5.0		<1.0	0.49 J	<1.0

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon tetrachloride	Chloroethane	Chloroform (Trichloromethane)	Chloromethane (Methyl chloride)	cis-1,2-Dichloroethene	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	Methylene chloride	Tetrachloroethene	Tetrahydrofuran	Toluene	trans-1,3-Dichloropropene	Trichloroethene	Vinyl chloride
		ES	200	5	850	7	0.2	600	5	5	9000	5	0.6	-	5	400	6	30	70	500	5	5	50	800	0.4	5	0.2
		PAL	40	0.5	85	0.7	0.02	60	0.5	0.5	1800	0.5	0.06	-	0.5	80	0.6	3	7	50	0.5	0.5	10	160	0.04	0.5	0.02
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW10A	5/18/17		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW10A	11/1/17		19	<1.0	19	4.1	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	0.7 J	<1.0	1.7	<5.0	<5.0	4.1	<10		<1.0	0.4 J	<0.5
MW10A	5/4/18		20	<1.0	20	**4.2**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	1.6	<5.0	<5.0	**3.8**	<10		<1.0	<0.5	<1.0
MW10A	11/14/18		15	<1.0	18	**3.8**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	0.49 J	<1.0	1.6	<5.0	<5.0	<3.4	<10		<1.0	0.37 J	<1.0
MW10A	5/16/19		15	<1.0	17	**3.7**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	**3**	<10		<1.0	0.36 J	<1.0
MW10A	11/14/19		10	<1.0	12	**2.2**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	0.97 J	<5.0	<5.0	**2.4**	<10		<1.0	0.28 J	<1.0
MW10A	5/19/20		11	<1.0	13	**2.5**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	0.41 J	<1.0	1.2	<5.0	<5.0	**2.4**	<10		<1.0	0.24 J	<1.0
MW10A	5/19/20	D	9.9	<1.0	12	**2.3**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	1	<5.0	<5.0	**2.3**	<10		<1.0	0.25 J	<1.0
MW10A	11/16/20		8.9	<1.0	13	**2.4**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	0.47 J	<1.0	0.96 J	<5.0	<5.0	**2.2**	<10		<1.0	0.35 J	<1.0
MW10A	5/6/21		7.3	<1.0	9.6	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	0.86 J	<5.0	**1.9 J**	**1.8**	<10	<0.50	<1.0	<0.50	<1.0
MW10A	11/16/21		10	<1.0	13	**2.4**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0 J	0.41 J	<1.0	1.1	<5.0	**1.9 J**	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW10A	5/26/22		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	25	<0.50	<1.0	<2.0	<1.0	<1.0	0.47 J	<1.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW10A	5/27/22		8.1	<1.0	10	**1.7**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	0.73 J	<5.0	<5.0	**1.3**	<10 J	<0.50	<1.0	0.24 J	<1.0
MW10A	11/9/22		6.6	<1.0	8.9	**1.7**	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	**1.3**	<5.0	<1.0	<1.0	<1.0	<1.0
MW10A	10/12/2023		4.3	<1.0	6.8	0.69 J	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	<2.0	<5.0	<1.0	<10	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW10B	6/15/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW10B	8/8/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW10B	4/2/07		<0.18	<0.16	<0.21	<0.24	<0.17		<0.15	<0.23		<0.21	<0.17	<1.0	<0.22	<0.88	<0.2	<0.15	<0.21	<0.24	<0.4	<0.21	<0.47		<0.15	<0.2	<0.17
MW10B	7/19/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW10B	5/8/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW10B	8/5/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11	6/15/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW11	8/11/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW11	4/2/07		<0.18	<0.21	<0.13	<0.21	<0.56		<0.19	<0.24		0.22	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	<0.15	0.2	<0.26	<0.86		<0.19	<0.38	<0.18
MW11	7/17/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11	7/17/07	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11	5/6/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11	8/4/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11	5/10/16		6.1	<1.0	4.6	**1.3**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	**0.62 J**	<5.0		<1.0	<1.0	<1.0
MW11A	6/15/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW11A	8/11/05		0.22	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW11A	4/2/07		<0.18	<0.21	<0.13	<0.21	<0.56		<0.19	<0.24		<0.11	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	<0.15	0.21	<0.26	<0.86		<0.19	<0.38	<0.18
MW11A	7/17/07		0.28 J	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	5/6/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	8/4/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	11/11/08		0.22 J	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.36 J	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	2/17/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	5/4/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	8/10/09		0.23 J	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	11/11/09		0.24 J	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	2/15/10		<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5		<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	<1.0	<0.5		<0.5	<0.5	<0.5
MW11A	5/4/10		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	5/4/10	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	11/16/10		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	5/10/11		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	11/7/11		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	5/8/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	5/8/12	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	11/7/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon tetrachloride	Chloroethane	Chloroform (Trichloromethane)	Chloromethane (Methyl chloride)	cis-1,2-Dichloroethene	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	Methylene chloride	Tetrachloroethene	Tetrahydrofuran	Toluene	trans-1,3-Dichloropropene	Trichloroethene	Vinyl chloride
		ES	200	5	850	7	0.2	600	5	5	9000	5	0.6	-	5	400	6	30	70	500	5	5	50	800	0.4	5	0.2
		PAL	40	0.5	85	0.7	0.02	60	0.5	0.5	1800	0.5	0.06	-	0.5	80	0.6	3	7	50	0.5	0.5	10	160	0.04	0.5	0.02
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW11A	11/6/13		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	11/6/14		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	11/3/15		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	11/8/16		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW11A	10/30/17		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW11A	11/12/18		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW11A	11/13/19		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW11A	11/11/20		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW11A	11/11/20	D	<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW11A	11/15/21		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0 J	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW11A	11/15/21	D	<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0 J	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW11A	11/8/22		<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW12	8/11/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW12	9/28/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW12	4/4/07		<0.18	<0.21	<0.13	<0.21	<0.56		<0.19	<0.24		<0.11	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	<0.15	0.35	<0.26	<0.86		<0.19	<0.38	<0.18
MW12	7/17/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12	5/5/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12	8/4/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12	11/5/13		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	8/11/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW12A	8/11/05	D	<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW12A	9/28/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW12A	4/4/07		<0.18	<0.21	<0.13	<0.21	<0.56		<0.19	<0.24		<0.11	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	<0.15	0.39	<0.26	<0.86		<0.19	<0.38	<0.18
MW12A	7/17/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	5/5/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	8/4/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	11/11/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.49 J	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	2/17/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	2/17/09	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	5/4/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	8/10/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	11/10/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	2/15/10		<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5		<0.5	<0.5	<1.0	<1.0	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
MW12A	5/4/10		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	11/16/10		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	11/16/10	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	5/10/11		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	11/7/11		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	5/8/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	11/7/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW12A	10/30/17		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW13	6/15/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW13	8/11/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW13	4/2/07		<0.18	<0.16	<0.21	<0.24	<0.17		<0.15	<0.23		<0.21	<0.17	<1.0	<0.22	<0.88	<0.2	<0.15	<0.21	<0.24	<0.4	<0.21	<0.47		<0.15	<0.2	<0.17
MW13	7/18/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	5/7/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	8/5/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	11/12/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	2/17/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	1,1,1-Trichloroethane ES 200 PAL 40 ug/L	1,1,2-Trichloroethane 5 0.5 ug/L	1,1-Dichloroethane 850 85 ug/L	1,1-Dichloroethene 7 0.7 ug/L	1,2-Dibromo-3-chloropropane (DBCP) 0.2 0.02 ug/L	1,2-Dichlorobenzene 600 60 ug/L	1,2-Dichloroethane 5 0.5 ug/L	1,2-Dichloropropane 5 0.5 ug/L	Acetone 9000 1800 ug/L	Benzene 5 0.5 ug/L	Bromodichloromethane 0.6 0.06 ug/L	Carbon Disulfide - - -	Carbon tetrachloride 5 0.5 ug/L	Chloroethane 400 80 ug/L	Chloroform (Trichloromethane) 6 0.6 ug/L	Chloromethane (Methyl chloride) 30 3 ug/L	cis-1,2-Dichloroethene 70 7 ug/L	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) 500 50 ug/L	Methylene chloride 5 0.5 ug/L	Tetrachloroethene 5 0.5 ug/L	Tetrahydrofuran 50 10 ug/L	Toluene 800 160 ug/L	trans-1,3-Dichloropropene 0.4 0.04 ug/L	Trichloroethene 5 0.5 ug/L	Vinyl chloride 0.2 0.02 ug/L
MW13	5/5/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	8/11/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	11/11/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	11/11/09	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	2/15/10		<0.5	<1.0	<0.5	<0.5	<1.0		<0.5	<0.5		<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	0.33 J	<0.5	<0.5		<0.5	<0.5	<0.5
MW13	5/5/10		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	11/16/10		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	5/11/11		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	11/7/11		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	5/10/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	11/7/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	11/6/13		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	11/6/14		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	11/4/15		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	11/4/15	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	11/7/16		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	11/7/16	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13	10/31/17		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW13	11/14/18		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW13	11/14/19		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW13	11/16/20		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW13	11/16/21		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0 J	<2.0	<1.0	<1.0	<5.0	**1.9 J**	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW13	11/16/21	D	<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0 J	<2.0	<1.0	<1.0	<5.0	**1.7 J**	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW13	11/9/22		<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW13A	6/15/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW13A	8/11/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW13A	4/2/07		<0.18	<0.21	<0.13	<0.21	<0.56		<0.19	<0.24		<0.11	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	<0.15	0.19	<0.26	<0.86		<0.19	<0.38	<0.18
MW13A	7/18/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13A	5/7/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW13A	8/5/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14	6/16/05		8	<0.2	0.37	0.56	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	0.3	<0.51		<0.24	<0.13	<0.2
MW14	8/11/05		6.2	<0.2	0.22	0.35	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	0.9		<0.24	<0.13	<0.2
MW14	4/4/07		3.2	<0.21	0.2	<0.21	<0.56		<0.19	<0.24		<0.11	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	<0.15	0.36	0.27	<0.86		<0.19	<0.38	<0.18
MW14	7/18/07		4.1	<1.0	0.27 J	0.3 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14	5/7/08		3.4	<1.0	<1.0	0.32 J	<2.0		<1.0	<1.0		**1.3**	<1.0	<1.0	<1.0	0.31 J	<1.0	**11**	<1.0	<10	<1.0	0.33 J	<5.0		<1.0	<1.0	<1.0
MW14	8/5/08		5.4	<1.0	0.32 J	**1.2**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	0.43 J	<5.0		<1.0	<1.0	<1.0
MW14	11/11/08		4.6	<1.0	0.29 J	0.56 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	0.4 J	<5.0		<1.0	<1.0	<1.0
MW14	2/17/09		4.1	<1.0	0.31 J	0.67 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	0.37 J	<5.0		<1.0	<1.0	<1.0
MW14	5/5/09		4.2	<1.0	0.31	0.5	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	0.34	<5.0		<1.0	<1.0	<1.0
MW14	8/11/09		3	<1.0	0.23 J	0.3 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	0.29 J	<5.0		<1.0	<1.0	<1.0
MW14	11/11/09		2.3	<1.0	<1.0	0.29 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14	2/15/10		1.5	<0.5	<0.5	0.21 J	<0.5		<1.0	<0.5		<0.5	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5	<0.5
MW14	2/15/10	D	1.5	<0.5	<1.0	0.22 J	<2.0		<1.0	<1.0		<0.5	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<0.5	<0.5	<0.5		<0.5	<0.5	<1.0
MW14	5/5/10		3.1	<1.0	<1.0	0.33 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	0.29 J	<5.0		<1.0	<1.0	<1.0
MW14	11/18/10		2.1	<1.0	<1.0	0.23 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14	5/11/11		1.8	<1.0	<1.0	0.28 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14	11/9/11		0.95 J	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14	5/9/12		0.38	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14	5/9/12	D	0.28	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon tetrachloride	Chloroethane	Chloroform (Trichloromethane)	Chloromethane (Methyl chloride)	cis-1,2-Dichloroethene	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	Methylene chloride	Tetrachloroethene	Tetrahydrofuran	Toluene	trans-1,3-Dichloropropene	Trichloroethene	Vinyl chloride
		ES	200	5	850	7	0.2	600	5	5	9000	5	0.6	-	5	400	6	30	70	500	5	5	50	800	0.4	5	0.2
		PAL	40	0.5	85	0.7	0.02	60	0.5	0.5	1800	0.5	0.06	-	0.5	80	0.6	3	7	50	0.5	0.5	10	160	0.04	0.5	0.02
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW14	11/7/12		0.26 J	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14	11/5/13		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14	11/5/14		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14	11/5/15		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14	11/8/16		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14	10/31/17		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW14	10/31/17	D	<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW14	11/14/18		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW14	11/14/18	D	<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW14	11/13/19		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW14	11/16/20		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW14	11/16/21		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0 J	<2.0	<1.0	<1.0	<5.0	**1.9 J**	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW14	11/8/22		<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW14A	6/16/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		0.2	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW14A	6/16/05	D	<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		0.22	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW14A	8/11/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW14A	4/4/07		<0.18	<0.21	<0.13	<0.21	<0.56		<0.19	<0.24		<0.11	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	0.71	0.42	<0.26	<0.86		<0.19	<0.38	<0.18
MW14A	7/18/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14A	5/7/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14A	5/7/08	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW14A	8/5/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15	8/11/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW15	8/11/05	D	<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW15	9/28/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		0.2	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW15	4/4/07		<0.18	<0.21	<0.13	<0.21	<0.56		<0.19	<0.24		<0.11	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	<0.15	0.43	<0.26	<0.86		<0.19	<0.38	<0.18
MW15	7/17/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15	5/5/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15	8/4/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	8/11/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		<0.14	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW15A	9/28/05		<0.13	<0.2	<0.15	<0.19	<0.3		<0.19	<0.15		0.2	<0.14	<1.0	<0.15	<0.63	<0.1	<0.17	<0.18	<0.69	<0.25	<0.18	<0.51		<0.24	<0.13	<0.2
MW15A	4/4/07		<0.18	<0.21	<0.13	<0.21	<0.56		<0.19	<0.24		<0.11	<0.25	<1.0	<0.22	<1.5	<0.17	<0.47	<0.26	<0.15	0.39	<0.26	<0.86		<0.19	<0.38	<0.18
MW15A	7/17/07		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	5/5/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	8/4/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	8/4/08	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	11/11/08		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.35 J	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	11/11/08	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	0.43 J	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	2/17/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	5/4/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	5/4/09	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	8/10/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	11/10/09		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	11/10/09	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	2/15/10		<0.5	<0.5	<0.5	<0.5	<0.5		<0.5	<0.5		<1.0	<0.5	<1.0	<0.5	<0.5	<0.5	<0.5	<0.5	<1.0	0.41 J	<0.5	<0.5		<0.5	<0.5	<0.5
MW15A	5/5/10		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	11/16/10		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	5/10/11		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	11/7/11		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	11/7/11	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	1,1,1-Trichloroethane ES 200 PAL 40 ug/L	1,1,2-Trichloroethane 5 0.5 ug/L	1,1-Dichloroethane 850 85 ug/L	1,1-Dichloroethene 7 0.7 ug/L	1,2-Dibromo-3-chloropropane (DBCP) 0.2 0.02 ug/L	1,2-Dichlorobenzene 600 60 ug/L	1,2-Dichloroethane 5 0.5 ug/L	1,2-Dichloropropane 5 0.5 ug/L	Acetone 9000 1800 ug/L	Benzene 5 0.5 ug/L	Bromodichloromethane 0.6 0.06 ug/L	Carbon Disulfide - - -	Carbon tetrachloride 5 0.5 ug/L	Chloroethane 400 80 ug/L	Chloroform (Trichloromethane) 6 0.6 ug/L	Chloromethane (Methyl chloride) 30 3 ug/L	cis-1,2-Dichloroethene 70 7 ug/L	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) 500 50 ug/L	Methylene chloride 5 0.5 ug/L	Tetrachloroethene 5 0.5 ug/L	Tetrahydrofuran 50 10 ug/L	Toluene 800 160 ug/L	trans-1,3-Dichloropropene 0.4 0.04 ug/L	Trichloroethene 5 0.5 ug/L	Vinyl chloride 0.2 0.02 ug/L
MW15A	5/8/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	11/7/12		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	11/7/12	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	11/5/13		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	11/6/14		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	11/3/15		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	11/8/16		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW15A	10/30/17		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW15A	10/30/17	D	<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW15A	11/12/18		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW15A	11/13/19		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW15A	11/13/19	D	<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW15A	11/11/20		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW15A	11/15/21		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0 J	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW15A	11/8/22		<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW16	5/8/08		**160**	<5.7	**160**	18	<11		<5.7	<5.7		<5.7	<5.7	<1.0	<5.7	3.9 J	<5.7	<5.7	**11**	<57	<5.7	17	5.8 J		<5.7	**2.5 J**	<5.7
MW16	8/6/08		**150**	<6.7	**150**	19	<13		<6.7	<6.7		<6.7	<6.7	<1.0	<6.7	3.7 J	**2.8 J**	<6.7	**9.6**	<67	<6.7	14	2.8 J		<6.7	**2.3 J**	<6.7
MW16	11/12/08		**97**	<3.3	**92**	14	<6.7		<3.3	<3.3		<3.3	<3.3	<1.0	<3.3	2.7 J	**1.6 J**	<3.3	4.5	<33	<3.3	7.1	<17		<3.3	**1.4 J**	<3.3
MW16	2/18/09		**97**	<4.0	**86**	16	<8.0		<4.0	<4.0		<4.0	<4.0	<1.0	<4.0	2 J	<4.0	<4.0	4.2	<40	<4.0	9	3 J		<4.0	**1.4 J**	<4.0
MW16	5/6/09		**110**	<5.0	**110**	16	<10		<5.0	<5.0		<5.0	<5.0	<1.0	<5.0	1.4	**2.4**	<5.0	4.9	<50	<5.0	9.8	4.4		<5.0	**1.7**	<5.0
MW16	5/6/09	D	**110**	<4.0	**110**	16	<8.0		<4.0	<4.0		<4.0	<4.0	<1.0	<4.0	2.3	**2.4**	<4.0	4.9	<40	<4.0	9.5	3.9		<4.0	**1.6**	<4.0
MW16	8/11/09		**160**	<5.7	**180**	13	<11		<5.7	<5.7		<5.7	<5.7	<1.0	<5.7	2.8 J	**3.8 J**	<5.7	**9.7**	<57	<5.7	14	7.1 J		<5.7	**2.8 J**	<5.7
MW16	11/10/09		**100**	<3.3	**100**	19	<6.7		<3.3	**0.6 J**		<3.3	<3.3	<1.0	<3.3	2.3 J	**2.3 J**	<3.3	5.9	<33	<3.3	8.7	<17		<3.3	**1.9 J**	<3.3
MW16	2/16/10		**140 J**	<6.7	**190**	32 J	<13		<6.7	<6.7		<6.7	<6.7	<1.0	<6.7	3.5 J	**3.9 J**	<6.7	**11**	<67	<6.7	13	2.8 J		<6.7	**3 J**	<6.7
MW16	5/6/10		**150**	<6.7	**200**	24	<13		<6.7	<6.7		<6.7	<6.7	<1.0	<6.7	3 J	**4 J**	<6.7	**9.7**	<67	<6.7	13	8.6 J		<6.7	**2.6 J**	<6.7
MW16	5/6/10	D	**140**	<6.7	**200**	25	<13		<6.7	<6.7		<6.7	<6.7	<1.0	<6.7	3.1 J	**4 J**	<6.7	**9.8**	<67	<6.7	12	8.6 J		<6.7	**2.4 J**	<6.7
MW16	11/17/10		**140**	<8.0	**190**	22	<16		<8.0	<8.0		<8.0	<8.0	<1.0	<8.0	2.8 J	**4.3 J**	<8.0	**9.7**	<80	<8.0	16	5.9 J		<8.0	**3 J**	<8.0
MW16	5/11/11		**130**	<5.7	**170**	27	<11		<5.7	1 J		<5.7	<5.7	<1.0	<5.7	2.4 J	**4.1 J**	<5.7	**9.8**	<57	<5.7	13	6.1 J		<5.7	**2.4 J**	<5.7
MW16	11/10/11		**74**	<2.5	68	9.4	<5.0		<2.5	<2.5		<2.5	<2.5	<1.0	<2.5	<2.5	**2.6**	<2.5	4.2	<25	<2.5	11	2.6 J		<2.5	**1.2 J**	<2.5
MW16	5/11/12		**77**	<2.5	**94**	**10**	<5.0		<2.5	0.67		<2.5	<2.5	<1.0	<2.5	1	**2.8**	<2.5	6.1	<25	<2.5	8.6	3.5		<2.5	**1.3**	<2.5
MW16	11/8/12		**84**	<3.3	**110**	**15**	<6.7		<3.3	<3.3		<3.3	<3.3	<1.0	<3.3	<3.3	**3.5**	<3.3	**7.3**	<33	<3.7	11	<17		<3.3	**1.7 J**	<3.3
MW16	11/8/12	D	**87**	<3.3	**120**	**17**	<6.7		<3.3	**0.84 J**		<3.3	<3.3	<1.0	<3.3	<3.3	**3.6**	<3.3	**7.6**	<33	<3.5	12	<17		<3.3	**1.9 J**	<3.3
MW16	11/6/13		**40**	<3.3	46	**7**	<6.7		<3.3	<3.3		<3.3	<3.3	<1.0	<3.3	<3.3	**1.8 J**	<3.3	3.1 J	<33	<3.3	7.6	1.9 J		<3.3	**0.82 J**	<3.3
MW16	11/6/14		**42**	<1.7	41	**6**	<3.3		<1.7	<1.7		<1.7	<1.7	<1.0	<1.7	<1.7	**1.8**	<1.7	2.6	<17	<1.7	**5.3**	1.6 J		<1.7	**0.64 J**	<1.7
MW16	11/4/15		35	<1.0	32	**6.3**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**1.6**	<1.0	1.5	<10	<1.0	**3.4**	<5.0		<1.0	**0.55 J**	<1.0
MW16	5/10/16		27	<1.0	30	**5.7**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**1.4**	<1.0	**1.7**	<10	<1.0	**3.2**	1.5 J		<1.0	**0.51 J**	<1.0
MW16	11/9/16		19	<1.0	20	**3.9**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	**1.2**	<1.0	**1.1**	<10	<1.0	**2.3**	1.5 J		<1.0	0.37 J	<1.0
MW16	5/18/17		17	<1.0	20	3.7	<2.0		<1.0	<1.0		<1.0	<1.0	<2.0	<1.0	<1.0	1.2	<1.0	1.1	<10	<1.0	**2**	1.1 J		<1.0	<1.0	<1.0
MW16	11/1/17		14	<1.0	15	2.5	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	1.1 J	<1.0	<1.0	<5.0	<5.0	**1.5**	<10		<1.0	<0.5	<0.5
MW16	5/3/18		13	<1.0	16	**3.6**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**1.1 J**	<1.0	1.2	<5.0	<5.0	**1.8**	<10		<1.0	0.3 J	<1.0
MW16	11/14/18		14	<1.0	16	**3.5**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**0.84 J**	<1.0	1.1	<5.0	<5.0	<2.1	<10		<1.0	0.34 J	<1.0
MW16	5/15/19		9.8	<1.0	16	**2.9**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**0.65 J**	<1.0	1.2	<5.0	<5.0	**1.7**	<10		<1.0	0.24 J	<1.0
MW16	11/14/19		12	<1.0	15	**2.8**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**0.77 J**	<1.0	1.3	<5.0	<5.0	**1.7**	<10		<1.0	0.27 J	<1.0
MW16	5/20/20		12	<1.0	12	**3.1**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**0.67 J**	<1.0	0.9 J	<5.0	<5.0	**1.7**	<10		<1.0	0.2 J	<1.0
MW16	11/16/20		8.4	<1.0	12	**2.5**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	**0.79 J**	<1.0	0.92 J	<5.0	<5.0	**1.4**	<10		<1.0	0.21 J	<1.0
MW16	5/7/21		9	<1.0	7.7	**1.6**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	**0.79 J**	<1.0	<1.0	<5.0	<5.0	**1**	<10	<0.50	<1.0	<0.50	<1.0
MW16	11/18/21		8.6	<1.0	9.6	**2.3**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	**0.75 J**	<1.0	0.77 J	<5.0	<5.0	**1.3**	<10	<0.50	<1.0	0.20 J	<1.0
MW16	5/26/22		9.3	<1.0	9	**2.4**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	0.72 J	<5.0	<5.0	**1.2**	<10 J	<0.50	<1.0	0.18 J	<1.0
MW16	11/9/22		8.8	<1.0	9.8	**2.2**	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	**0.61 J**	<1.0	0.84 J	<5.0	<1.0	**1.2**	<5.0	<1.0	<1.0	<1.0	<1.0

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	ES / PAL /	1,1,1-Trichloroethane 200 40 ug/L	1,1,2-Trichloroethane 5 0.5 ug/L	1,1-Dichloroethane 850 85 ug/L	1,1-Dichloroethene 7 0.7 ug/L	1,2-Dibromo-3-chloropropane (DBCP) 0.2 0.02 ug/L	1,2-Dichlorobenzene 600 60 ug/L	1,2-Dichloroethane 5 0.5 ug/L	1,2-Dichloropropane 5 0.5 ug/L	Acetone 9000 1800 ug/L	Benzene 5 0.5 ug/L	Bromodichloromethane 0.6 0.06 ug/L	Carbon Disulfide - -	Carbon tetrachloride 5 0.5 ug/L	Chloroethane 400 80 ug/L	Chloroform (Trichloromethane) 6 0.6 ug/L	Chloromethane (Methyl chloride) 30 3 ug/L	cis-1,2-Dichloroethene 70 7 ug/L	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK) 500 50 ug/L	Methylene chloride 5 0.5 ug/L	Tetrachloroethene 5 0.5 ug/L	Tetrahydrofuran 50 10 ug/L	Toluene 800 160 ug/L	trans-1,3-Dichloropropene 0.4 0.04 ug/L	Trichloroethene 5 0.5 ug/L	Vinyl chloride 0.2 0.02 ug/L
MW16	10/11/2023			6.6	<1.0	8.2	**1.9**	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	**0.65 J**	<5.0	<1.0	<5.0	<5.0	**1.2**	<10	<0.50	<1.0	<0.50	<1.0
MW16A	5/8/08			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	8/6/08			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	11/12/08			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	2/18/09			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	2/18/09	D		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	5/6/09			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	8/11/09			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	8/11/09	D		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	11/10/09			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	2/16/10			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	5/6/10			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	11/17/10			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	5/11/11			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	5/11/11	D		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	11/10/11			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	5/11/12			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	11/8/12			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	11/6/13			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	11/6/14			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	11/6/14	D		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	11/4/15			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	5/10/16			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	11/9/16			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	5/18/17			<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW16A	11/1/17			<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<0.5
MW16A	5/3/18			<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW16A	11/14/18			<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW16A	5/15/19			<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW16A	11/14/19			<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW16A	11/14/19	D		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW16A	5/20/20			<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW16A	11/16/20			<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW16A	5/7/21			<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW16A	11/18/21			<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW16A	5/26/22			<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10 J	<0.50	<1.0	<0.50	<1.0
MW16A	5/26/22	D		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10 J	<0.50	<1.0	<0.50	<1.0
MW16A	11/10/22			<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW16A	10/11/2023			<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	<2.0	<5.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW17	5/8/08			**55**	<1.0	32	7.7	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	2.7	<10	<1.0	**4.7**	1 J		<1.0	0.42 J	<1.0
MW17	8/5/08			**48**	<1.7	32	11	<3.3		<1.7	<1.7		<1.7	<1.7	<1.0	<1.7	0.98 J	0.37 J	<1.7	2.3	<17	<1.7	**3.7**	1.1 J		<1.7	<1.7	<1.7
MW17	11/12/08			**48**	<1.4	35	**6**	<2.9		<1.4	<1.4		<1.4	<1.4	<1.0	<1.4	1.3 J	0.41 J	<1.4	2.6	<14	<1.4	**3.2**	<7.2		<1.4	<1.4	<1.4
MW17	2/18/09			**44**	<1.7	32	8.7	<3.3		<1.7	<1.7		<1.7	<1.7	<1.0	<1.7	0.98 J	<1.7	<1.7	2.5	<17	<1.7	**3.8**	<8.4		<1.7	<1.7	<1.7
MW17	5/5/09			**44**	<2.0	37	7	<4.0		<2.0	<2.0		<2.0	<2.0	<1.0	<2.0	0.98	0.49	<2.0	2.6	<20	<2.0	**3.1**	1.4		<2.0	<2.0	<2.0
MW17	8/11/09			**47**	<1.7	34	**3.7**	<3.3		<1.7	<1.7		<1.7	<1.7	<1.0	<1.7	1.3 J	0.46 J	<1.7	2.6	<17	<1.7	**3.5**	1.2 J		<1.7	<1.7	<1.7
MW17	11/10/09			**43**	<1.7	29	**6.4**	<3.3		<1.7	<1.7		<1.7	<1.7	<1.0	<1.7	1.3 J	0.41 J	<1.7	2.3	<17	<1.7	**4.2 J**	<8.4		<1.7	<1.7	<1.7
MW17	2/16/10			36	<1.4	32	**6.5**	<2.9		<1.4	<1.4		<1.4	<1.4	<1.0	<1.4	1.4	0.4 J	<1.4	2.3	<14	<1.4	**3.5**	<7.2		<1.4	0.41 J	<1.4
MW17	5/6/10			**41**	<2.0	37	**6.1**	<4.0		<2.0	<2.0		<2.0	<2.0	<1.0	<2.0	1.8 J	0.45 J	<2.0	2.4	<20	<2.0	**3.2**	1.9 J		<2.0	<2.0	<2.0
MW17	11/17/10			34	<1.4	30	**6.8**	<2.9		<1.4	<1.4		<1.4	<1.4	<1.0	<1.4	1.4	0.38 J	<1.4	2.1	<14	<1.4	**3.4**	0.69 J		<1.4	<1.4	<1.4

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon tetrachloride	Chloroethane	Chloroform (Trichloromethane)	Chloromethane (Methyl chloride)	cis-1,2-Dichloroethene	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	Methylene chloride	Tetrachloroethene	Tetrahydrofuran	Toluene	trans-1,3-Dichloropropene	Trichloroethene	Vinyl chloride
		ES	200	5	850	7	0.2	600	5	5	9000	5	0.6	-	5	400	6	30	70	500	5	5	50	800	0.4	5	0.2
		PAL	40	0.5	85	0.7	0.02	60	0.5	0.5	1800	0.5	0.06	-	0.5	80	0.6	3	7	50	0.5	0.5	10	160	0.04	0.5	0.02
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW17	5/11/11		39	<1.7	37	7.8	<3.3		<1.7	<1.7		<1.7	<1.7	<1.0	<1.7	1.7	0.48 J	<1.7	2.3	<17	<1.7	**3.5**	1.1 J		<1.7	<1.7	<1.7
MW17	11/10/11		40	<2.0	35	7.7	<4.0		<2.0	<2.0		<2.0	<2.0	<1.0	<2.0	1.7 J	0.48 J	<2.0	2.1	<20	<2.0	**3.7**	1.4 J		<2.0	0.4 J	<2.0
MW17	5/11/12		37	<1.4	35	**4.9**	<2.9		<1.4	<1.4		<1.4	<1.4	<1.0	<1.4	1.2	0.43	<1.4	2.2	<14	<1.4	**3.2**	1.1		<1.4	0.43	<1.4
MW17	11/9/12		36	<1.0	33	7.3	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	2.2	0.42 J	<1.0	2	<10	<1.0	**3.5**	<5.0		<1.0	0.44 J	<1.0
MW17	11/6/13		28	<1.0	29	**6.2**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.4	0.38 J	<1.0	1.8	<10	<1.0	**3.6**	1.1 J		<1.0	0.42 J	<1.0
MW17	11/6/14		32	<1.0	30	**5.6**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.2	0.43 J	<1.0	1.7	<10	<1.0	**3.2**	1.2 J		<1.0	0.43 J	<1.0
MW17	11/4/15		24	<1.0	23	**3.7**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.54 J	0.35 J	<1.0	1.4	<10	<1.0	**3**	<5.0		<1.0	0.43 J	<1.0
MW17	5/10/16		17	<1.0	23	**3.7**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	2	0.32 J	<1.0	**1.2**	<10	<1.0	**2.4**	<5.0		<1.0	0.32 J	<1.0
MW17	11/8/16		17	<1.0	19	**3.1**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.2	<1.0	<1.0	**1**	<10	<1.0	**2.3**	0.9 J		<1.0	0.39 J	<1.0
MW17	5/18/17		17	<1.0	22	3.6	<2.0		<1.0	<1.0		<1.0	<1.0	<2.0	<1.0	0.86 J	<1.0	<1.0	1.2	<10	<1.0	2.2	1 J		<1.0	<1.0	<1.0
MW17	11/1/17		14	<1.0	18	3.3	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	1.3	<2.0	<1.0	<1.0	<5.0	<23	2.2	<10		<1.0	<0.5	<0.5
MW17	5/3/18		11	<1.0	15	**3.4**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	1	<2.0	<1.0	0.95 J	<5.0	<5.0	**1.9**	<10		<1.0	0.25 J	<1.0
MW17	5/3/18	D	11	<1.0	16	**3.5**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	0.99 J	<2.0	<1.0	1	<5.0	<5.0	**1.8**	<10		<1.0	0.29 J	<1.0
MW17	11/15/18		12	<1.0	16	**3.1**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	1.2	<2.0	<1.0	0.87 J	<5.0	<5.0	<2.1	<10		<1.0	0.37 J	<1.0
MW17	5/15/19		7.1	<1.0	12	**2**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	0.64 J	<5.0	<5.0	**1.6**	<10		<1.0	0.21 J	<1.0
MW17	5/15/19	D	6.8	<1.0	12	**1.5**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	0.64 J	<5.0	<5.0	**1.5**	<10		<1.0	0.19 J	<1.0
MW17	11/15/19		8.1	<1.0	11	**2.6**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	0.91 J	<2.0	<1.0	0.77 J	<5.0	<5.0	**1.4**	<10		<1.0	0.2 J	<1.0
MW17	5/20/20		7.8	<1.0	10	**2.1**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	0.6 J	<2.0	<1.0	0.67 J	<5.0	<5.0	**1.4**	<10		<1.0	0.21 J	<1.0
MW17	11/11/20		7	<1.0	9.9	**1.9**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	0.7 J	0.42 J	<1.0	0.54 J	<5.0	<5.0	**1.3**	<10		<1.0	0.17 J	<1.0
MW17	5/6/21		5.6	<1.0	7.8	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	0.68 J	<2.0	<1.0	0.49 J	<5.0	**1.8 J**	**1.2**	<10	<0.50	<1.0	0.17 J	<1.0
MW17	5/6/21	D	5.8	<1.0	8.5	**1.1**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	0.51 J	<5.0	**1.9 J**	**1.3**	<10	<0.50	<1.0	<0.50	<1.0
MW17	11/18/21		6.1	<1.0	8.6	**1.8**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	0.62 J	<2.0	<1.0	0.49 J	<5.0	<5.0	**1.5**	<10	<0.50	<1.0	0.25 J	<1.0
MW17	5/26/22		6.3	<1.0	8.1	**1.7**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	0.55 J	<2.0	<1.0	0.51 J	<5.0	<5.0	**1**	<10 J	<0.50	<1.0	0.17 J	<1.0
MW17	11/9/22		5.2	<1.0	7.5	**1.5**	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	0.46 J	<1.0	<1.0	<1.0	<5.0	<1.0	**0.95 J**	<5.0	<1.0	<1.0	<1.0	<1.0
MW17	11/9/22	D	5.2	<1.0	7.3	**1.5**	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	0.42 J	<1.0	<1.0	<1.0	<5.0	<1.0	**0.94 J**	<5.0	<1.0	<1.0	<1.0	<1.0
MW17	10/10/2023		4.3	<1.0	6.1	**1.3**	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	<2.0	<5.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW17A	5/7/08		38	<1.0	21	**5.2**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.55 J	<1.0	<1.0	1.5	<10	<1.0	**3.1**	0.62 J		<1.0	<1.0	<1.0
MW17A	8/5/08		38	<1.4	26	8.6	<2.9		<1.4	<1.4		<1.4	<1.4	<1.0	<1.4	0.8 J	0.31 J	<1.4	1.6	<14	<1.4	**2.3**	<7.2		<1.4	<1.4	<1.4
MW17A	8/5/08	D	38	<1.4	27	8.1	<2.9		<1.4	<1.4		<1.4	<1.4	<1.0	<1.4	0.86 J	0.29 J	<1.4	1.6	<14	<1.4	**2.5**	<7.2		<1.4	<1.4	<1.4
MW17A	11/12/08		30	<1.4	22	**4.1**	<2.9		<1.4	<1.4		<1.4	<1.4	<1.0	<1.4	0.7 J	0.29 J	<1.4	1.4	<14	<1.4	**1.9**	<7.2		<1.4	<1.4	<1.4
MW17A	2/18/09		36	<1.0	23	**6.1**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.73 J	<1.0	<1.0	1.5	<10	<1.0	**2.9**	0.52 J		<1.0	0.29 J	<1.0
MW17A	5/5/09		37	<1.0	29	**5.9**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.74	0.33	<1.0	1.5	<10	<1.0	**2.5**	0.8		<1.0	<1.0	<1.0
MW17A	8/11/09		40	<1.0	27	**4.6**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.1	0.37 J	<1.0	1.5	<10	<1.0	**3**	0.84 J		<1.0	0.3 J	<1.0
MW17A	11/11/09		34	<1.0	23	**5.6**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.53 J	0.31 J	<1.0	1.6	<10	<1.0	**3.2**	<5.0		<1.0	0.31 J	<1.0
MW17A	2/16/10		31	<1.0	26	**5.3**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.2	0.32 J	<1.0	1.5	<10	<1.0	**3**	<5.0		<1.0	0.31 J	<1.0
MW17A	5/6/10		39	<1.0	27	**4.6**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.2	0.36 J	<1.0	1.5	<10	0.33 J	**2.9**	<5.0		<1.0	0.33 J	<1.0
MW17A	11/17/10		29	<1.0	24	**6.7**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.93 J	0.32 J	<1.0	1.2	<10	<1.0	**2.6**	<5.0		<1.0	0.29 J	<1.0
MW17A	5/11/11		30	<1.0	27	7.4	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.4	0.37 J	<1.0	1.4	<10	<1.0	**2.5**	0.83 J		<1.0	0.33 J	<1.0
MW17A	11/10/11		28	<1.0	25	**5.7**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.4	0.35 J	<1.0	1.2	<10	<1.0	**2.6**	0.82 J		<1.0	0.3 J	<1.0
MW17A	5/11/12		26	<1.0	24	**2.1**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.3	0.29	<1.0	1	<10	<1.0	**1.9**	0.87		<1.0	0.31	<1.0
MW17A	11/9/12		23	<1.0	22	**4.8**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.7	0.28 J	<1.0	1.1	<10	<1.0	**2**	<5.0		<1.0	0.28 J	<1.0
MW17A	11/6/13		16	<1.0	17	**3.8**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.1	0.24 J	<1.0	0.85 J	<10	<1.0	**2**	0.86 J		<1.0	0.24 J	<1.0
MW17A	11/6/14		19	<1.0	19	**3.1**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.79 J	0.28 J	<1.0	0.72 J	<10	<1.0	**1.8**	0.72 J		<1.0	0.23 J	<1.0
MW17A	11/4/15		20	<1.0	17	**2.4**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	0.36 J	<1.0	<1.0	0.4 J	<10	<1.0	**1.7**	<5.0		<1.0	<1.0	<1.0
MW17A	5/10/16		14	<1.0	17	**2.5**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	0.48 J	<10	<1.0	**1.6**	<5.0		<1.0	<1.0	<1.0
MW17A	11/8/16		10	<1.0	12	**2.5**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	1.1	<1.0	<1.0	0.53 J	<10	<1.0	**1.5**	0.89 J		<1.0	<1.0	<1.0
MW17A	5/19/17		10	<1.0	14	2	<2.0		<1.0	<1.0		<1.0	<1.0	<2.0	<1.0	0.65 J	<1.0	<1.0	0.61 J	<10	<1.0	1.2	0.86 J		<1.0	<1.0	<1.0
MW17A	11/1/17		13	<1.0	13	2	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	0.85 J	<2.0	<1.0	<1.0	<5.0	<23	1.8	<10		<1.0	<0.5	<0.5
MW17A	5/4/18		8.4	<1.0	10	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	**1.3**	<10		<1.0	<0.5	<1.0

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon tetrachloride	Chloroethane	Chloroform (Trichloromethane)	Chloromethane (Methyl chloride)	cis-1,2-Dichloroethene	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	Methylene chloride	Tetrachloroethene	Tetrahydrofuran	Toluene	trans-1,3-Dichloropropene	Trichloroethene	Vinyl chloride
		ES	200	5	850	7	0.2	600	5	5	9000	5	0.6	-	5	400	6	30	70	500	5	5	50	800	0.4	5	0.2
		PAL	40	0.5	85	0.7	0.02	60	0.5	0.5	1800	0.5	0.06	-	0.5	80	0.6	3	7	50	0.5	0.5	10	160	0.04	0.5	0.02
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW17A	11/15/18		11	<1.0	11	**1.5**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	0.67 J	<2.0	<1.0	0.45 J	<5.0	<5.0	<1.9	<10		<1.0	<0.5	<1.0
MW17A	5/15/19		4.3	<1.0	7.6	**1.4**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	**1.2**	<10		<1.0	<0.5	<1.0
MW17A	11/15/19		5.3	<1.0	6.5	**1.2**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	0.54 J	<2.0	<1.0	<1.0	<5.0	<5.0	**1.3**	<10		<1.0	0.17 J	<1.0
MW17A	5/20/20		5.9	<1.0	6.4	**1.1**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	**1.5**	<10		<1.0	<0.5	<1.0
MW17A	11/12/20		3.4	<1.0	5.2	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW17A	5/6/21		3	<1.0	4.6	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	**1.8 J**	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW17A	11/18/21		1.4	<1.0	4.2	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW17A	5/26/22		3.5	<1.0	4.7	**0.78 J**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	**0.64 J**	<10 J	<0.50	<1.0	<0.50	<1.0
MW17A	11/9/22		1.1	<1.0	3.3	<1.0	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW17A	11/9/22		<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW17A	10/10/2023		2.4	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	<2.0	<5.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW18	10/2/07		2.5	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	5/14/08		3.2	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	8/12/09		7.5	<1.0	<1.0	0.66 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	**4.2**	<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	10/21/09		6.6	<1.0	<1.0	**0.7 J**	<2.0		**<1.0**	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	4/1/10		13	<1.0	0.36 J	**1.5**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	11/16/10		2.7	<1.0	0.59 J	0.34 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	5/10/11		6.1	<1.0	0.61 J	0.94 J	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	5/10/11	D	8	<1.0	0.57 J	1.2	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	11/9/11		<1.0	<1.0	0.55 J	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	11/9/11	D	<1.0	<1.0	0.56 J	<1.0	<2.0		<1.0	<1.0		0.22 J	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	5/10/12		22	<1.0	0.52	**2.7**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	11/9/12		20	<1.0	0.56 J	**3.9**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	6/6/13		24	<1.0	0.78 J	**3.7**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	6/6/13	D	26	<1.0	0.76 J	**3.9**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	0.42 J		<1.0	<1.0	<1.0
MW18	11/5/13		25	<1.0	0.96 J	**3.6**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	5/13/14		33	<1.0	1.3	**5.9**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	11/5/14		29	<1.0	1.2	**5.1**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	5/13/15		34	<1.0	1.7	**6.3**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	11/4/15		32	<1.0	1.6	**5.6**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	5/10/16		25	<1.0	2	**6.2**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	11/9/16		25	<1.0	2.7	**6.1**	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	5/19/17		31	<1.0	3.8	6.8	<2.0		<1.0	<1.0		<1.0	<1.0	<2.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW18	10/31/17		15	<1.0	2.6	4.2	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<23	<1.0	<10		<1.0	<0.5	<0.5
MW18	5/4/18		13	<1.0	2.5	**3.7**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW18	11/12/18		14	<1.0	3.8	**3.3**	<5.0		<1.0	<1.0		<0.5	<1.0	4.6	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW18	5/15/19		2.9	<1.0	1.4	**0.93 J**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW18	11/14/19		2.9	<1.0	1.3	1	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW18	5/20/20		6.8	<1.0	2.6	**2.8**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW18	11/16/20		5	<1.0	2.3	**2.3**	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW18	5/6/21		5.4	<1.0	2.2	**2.3**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	**1.8 J**	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW18	11/15/21		<1.0	<1.0	<1.0	<1.0	<5.0		**8**	<1.0	4.8 J	<0.50	<1.0	<2.0	<1.0	<1.0 J	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10	0.20 J	<1.0	<0.50	<1.0
MW18	5/27/22		10	<1.0	3.7	**3.2**	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.7	<1.0	<10	0.20 J	<1.0	<0.50	<1.0
MW18	11/8/22		14	<1.0	4.5	**3.9**	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW18	10/10/2023		7.8	<1.0	3.1	**2.6**	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	<2.0	<5.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW19	5/13/14		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW19	11/5/14		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW19	5/13/15		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW19	11/3/15		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0

Appendix C

Historical Groundwater Monitoring Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Dup	1,1,1-Trichloroethane	1,1,2-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	1,2-Dibromo-3-chloropropane (DBCP)	1,2-Dichlorobenzene	1,2-Dichloroethane	1,2-Dichloropropane	Acetone	Benzene	Bromodichloromethane	Carbon Disulfide	Carbon tetrachloride	Chloroethane	Chloroform (Trichloromethane)	Chloromethane (Methyl chloride)	cis-1,2-Dichloroethene	4-Methyl-2-pentanone (Methyl isobutyl ketone) (MIBK)	Methylene chloride	Tetrachloroethene	Tetrahydrofuran	Toluene	trans-1,3-Dichloropropene	Trichloroethene	Vinyl chloride
		ES	200	5	850	7	0.2	600	5	5	9000	5	0.6	-	5	400	6	30	70	500	5	5	50	800	0.4	5	0.2
		PAL	40	0.5	85	0.7	0.02	60	0.5	0.5	1800	0.5	0.06	-	0.5	80	0.6	3	7	50	0.5	0.5	10	160	0.04	0.5	0.02
			ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	-	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
MW19	11/8/16		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW19	10/31/17		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<23	<1.0	<10		<1.0	<0.5	<0.5
MW19	11/12/18		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW19	11/15/19		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW19	11/16/20		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW19	11/18/21		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW19	11/8/22		<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW19	11/8/22	D	<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW19	10/10/2023		<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	<2.0	<5.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW19	10/10/2023	D	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	<2.0	<5.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW19A	5/13/14		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW19A	5/13/14	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW19A	11/5/14		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW19A	5/13/15		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW19A	5/13/15	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW19A	11/3/15		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW19A	11/8/16		<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW19A	11/8/16	D	<1.0	<1.0	<1.0	<1.0	<2.0		<1.0	<1.0		<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<10	<1.0	<1.0	<5.0		<1.0	<1.0	<1.0
MW19A	11/1/17		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<22	<1.0	<10		<1.0	<0.5	<0.5
MW19A	11/12/18		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW19A	11/12/18	D	<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW19A	11/14/19		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW19A	11/16/20		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0		<0.5	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10		<1.0	<0.5	<1.0
MW19A	11/18/21		<1.0	<1.0	<1.0	<1.0	<5.0		<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<1.0	<2.0	<1.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0
MW19A	11/8/22		<1.0	<1.0	<1.0	<1.0	<1.0		<1.0	<1.0	<10	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<1.0
MW19A	10/10/2023		<1.0	<1.0	<1.0	<1.0	<5.0	<1.0	<1.0	<1.0	<10	<0.50	<1.0	<2.0	<1.0	<5.0	<2.0	<5.0	<1.0	<5.0	<5.0	<1.0	<10	<0.50	<1.0	<0.50	<1.0

Notes:
All results are in ug/L
D - Duplicate
J - Estimated concentration
Bold Lettering - Exceeds PAL
[shaded] - Exceeds ES
Thommes (OLD) residential well was renamed MW-18 in 2014

Appendix D

Historical Residential Well Analytical Results

Historical Residential Well Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Name	Phase	Date	Dup	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Carbon disulfide	Methylene chloride	Tetrachloroethene	Toluene
				ES	200	850	7	9000		5	5	800
				PAL	40	85	0.7	1800		0.5	0.5	160
					ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1070 192nd Ave	Hegge		5/14/08		<1.0	<1.0	<1.0		<1.0		<1.0	
1070 192nd Ave	Hegge		8/12/09		<1.0	<1.0	<1.0		<1.0		<1.0	
1070 192nd Ave	Hegge		5/6/10		<1.0	<1.0	<1.0		<1.0		<1.0	
1070 192nd Ave	Hegge		5/9/11		<1.0	<1.0	<1.0		<1.0		<1.0	
1070 192nd Ave	Hegge		5/8/12		<1.0	<1.0	<1.0		<1.0		<1.0	
1070 192nd Ave	Hegge		5/14/13		<1.0	<1.0	<1.0		<1.0		<1.0	
1070 192nd Ave	Hegge		5/13/14		<1.0	<1.0	<1.0		<1.0		<1.0	
1070 192nd Ave	Hegge		5/13/15		<1.0	<1.0	<1.0		<1.0		<1.0	
1070 192nd Ave	Hegge		5/10/16		<1.0	<1.0	<1.0		<1.0		<1.0	
1070 192nd Ave	Hegge		5/18/17		<1.0	<1.0	<1.0		<1.0		<1.0	
1070 192nd Ave	Hegge		5/18/17	D	<1.0	<1.0	<1.0		<1.0		<1.0	
1070 192nd Ave	Hegge		5/6/21		<1.0	<1.0	<1.0		<2.0	**2.0 J**	<1.0	
1085 Cty Rd C	Brotzler		5/14/08		<1.0	<1.0	<1.0		<1.0		<1.0	
1087 Cty Rd C	Franko S		5/14/08		<1.0	<1.0	<1.0		<1.0		<1.0	
1098 Cty Rd C	Penman		5/14/08		<1.0	<1.0	<1.0		<1.0		<1.0	
1098 Cty Rd C	Penman		5/14/08	D	<1.0	<1.0	<1.0		<1.0		<1.0	
1103 Cty Rd C	Deavy		10/2/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1965 104th St	Wittstock		8/28/09		<1.0	<1.0	<1.0		<1.0		<1.0	
1965 110th St	Tamoshaitis		10/1/07		1.7	<1.0	<1.0		<1.0		<1.0	
1968 115th St D	Karastes D	Eff	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1968 115th St D	Karastes D	Inf	5/29/07		**46**	42	7.4		<1.0		**3.8**	

Historical Residential Well Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Name	Phase	Date	Dup	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Carbon disulfide	Methylene chloride	Tetrachloroethene	Toluene
				ES	200	850	7	9000		5	5	800
				PAL	40	85	0.7	1800		0.5	0.5	160
					ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1968 115th St D	Karastes D	Inter	5/29/07		<1.0	6.8	<1.0		<1.0		<1.0	
1968 115th St D	Karastes D	Inter	6/27/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1968 115th St J	Karastes J	Inf	5/29/07		0.21 J	<1.0	<1.0		<1.0		<1.0	
1968 115th St J	Karastes J	Inter	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1968 115th St J	Karastes J	Inter	6/27/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1974 110th St	Backes		10/1/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1982 115th St	FormerClement		10/2/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1985 110th St	Potting	Inf	5/29/07		**67**	36	11		<1.0		**3.6**	
1985 110th St	Potting	Inter	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1985 110th St	Potting	Inter	6/27/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1985 115th St	Olson T	Inf	6/5/07		19	2.5	**2.9**		<1.0		**1.1**	
1985 115th St	Olson T	Inter	6/5/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1985 115th St	Olson T	Inter	6/27/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1987 115th St	Claassen	Eff	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1987 115th St	Claassen	Inf	5/29/07		**140**	29	23		<1.0		15	
1987 115th St	Claassen	Inter	5/29/07		2.3	6.6	<1.0		<1.0		<1.0	
1987 115th St	Claassen	Inter	6/27/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1988 115th St	Kunz		10/2/07		1.4	1.6	<1.0		<1.0		<1.0	
1988 115th St	Kunz		10/2/07	D	1	1.7	0.23 J		<1.0		<1.0	
1989 110th St	Seim	Eff	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1989 110th St	Seim	Inf	5/29/07		**170**	52	29		<1.0		11	

Historical Residential Well Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Name	Phase	Date	Dup	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Carbon disulfide	Methylene chloride	Tetrachloroethene	Toluene
				ES	200	850	7	9000		5	5	800
				PAL	40	85	0.7	1800		0.5	0.5	160
					ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
1989 110th St	Seim	Inter	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1989 110th St	Seim	Inter	6/27/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1989 110th St	Seim	Inter	6/27/07	D	<1.0	<1.0	<1.0		<1.0		<1.0	
1991 115th St	Mountain	Eff	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1991 115th St	Mountain	Inf	5/29/07		**73**	28	14		<1.0		6.4	
1991 115th St	Mountain	Inter	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1991 115th St	Mountain	Inter	6/27/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1997 110th St	Lehner	Eff	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1997 110th St	Lehner	Inf	5/29/07		34	17	**4.8**		<1.0		**1.9**	
1997 110th St	Lehner	Inter	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
1997 110th St	Lehner	Inter	6/27/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2001 110th St	Barberine		7/17/07		9.3	3	**1.4**		<1.0		**0.52**	
2001 110th St	Barberine		10/1/07		8.2	2.6	**0.76 J**		<1.0		**0.59 J**	
2001 110th St	Barberine		1/18/08		6.2	2.6	**1.5**		<1.0		**0.61 J**	
2003 110th St	Wicklem	Eff	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2003 110th St	Wicklem	Inf	5/29/07		**56**	42	9.1		<1.0		**3.6**	
2003 110th St	Wicklem	Inter	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2003 110th St	Wicklem	Inter	6/27/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2013 110th St	Heinecke	Eff	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2013 110th St	Heinecke	Eff	5/29/07	D	<1.0	<1.0	<1.0		<1.0		<1.0	
2013 110th St	Heinecke	Inf	5/29/07		**87**	26	14		<1.0		7.6	

Historical Residential Well Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Name	Phase	Date	Dup	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Carbon disulfide	Methylene chloride	Tetrachloroethene	Toluene
				ES	200	850	7	9000		5	5	800
				PAL	40	85	0.7	1800		0.5	0.5	160
					ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2013 110th St	Heinecke	Inter	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2013 110th St	Heinecke	Eff	6/25/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2013 110th St	Heinecke	Inf	6/25/07		**70**	22	19		<1.0		7.6	
2013 110th St	Heinecke	Inter	6/27/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2025 110th St	Mondor	Eff	5/29/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2025 110th St	Mondor	Inf	5/29/07		**52**	29	8.3		<1.0		**3.6**	
2025 110th St	Mondor	Inter	5/29/07		1.7	38	<1.0		<1.0		<1.0	
2025 110th St	Mondor	Inter	6/27/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2025 110th St	Mondor	Inter	6/27/07	D	<1.0	<1.0	<1.0		<1.0		<1.0	
2040 110th St	Levy(new)		10/1/07		<1.0	1.3	<1.0		<1.0		<1.0	
2040 110th St	Levy(new)		10/1/07	D	<1.0	1.5	<1.0		<1.0		<1.0	
2054 County Road C			5/13/14		<1.0	<1.0	<1.0		<1.0		<1.0	
2055 Cty Rd C	Thommes (NEW)	Eff	4/1/10		<1.0	<1.0	<1.0		<1.0		<1.0	
2055 Cty Rd C	Thommes (NEW)	Inf	4/1/10		<1.0	<1.0	<1.0		0.36 J		<1.0	
2055 Cty Rd C	Thommes (NEW)		5/9/11		<1.0	<1.0	<1.0		<1.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		5/8/12		<1.0	<1.0	0.28		<1.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		5/14/13		<1.0	0.49 J	0.26 J		<1.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		5/13/14		<1.0	0.94 J	0.53 J		<1.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		5/13/15		<1.0	1.3	**0.76 J**		<1.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		11/4/15		<1.0	1.5	**0.98 J**		<1.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		5/10/16		1	1.9	**1.3**		<1.0		<1.0	

Historical Residential Well Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Name	Phase	Date	Dup	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Carbon disulfide	Methylene chloride	Tetrachloroethene	Toluene
				ES	200	850	7	9000		5	5	800
				PAL	40	85	0.7	1800		0.5	0.5	160
					ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2055 Cty Rd C	Thommes (NEW)		5/10/16		0.98 J	1.9	**1.3**		<1.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		11/9/16		1.7	2.1	**1.4**		<1.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		5/19/17		2.2	2.5	**1.4**		<1.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		10/31/17		2.1	2.4	**1.2**		<2.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		5/3/18		1.9	2.3	**2.1**		<2.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		11/12/18		1.6	2.5	**1.7**		3.5		<1.0	
2055 Cty Rd C	Thommes (NEW)		5/15/19		0.88 J	1.8	1.2		<2.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		11/14/19		0.81 J	1.5	1		<2.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		5/19/20		0.74 J	1.4	1		<2.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		11/16/20		0.84 J	1.8	1.2		<2.0		<1.0	
2055 Cty Rd C	Thommes (NEW)		5/6/21		<1.0	1.3	**1**		<2.0	**1.8 J**	<1.0	
2055 Cty Rd C	Thommes (NEW)		11/15/21		<1.0	1.8	**1.3**		<2.0	<5.0	<1.0	
2055 Cty Rd C	Thommes (NEW)		5/27/22		<1.0	0.81 J	0.48 J		<2.0	<5.0	<1.0	
2055 Cty Rd C	Thommes (NEW)		11/8/22		<1.0	1.1	**0.80 J**		<1.0	<1.0	<1.0	
2055 Cty Rd C	Thommes (NEW)		10/10/23		<1.0	<1.0	<1.0	<10	<2.0	<5.0	<1.0	<0.50
2055 Cty Rd C(Treated)	Thommes (NEW)		5/15/19		0.79 J	1.6	**1.1**		<2.0		<1.0	
2055 Cty Rd C(Treated)	Thommes (NEW)		11/14/19		<1.0	<1.0	<1.0		<2.0		<1.0	
2056 Cty Rd C	TNT Metals		5/14/08		<1.0	<1.0	<1.0		<1.0		<1.0	
2056 Cty Rd C	TNT Metals		4/1/10		<1.0	<1.0	<1.0		<1.0		<1.0	
2056 Cty Rd C	TNT Metals		5/9/11		<1.0	<1.0	<1.0		<1.0		<1.0	
2056 Cty Rd C	TNT Metals		5/8/12		<1.0	<1.0	<1.0		<1.0		<1.0	

Historical Residential Well Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Name	Phase	Date	Dup	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Carbon disulfide	Methylene chloride	Tetrachloroethene	Toluene
				ES	200	850	7	9000		5	5	800
				PAL	40	85	0.7	1800		0.5	0.5	160
					ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L	ug/L
2056 Cty Rd C	TNT Metals		5/14/13		<1.0	<1.0	<1.0		<1.0		<1.0	
2056 Cty Rd C	TNT Metals		5/13/14		<1.0	<1.0	<1.0		<1.0		<1.0	
2056 Cty Rd C	TNT Metals		5/13/15		<1.0	<1.0	<1.0		<1.0		<1.0	
2056 Cty Rd C	TNT Metals		5/10/16		<1.0	<1.0	<1.0		<1.0		<1.0	
2056 Cty Rd C	TNT Metals		5/10/16	D	<1.0	<1.0	<1.0		<1.0		<1.0	
2056 Cty Rd C	TNT Metals		5/18/17		<1.0	<1.0	<1.0		<1.0		<1.0	
2056 Cty Rd C	TNT Metals		5/3/18		<1.0	<1.0	<1.0		<2.0		<1.0	
2056 Cty Rd C	TNT Metals		5/15/19		<1.0	<1.0	<1.0		<2.0		<1.0	
2056 Cty Rd C	TNT Metals		5/19/20		<1.0	<1.0	<1.0		<2.0		<1.0	
2056 Cty Rd C	TNT Metals		5/6/21		<1.0	<1.0	<1.0		<2.0	**1.9 J**	<1.0	
2056 Cty Rd C	TNT Metals		5/26/22		<1.0	<1.0	<1.0		<2.0	<5.0	<1.0	
2056 Cty Rd C	TNT Metals		10/10/23		<1.0	<1.0	<1.0	5.8 J	<2.0	<5.0	<1.0	4.4
2061 Cty Rd C	Olson R (OLD)		10/2/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2061 Cty Rd C	Olson R (OLD)		5/14/08		<1.0	<1.0	<1.0		<1.0		<1.0	
2061 Cty Rd C	Olson R (OLD)		8/12/09		<1.0	<1.0	<1.0		<1.0		<1.0	
2061 Cty Rd C	Olson R (OLD)		10/21/09		<1.0	<1.0	<1.0		<1.0		<1.0	
2061 Cty Rd C	Olson R (NEW)		4/1/10		<1.0	<1.0	<1.0		<1.0		<1.0	
2062 Cty Rd C	Star Prairie		7/2/13		<1.0	<1.0	<1.0		0.34 J		<1.0	
2072 110th St	Aldous		10/2/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2072 Cty Rd C	Larson R		5/14/08		<1.0	<1.0	<1.0		<1.0		<1.0	
2073 Cty Rd C	Johnson D		5/14/08		<1.0	<1.0	<1.0		<1.0		<1.0	

Historical Residential Well Analytical Results (Detected Compounds)
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Name	Phase	Date	Dup	1,1,1-Trichloroethane	1,1-Dichloroethane	1,1-Dichloroethene	Acetone	Carbon disulfide	Methylene chloride	Tetrachloroethene	Toluene
				ES	**200**	**850**	**7**	**9000**		**5**	**5**	**800**
				PAL	**40**	**85**	**0.7**	**1800**		**0.5**	**0.5**	**160**
					ug/L	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**	**ug/L**
2076 110th St	Hanson		10/1/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2077 110th St	Olson C		10/1/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2078 114th St	Rivard		10/1/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2080 Asplund Rd	Deal		10/2/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2082 110th St	Bryant		10/1/07		<1.0	<1.0	<1.0		<1.0		<1.0	
2082 Asplund Rd	Brown		10/2/07		1.2	0.68 J	<1.0		<1.0		<1.0	
2118 Cook Dr	Star Prairie Town Hall		5/14/08		<1.0	<1.0	<1.0		<1.0		<1.0	
985 198th St			7/2/13		<1.0	<1.0	<1.0		<1.0		<1.0	

Notes:
All results are in ug/L
D - Duplicate
J - Estimated concentration
Bold Lettering - Exceeds PAL
[shaded] - Exceeds ES

Appendix E

Historical SVE/LFG System Monitoring Data

Appendix E.1

Historical SVE/LFG System Blower (Stack) Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
Stack	09/23/08	28.9	0.3	0.5	93	1,250	-
Stack	09/25/08	13.9	1.8	1.4	98	1,250	-
Stack	10/01/08	1.6	6.3	0.6	100	1,275	-
Stack	10/07/08	0.6	10.3	0.7	96	1,300	-
Stack	10/15/08	0.4	12.2	0.9	100	1,280	-
Stack	10/30/08	0.4	13.9	1.0	92	1,100	-
Stack	11/13/08	0.1	14.5	0.2	88	1,100	-
Stack	11/26/08	0.0	15.6	0.3	84	1,100	-
Stack	01/22/09 [1]	0.5	14.0	0.8	80	1,250	24,900
Stack	02/05/09	0.0	16.0	0.8	82	1,230	2,840
Stack	02/16/09	0.0	17.0	0.7	80	1,260	3,200
Stack	03/16/09	0.0	16.5	0.8	80	1,310	3,350
Stack	04/24/09	0.0	16.7	1.4	84	1,360	2,420
Stack	05/20/09	0.0	17.1	1.5	92	1,340	1,500
Stack	06/23/09	0.0	16.3	1.8	106	1,282	1,950
Stack	07/23/09	0.0	16.5	1.1	106	1,357	6,420
Stack	08/20/09	0.0	16.0	2.0	108	1,407	8,240
Stack	09/23/09	0.0	16.9	2.2	108	1,458	7,850
Stack	10/20/09	0.0	16.7	1.4	96	1,445	7,200
Stack	11/24/09	0.0	16.9	1.4	92	1,450	6,550
Stack	12/29/09	0.0	19.2	1.4	86	1,916 [2]	7,230
Stack	01/29/10	0.1	18.3	1.7	86	1,051	NA [3]
Stack	02/22/10	0.2	20.8	1.6	80	1,732	10,700
Stack	03/26/10	0.0	16.9	1.2	84	1,552	3,040
Stack	04/22/10	0.0	18.0	1.6	88	1,574	2,130
Stack	05/18/10	0.0	17.7	2.2	90	1,568	6,530
Stack	06/29/10	0.0	16.9	2.2	104	1,354	4,760
Stack	07/23/10	0.0	16.8	2.2	110	1,357	4,650
Stack	08/27/10	4.4	9.4	2.2	108	1,369	NA [3]
Stack	10/01/10	3.5	9.1	1.8	98	1,353	NA [3]
Stack	10/22/10	1.9	13.7	1.4	96	1,444	NA [3]
Stack	11/29/10	0.1	17.0	1.2	90	1,504	13,400
Stack	12/22/10	0.7	17.4	2.0	84	1,127	16,400
Stack	01/24/11	0.0	18.8	0.8	89	1,207	7,610
Stack	02/28/11	0.0	16.6	0.0	88	906 [4]	5,970
Stack	04/13/11	0.2	17	0.6	90	970 [4]	9,430

Appendix E.1

Historical SVE/LFG System Blower (Stack) Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
Stack	04/29/11	0.1	17.8	1.0	88	1,203	9,850
Stack	05/27/11	0.0	18.2	1.1	94	1,313	6,850
Stack	06/24/11	0.1	17.5	1.2	101	1,230	5,820
Stack	07/22/11	0.0	18.3	1.4	108	1,290	4,800
Stack	08/25/11	2.1	14.6	1.3	106	1,347	23,200
Stack	09/30/11	0.1	17.8	2.2	102	1,421	2,670
Stack	10/26/11	0.1	17.0	1.6	96	1,534	3,270
Stack	11/22/11	0.0	17.5	1.5	94	1,454	5,170
Stack	12/29/11	0.1	18.4	1.4	88	1,493	5,000
Stack	01/26/12	0.3	16.3	1.4	80	1,410	33,350
Stack	02/21/12	0.0	18.0	1.0	85	1,456	5,270
Stack	03/30/12	0.0	17.8	0.9	93	1,235	3,301
Stack	04/27/12	0.0	16.8	1.2	92	1,400	3,920
Stack	05/25/12	0.2	19.5	1.2	96	1,509	7,350
Stack	06/26/12	0.3	15.7	1.7	104	1,415	24,820
Stack	07/25/12	0.7	16.5	1.0	112	1,010	28,890
Stack	08/22/12	0.0	17.7	1.9	108	1,549	6,950
Stack	09/25/12	0.3	17.6	2.3	106	2,005	4,010
Stack	10/30/12	0.0	18.1	2.0	56	1,974	650 [5]
Stack	11/21/12 [6]	0.0	18.3	1.7	90	1,708	3,140
Stack	12/21/12 [6]	3.5	13.7	1.8	70	1,000 [4]	NA [3]
Stack	1/3/13 [6]	0.1	17.9	0.8	80	1,501	8,190
Stack	1/28/13	0.0	17.7	2.8	82	1,680	7,600
Stack	2/27/13	0.0	18.1	1.2	80	1,608	6,160
Stack	3/25/13	0.0	17.9	1.0	84	1,447	8,680
Stack	04/26/13	0.8	16.3	0.6	40	1,257	44,710
Stack	05/30/13	0.0	18.3	1.2	90	1,341	2,740
Stack	06/27/13	0.4	17.3	1.2	62	2,114	7,200
Stack	07/25/13	0.0	17.9	1.4	108	2,301	1,980
Stack	08/30/13	0.1	19.6	1.3	84	1,269	2,213
Stack	09/25/13	0.1	18.8	2.0	100	2,115	2,680
Stack	10/23/13	0.0	18.6	3.7	57	2,335	1,150
Stack	11/20/13	0.0	18.4	3.1	52	2,134	2,370
Stack	12/18/13	0.0	18.6	1.3	82	1,437	1,690
Stack	05/13/14 [7]	3.7	10.1	0.1	86	616 [4]	8,490
Stack	05/28/14 [7]	0.0	17.6	0.9	88	2,174	10,200

Appendix E.1

Historical SVE/LFG System Blower (Stack) Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
Stack	06/26/14	0.0	17.9	1.3	98	1,324	4,010 [5]
Stack	07/31/14	3.3	14.6	1.9	98	1,653	10,190
Stack	08/28/14	7.0	12.0	2.0	92	3,163	21,840
Stack	09/26/14	0.0	17.7	2.0	100	1,367	1,530
Stack	10/24/14	0.0	18.3	1.2	92	1,516	2,430
Stack	11/19/14	0.1	16.4	1.6	82	1,712	4,530
Stack	12/17/14	0.0	18.7	1.8	82	1,745	700
Stack	01/21/15	0.0	18.7	1.6	78	1,588	510
Stack	02/26/15	0.0	17.1	1.4	85	1,602	7,820
Stack	03/17/15	0.0	19.4	2.2	90	1,908	1,130
Stack	04/17/15	0.0	16.7	1.9	82	1,704	2,910
Stack	05/12/15	0.0	18.8	3.2	85	2,033	990
Stack	06/25/15	0.0	17.7	2.6	96	1,955	340
Stack	07/31/15	0.0	18.7	2.4	108	1,809	450
Stack	08/19/15	0.0	18.5	2.7	98	3,114	530
Stack	09/24/15	0.2	17.9	1.7	100	2,090	2,370
Stack	10/22/15	0.0	18.9	1.8	90	2,612	770
Stack	11/12/15	0.6	15.4	0.1	110	550	12,250
Stack	12/17/15	0.7	14.9	0.1	110	464	NA [3]
Stack	1/21/16	0.5	16.1	0.1	35	401	18,650
Stack	2/24/16	0.6	13.3	0.2	98	458	NA [3]
Stack	3/22/16	0.0	15.4	0.1	85	448	NA [3]
Stack	4/22/16	0.1	17.4	1.1	112	459	2,120
Stack	5/19/16	0.0	17	0.2	115	403	3,600
Stack	6/14/16	0.0	16.4	0.2	120	415	3,700
Stack	7/27/16	0.1	15.3	0.3	124	494	3,870
Stack	8/10/16	0.3	16.1	0.1	130	444	3,760
Stack	9/15/16	0.3	14.9	0.2	110	458	4,120
Stack	10/26/16	1.1	12.9	0.2	51	537	NA [3]
Stack	11/23/16	1.4	12.3	0	50	547	NA [3]
Stack	12/13/16	0.0	18.7	0.2	45	593	5,096
Stack	1/10/17	0.4	14.7	0.1	40	488	NA [3]
Stack	2/14/17	0.0	17.4	0.2	44	499	2,167
Stack	3/7/17	0.3	17.2	0	40	437	3,491
Stack	4/5/17	0.5	14.5	0.2	50	378	NA [3]
Stack	5/25/17	0.2	13.0	0.7	53	430	NA [3]
Stack	6/28/17	0.0	16.5	0.0	63	910	3,117
Stack	7/24/17	0.0	17.8	0.0	68	962	3,710

Appendix E.1

Historical SVE/LFG System Blower (Stack) Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
Stack	8/14/17	0.0	17.1	0.0	66	964	4,989
Stack	9/13/17	0.3	15.9	0.0	67	0 [8]	NA[3]
Stack	10/30/17	0.4	14.3	0.0	54	448	NA[3]
Stack	11/17/17	0.0	16.4	0.0	55	447	NA[3]
Stack	12/7/17	0.0	18.4	0.0	52	464	3,841
Stack	1/24/18	1.7	14.8	0.2	37	535	NA[3]
Stack	2/13/18	0.0	17.1	0.2	44	459	3,909
Stack	3/5/18	0.0	17.5	0.2	45	504	3,220
Stack	4/4/18	0.0	14.9	0.1	36	559	NA[3]
Stack	5/17/18	0.2	13.7	1.0	56	300	-
Stack	7/3/18	0.0	16.7	0.8	68	300	-
Stack	7/31/18	0.0	14.9	0.3	69	300	-
Stack	8/30/18	0.4	15.4	0.6	64	300	-
Stack	9/28/18	0.0	16.3	1.6	56	300	2,257
Stack	11/16/18	0.1	16.8	0.1	50	446	> 4,194
Stack	12/13/18	0.5	15.9	0.1	42	622	> 5,745
Stack	1/23/19	0.8	13.5	-1.8	37	567	9,973
Stack	2/22/19	0.6	14.9	0.3	36	509	9,801
Stack	4/2/19	0.4	14.0	1.6	41	559	8,658
Stack	4/26/19	0.1	15.0	1.4	46	527	6,682
Stack	5/29/19	0.0	14.4	0.1	54	455	4,358
Stack	6/18/19	0.0	16.0	0.1	64	489	3,506
Stack	7/23/19	0.0	16.1	0.8	68	479	1,132
Stack	8/29/19	0.1	14.9	0.8	66	506	3,174
Stack	9/12/19	0.1	15.9	3.0	62	478	6,166
Stack	10/31/19	0.2	17.0	0.1	54	448	4,854
Stack	11/25/19	0.5	19.2	0.2	46	474	-
Stack	2/18/20	0.2	17.0	1.4	41	445	4,381
Stack	6/23/20	0.0	16.3	1.4	70	371	881
Stack	8/17/20	0.0	14.8	0.1	72	361	-
Stack	11/5/20	0.2	14.9	0.0	52	647	4,421
Stack	1/20/21	0.2	17.2	0.2	36	546	5,621
Stack	2/19/21	0.2	17.4	-1.7	34	NA [8]	7,721
Stack	3/25/21	0.4	12.9	1.1	44	481	NA [8]
Stack	4/22/21	0.0	17.6	0.1	48	585	1,811
Stack	5/21/21	0.0	17.0	0.0	56	536	1,220
Stack	6/17/21	0.0	17.5	0.0	65	513	465
Stack	7/15/21	0.0	16.9	0.2	70	511	-
Stack	8/12/21	0.0	19.3	0.2	67	337	223
Stack	9/23/21	0.0	16.0	0.4	60	406	11,900
Stack	10/21/21	0.0	17.8	0.2	61	512	2,814

Appendix E.1

Historical SVE/LFG System Blower (Stack) Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
Stack	11/30/21	0.3	14.3	0.2	40	565	9,877
Stack	12/21/21	0.0	14.9	0.2	36	530	5,079
Stack	1/31/22	0.1	14.4	0.4	35	567	753
Stack	2/28/22	0.1	18.8	0.3	42	543	2,152
Stack	3/28/22	0.0	13.1	0.1	36	537	3,470
Stack	4/28/22	0.0	16.2	1.9	46	478	3,523
Stack	5/26/22	0.0	16.6	4.7	54	498	808
Stack	6/23/22	0.0	18.9	2.6	68	475	145
Stack	7/26/22	0.0	18.7	1.6	68	521	738
Stack	8/23/22	0.0	17.0	1.6	70	492	1,288
Stack	9/29/2022	0.0	18.4	-	68	529	392
Stack	10/27/22	0.0	18.3	-	58	516	1,841
Stack	12/6/22	0.2	15.0	1.7	45	562	6,137
Stack	1/12/23	0.0	17.5	1.2	100	432	2,556
Stack	2/16/23	0.0	15.7	1.5	108	427	2,561
Stack	3/20/23	0.0	17.1	0.5	38	507	808
Stack	4/13/23	0.0	16.8	-	44	515	1,117
Stack	5/2/23	0.0	17.1	0.6	44	489	816
Stack	6/22/23	0.0	18.5	0.8	67	526	569
Stack	7/31/23	0.0	18.0	2.2	71	466	1,436
Stack	8/31/23	0.0	18.2	1.6	71	407	1,951
Stack	9/28/23	0.0	6.7	0.2	66	432	624
Stack	12/21/23	0.0	-	-	46	570	0

Notes:
*Readings for the first three quarters in 2023 were recorded using a FID. The fourth quarter in 2023 readings were recorded using a PID.

[1] System was restarted on 1/19/09 after being down for a month for SVE well cleaning and condensate collection system installation.

[2] During the 12/29/09 inspection, the pitot tube flow measurement device was noted to be slightly misaligned The pitot tube was realigned resulting in a higher flow rate versus previous months

[3] No reading could be obtained; FID flamed out because of low oxygen level.

[4] Tubing connecting Pitot tube from discharge stack to manometer was blocked or cracked.

[5] FID taken with Thermo Scientific TVA 1000 Vapor Analyzer.

[6] System was shutdown on 11/21/12 following monthly monitoring for 1 month shutdown period. Post 1 month shutdown monitoring was conducted at startup (12/21/12) and two weeks after startup (1/3/13).

[7] System was shutdown on 1/10/14 for a 4 month shutdown period. Post 4 month shutdown monitoring was conducted at startup (5/13/14) and two weeks after startup (5/28/14).

[8] Could not obtain flow reading

[9] Values could not be obtained due to equipment error.

With approval from the WDNR on 10/21/15, the System was put into part time (16 hrs/day) operational mode on 10/29/15. Select SVE wells were turned off, and LFG wells were adjusted to focus extraction around the GP-2 nest.

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-1	08/27/08 [1]	1.1	19.2	0.0	-	-	-	-
SVE-1	09/23/08 [2]	-	-	-	-	-	90 - 100	-
SVE-1	09/25/08 [2]	-	-	-	-	-	90 - 100	-
SVE-1	10/1/08 [2]	-	-	-	-	-	90 - 100	-
SVE-1	10/07/08	0.1	10.5	-47.4	-	29	90 - 100	-
SVE-1	10/15/08	0.0	14.4	-47.8	-	0	90 - 100	-
SVE-1	10/30/08	0.0	15.9	-47.9	-	0	90 - 100	635
SVE-1	11/13/08	0.0	16.7	-47.3	-	0	90 - 100	222
SVE-1	11/26/08	0.0	17.3	-49.4	-	0	90 - 100	-
SVE-1	01/22/09 [3]	0.0	16.9	-50.0	-	42	90 - 100	1,300
SVE-1	02/05/09	0.0	17.8	-50.7	-	43	90 - 100	49
SVE-1	02/16/09	0.0	19.0	-51.0	-	43	90 - 100	120
SVE-1	03/16/09	0.0	18.8	-49.6	-	0	90 - 100	108
SVE-1	04/24/09	0.0	19.2	-47.6	-	42	90 - 100	147
SVE-1	05/20/09	0.0	19.2	-46.8	-	49	90 - 100	25
SVE-1	06/23/09	0.0	18.4	-45.2	-	30	90 - 100	63
SVE-1	07/23/09	0.0	18.1	-44.3	-	32	90 - 100	50
SVE-1	08/20/09	0.0	18.0	-43.0	-	32	50	178
SVE-1	09/23/09	0.0	18.6	-43.8	-	29	50	152
SVE-1	10/20/09	0.0	19.1	-46.2	-	36	50	64
SVE-1	11/24/09	0.0	19.0	-45.8	-	36	50	127
SVE-1	12/29/09	0.0	18.7	-47.0	-	37	50	105
SVE-1	01/29/10	0.0	20.9	-46.9	-	34	50	11
SVE-1	02/22/10	0.1	19.9	-47.1	-	40	50	5
SVE-1	03/26/10	0.0	18.5	-46.1	-	37	50	64
SVE-1	04/22/10	0.0	19.6	-44.4	-	31	50	8
SVE-1	05/18/10	0.0	19.1	-44.4	-	13	50	460
SVE-1	06/29/10	0.0	18.6	-44.7	-	30	50	87
SVE-1	07/23/10	0.0	18.2	-41.9	-	33	50	170
SVE-1	08/27/10	0.0	15.8	-43.7	-	38	50	192
SVE-1	10/01/10	0.0	16.1	-46.5	-	32	50	3,270
SVE-1	10/22/10	0.0	17.6	-46.0	-	32	50	185
SVE-1	11/29/10	0.0	19.2	-44.0	-	50	50	20
SVE-1	12/22/10	0.0	20.4	-46.5	-	50	50	171
SVE-1	01/24/11	0.0	21.5	-45.2	-	50	50	320
SVE-1	02/28/11	0.0	18.7	-46.0	-	50	50	195
SVE-1	04/13/11	0.0	19.5	-49.1	-	40	50	241
SVE-1	04/29/11	0.0	20.1	-47.8	-	41	50	354
SVE-1	05/27/11	0.0	19.7	-42.0	-	50	50	682
SVE-1	06/24/11	0.0	19.1	-45.5	-	0 [4]	50	190
SVE-1	07/22/11	0.0	18.3	-43.4	-	0 [4]	50	257
SVE-1	08/25/11	0.0	17.5	-44.6	-	0 [4]	50	325
SVE-1	09/30/11	0.0	19.8	-43.3	-	0 [4]	50	250
SVE-1	10/26/11	0.0	18.4	-44.3	-	0 [4]	50	12

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-1	11/22/11	0.0	19.3	-44.7	-	40	50	250
SVE-1	12/29/11	0.1	20.2	-45.2	-	49	50	160
SVE-1	01/26/12	0.0	19.6	-45.1	-	54	50	84
SVE-1	02/21/12	0.0	19.9	-46.0	-	50	50	231
SVE-1	03/30/12	0.0	19.7	-45.6	-	0 [4]	50	327
SVE-1	04/27/12	0.0	18.3	-47.2	-	46	50	210
SVE-1	05/25/12	0.0	21.2	-42.5	-	0 [4]	50	130
SVE-1	06/26/12	0.0	18.5	-44.3	-	42	50	120
SVE-1	07/25/12	0.0	17.7	-45.1	-	0 [4]	50	140
SVE-1	08/22/12	0.0	18.6	-40.3	-	33	50	300
SVE-1	09/25/12	0.0	19.2	-35.4	-	36	50	17
SVE-1	10/30/12	0.0	19.4	-38.4	-	0 [4]	50	NA [11]
SVE-1	11/21/12	0.0	19.8	-42.8	-	0 [4]	50	20
SVE-1	12/21/12 [12]	0.0	17.8	-43.6	-	57	50	315
SVE-1	01/03/13 [12]	0.0	20.1	-45.4	-	41	50	230
SVE-1	01/28/13	0.0	20.4	-48.8	-	33	50	730
SVE-1	02/27/13	0.0	20.1	-47.2	-	0 [4]	50	231
SVE-1	03/25/13	0.0	19.7	-46.1	-	0 [4]	50	650
SVE-1	04/26/13	0.0	19.0	-49.5	-	50	50	214
SVE-1	05/30/13	0.0	20.0	-47.3	-	49	50	130
SVE-1	06/27/13	0.0	18.9	-34.5	-	0 [4]	50	74
SVE-1	07/25/13	0.0	18.6	-40.8	-	36	50	5
SVE-1	08/30/13	0.0	20.0	-41.1	-	0 [4]	50	96
SVE-1	09/25/13	0.0	20.2	-41.5	-	32	50	110
SVE-1	10/23/13	0.0	20.2	-43.2	-	40	50	1
SVE-1	11/20/13	0.0	19.9	-45.3	-	0 [4]	50	120
SVE-1	12/18/13	0.0	21.4	-47.0	-	56	50	55
SVE-1	05/13/14 [13]	0.0	11.9	0.0	-	48	50	290
SVE-1	05/28/14 [13]	0.0	20.8	-44.8	-	0 [4]	50	200
SVE-1	06/26/14	0.0	18.9	-45.8	-	0 [4]	50	20 [11]
SVE-1	07/31/14	0.0	20.5	-44.5	-	0 [4]	50	43
SVE-1	08/28/14	0.0	14.9	-45.0	-	59	50	257
SVE-1	09/26/14	0.0	18.8	-46.3	-	39	50	48
SVE-1	10/24/14	0.0	19.4	-46.8	-	59	50	190
SVE-1	11/19/14	0.0	19.9	-46.0	-	0 [4]	50	67
SVE-1	12/17/14	0.0	20.2	-45.5	-	37	50	110
SVE-1	01/21/15	0.0	19.9	-47.0	-	0 [4]	50	7
SVE-1	02/26/15	0.0	20.1	-47.8	-	57	50	330
SVE-1	03/17/15	0.0	20.1	-20.5	-	47	50	16
SVE-1	04/17/15	0.0	19.6	-16.0	-	0 [4]	50	12
SVE-1	05/12/15	0.0	19.7	-17.9	-	50	50	5
SVE-1	06/25/15	0.0	18.2	-15.6	-	0 [4]	50	51
SVE-1	07/31/15	0.0	20.7	0.0	-	0 [4]	50	6
SVE-1	08/19/15	0.0	20.7	-0.1	-	0 [4]	50	250

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-1	09/24/15	0.0	20.9	-0.1	-	0 [4]	50	250
SVE-1	10/22/15	0.0	20.1	-19.1	-	0 [4]	50	77
SVE-1	04/22/16	0.0	19.0	-5.0	50	0	-	120
SVE-1	10/26/16	0.0	14.7	-6.9	51	0	-	NA [6]
SVE-1	04/05/17	0.0	14.3	-7.7	50	0	-	NA [6]
SVE-1	10/30/17	0.0	16.7	-10.2	54	0	-	674
SVE-1	05/17/18	0.0	17.6	-8.0	56	0	-	-
SVE-1	11/16/18	0.0	16.4	-12.8	50	0	-	0
SVE-1	04/26/19	0.0	18.2	-11.8	46	0	-	27
SVE-1	10/31/19	0.0	19.0	-15.2	54	0	-	674
SVE-1	06/23/20	0.0	18.0	-9.4	70	0	-	0
SVE-1	11/05/20	0.0	17.5	-12.8	52	0	-	286
SVE-1	04/22/21	0.0	19.4	-12.5	48	0	-	14
SVE-1	10/21/21	0.0	18.8	-11.6	61	0	-	267
SVE-1	04/28/22	0.0	19.4	-13.1	46	0	-	461
SVE-1	10/27/22	0.0	18.0	-6.7	58	0	-	429
SVE-1	12/21/23	0.0	-	-12.2	46	0	-	0
SVE-2	08/27/08 [1]	8.3	3.1	0.2	-	-	-	-
SVE-2	09/23/08 [2]	-	-	-	-	-	90 - 100	-
SVE-2	09/25/08 [2]	-	-	-	-	-	90 - 100	-
SVE-2	10/01/08 [2]	-	-	-	-	-	90 - 100	-
SVE-2	10/07/08	0.9	8.7	-47.1	-	30	90 - 100	-
SVE-2	10/15/08	0.3	12.0	-47.4	-	40	90 - 100	-
SVE-2	10/30/08	0.0	13.9	-47.6	-	0	90 - 100	3,300
SVE-2	11/13/08	0.0	15.3	-46.9	-	0	90 - 100	1,350
SVE-2	11/26/08	0.0	15.7	-49.1	-	13	90 - 100	-
SVE-2	01/22/09 [3,5]	-	-	-	-	-	90 - 100	-
SVE-2	02/05/09 [5]	-	-	-	-	-	90 - 100	-
SVE-2	02/16/09 [5]	-	-	-	-	-	90 - 100	-
SVE-2	03/16/09 [5]	-	-	-	-	-	90 - 100	-
SVE-2	04/24/09	0.0	16.7	-44.1	-	93	90 - 100	787
SVE-2	05/20/09	0.0	16.6	-43.1	-	104	90 - 100	670
SVE-2	06/23/09	0.0	15.4	-41.8	-	100	90 - 100	805
SVE-2	07/23/09	0.0	15.2	-40.8	-	100	90 - 100	2,310
SVE-2	08/20/09	0.0	16.0	-42.7	-	87	150	730
SVE-2	09/23/09	0.0	16.4	-43.5	-	98	150	588
SVE-2	10/20/09	0.0	17.2	-45.8	-	108	150	444
SVE-2	11/24/09	0.0	17.2	-45.5	-	106	150	425
SVE-2	12/29/09	0.0	16.9	-46.6	-	109	150	216
SVE-2	01/29/10	0.0	19.2	-46.6	-	125	150	75
SVE-2	02/22/10	0.0	18.1	-45.8	-	105	150	91
SVE-2	03/26/10	0.0	16.7	-45.8	-	104	150	194
SVE-2	04/22/10	0.0	17.7	-44.0	-	106	150	65

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-2	05/18/10	0.0	17.0	-44.0	-	100	150	745
SVE-2	06/29/10	0.0	16.8	-44.2	-	101	150	225
SVE-2	07/23/10	0.0	16.2	-41.5	-	95	150	412
SVE-2	08/27/10	0.0	12.9	-43.3	-	106	150	520
SVE-2	10/01/10	0.0	13.5	-46.2	-	121	150	3,130
SVE-2	10/22/10	0.0	13.7	-45.8	-	106	150	2,420
SVE-2	11/29/10	0.0	16.5	-45.8	-	109	150	1,780
SVE-2	12/22/10	0.0	17.7	-48.5	-	128	150	310
SVE-2	01/24/11	0.0	19.1	-48.2	-	132	150	460
SVE-2	02/28/11	0.0	16.9	-49.3	-	118	150	289
SVE-2	04/13/11	0.0	16.7	-48.8	-	116	150	331
SVE-2	04/29/11	0.0	17.6	-47.5	-	98	150	520
SVE-2	05/27/11	0.0	17.8	-46.7	-	122	150	730
SVE-2	06/24/11	0.0	17.0	-45.2	-	109	150	400
SVE-2	07/22/11	0.0	15.5	-43.2	-	98	150	825
SVE-2	08/25/11	0.0	15.6	-44.1	-	116	150	3,660
SVE-2	09/30/11	0.0	17.6	-42.8	-	150	150	1,530
SVE-2	10/26/11	0.0	16.4	-44.1	-	60	150	350
SVE-2	11/22/11	0.0	17.2	-44.2	-	86	150	590
SVE-2	12/29/11	0.0	18.0	-44.6	-	113	150	1,480
SVE-2	01/26/12	0.0	16.2	-44.4	-	35	150	2,591
SVE-2	02/21/12	0.0	17.2	-45.8	-	84	150	1,180
SVE-2	03/30/12	0.0	17.0	-46.4	-	109	150	612
SVE-2	04/27/12	0.0	16.2	-46.7	-	110	150	1,430
SVE-2	05/25/12	0.0	18.8	-45.0	-	84	150	400
SVE-2	06/26/12	0.0	16.2	-43.9	-	85	150	690
SVE-2	07/25/12	0.0	14.9	-44.6	-	80	150	780
SVE-2	08/22/12	0.0	16.3	-39.7	-	87	150	580
SVE-2	09/25/12	0.0	16.3	-39.9	-	131	150	1,710
SVE-2	10/30/12	0.0	17.4	-40.1	-	126	150	28 [11]
SVE-2	11/21/12	0.0	17.7	-42.4	-	120	150	240
SVE-2	12/21/12 [12]	1.0	12.8	-44.4	-	141	150	NA [6]
SVE-2	01/03/13 [12]	0.0	17.7	-45.4	-	143	150	980
SVE-2	01/28/13	0.0	17.9	-48.1	-	0 [4]	150	2,270
SVE-2	02/27/13	0.0	17.5	-47.0	-	0 [4]	150	3,230
SVE-2	03/25/13	0.0	17.5	-45.6	-	0 [4]	150	3,110
SVE-2	04/26/13	0.5	13.8	-46.4	-	0 [4]	150	30,380
SVE-2	05/30/13	0.0	18.4	-47.7	-	0 [4]	150	96
SVE-2	06/27/13	0.0	16.1	-38.8	-	0 [4]	150	840
SVE-2	07/25/13	0.0	17.5	-40.4	-	50	150	27
SVE-2	08/30/13	0.0	18.3	-40.6	-	60	150	120
SVE-2	09/25/13	0.0	17.8	-20.2	-	48	150	140
SVE-2	10/23/13	0.0	18.6	-42.7	-	109	150	16
SVE-2	11/20/13	0.0	20.8	-44.4	-	0 [4]	150	140

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-2	12/18/13	0.0	19.9	-46.9	-	146	150	79
SVE-2	05/13/14 [13]	0.7	9.1	38.0	-	124	150	NA [6]
SVE-2	5/28/14 [13]	0.0	17.0	-7.2	-	0 [4]	150	5,890
SVE-2	06/26/14	0.0	17.3	-45.2	-	124	150	400 [11]
SVE-2	07/31/14	1.8	15.1	-44.0	-	147	150	2,810
SVE-2	08/28/14	5.0	8.0	-44.6	-	108	150	NA [6]
SVE-2	09/26/14	0.0	17.4	-45.8	-	138	150	55
SVE-2	10/24/14	0.0	18.4	-46.3	-	143	150	200
SVE-2	11/19/14	0.0	17.2	-45.8	-	151	150	71
SVE-2	12/17/14	0.0	19.4	-44.6	-	144	150	180
SVE-2	01/21/15	0.0	19.2	-46.3	-	111	150	8
SVE-2	02/26/15	0.0	18.6	-47.2	-	158	150	66
SVE-2	03/17/15	0.0	18.4	-45.3	-	142	150	9
SVE-2	04/17/15	0.0	19.1	-43.2	-	0 [4]	150	14
SVE-2	05/12/15	0.0	19.0	-41.6	-	147	150	6
SVE-2	06/25/15	0.0	18.4	-38.9	-	152	150	47
SVE-2	07/31/15	0.0	18.7	-38.5	-	152	150	9
SVE-2	08/19/15	0.0	18.7	-39.6	-	105	150	90
SVE-2	09/24/15	0.0	18.1	-44.9	-	105	150	210
SVE-2	10/22/15	0.0	19.3	-43.2	-	0 [4]	150	57
SVE-2	04/22/16	0.0	16.1	-1.2	50	0	-	270
SVE-2	10/26/16	0.0	13.4	-0.2	51	0	-	NA [6]
SVE-2	04/05/17	0.0	16.3	-0.1	50	0	-	741
SVE-2	10/30/17	0.0	20.0	0.0	54	0	-	1,008
SVE-2	05/17/18	0.0	19.5	-6.5	56	0	-	-
SVE-2	11/16/18	0.0	17.1	-10.0	50	0	-	217
SVE-2	04/26/19	0.0	17.3	-10.0	46	0	-	52
SVE-2	10/31/19	0.0	18.8	-13.0	54	0	-	0
SVE-2	06/23/20	0.0	16.9	-0.2	70	0	-	14
SVE-2	11/05/20	0.0	16.4	-10.5	52	0	-	14
SVE-2	04/22/21	0.0	19.8	-11.9	48	0	-	26
SVE-2	10/21/21	0.0	18.5	-10.2	61	0	-	45
SVE-2	04/28/22	0.0	16.9	-10.4	46	0	-	70
SVE-2	10/27/22	0.0	19.2	-8.5	58	0	-	14
SVE-2	12/21/23	0.0	-	-10.1	46	79	-	0
SVE-3	08/27/08 [1]	6.1	3.5	0.6	-	-	-	-
SVE-3	09/23/08	8.5	0.0	-12.2	-	89	90 - 100	-
SVE-3	09/25/08	3.0	2.8	-13.7	-	91	90 - 100	-
SVE-3	10/01/08	0.2	6.9	-14.5	-	93	90 - 100	-
SVE-3	10/07/08	0.1	11.0	-17.4	-	116	90 - 100	-
SVE-3	10/15/08	0.0	13.1	-14.5	-	104	90 - 100	-
SVE-3	10/30/08	0.0	14.5	-13.6	-	89	90 - 100	730
SVE-3	11/13/08	0.0	15.4	-11.7	-	99	90 - 100	455

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-3	11/26/08	0.0	16.8	-13.8	-	100	90 - 100	-
SVE-3	01/22/09 [3]	0.0	15.0	-13.6	-	100	90 - 100	1,510
SVE-3	02/05/09	0.0	17.3	-11.7	-	104	90 - 100	371
SVE-3	02/16/09	0.0	18.0	-12.2	-	92	90 - 100	327
SVE-3	03/16/09	0.0	17.7	-12.6	-	97	90 - 100	267
SVE-3	04/24/09	0.0	18.4	-11.6	-	95	90 - 100	236
SVE-3	05/20/09	0.0	18.6	-10.4	-	104	90 - 100	68
SVE-3	06/23/09	0.0	18.1	-14.6	-	104	90 - 100	138
SVE-3	07/23/09	0.0	18.1	-14.0	-	104	90 - 100	169
SVE-3	08/20/09	0.0	18.5	-6.7	-	53	50	170
SVE-3	09/23/09	0.0	18.8	-7.7	-	50	50	210
SVE-3	10/20/09	0.0	19.4	-7.6	-	58	50	18
SVE-3	11/24/09	0.0	19.1	-6.4	-	48	50	94
SVE-3	12/29/09	0.0	18.4	-6.7	-	49	50	24
SVE-3	01/29/10	0.0	19.0	-6.1	-	43	50	8
SVE-3	02/22/10	0.0	19.7	-5.0	-	52	50	84
SVE-3	03/26/10	0.0	18.3	-6.5	-	49	50	122
SVE-3	04/22/10	0.0	19.2	-7.2	-	45	50	15
SVE-3	05/18/10	0.0	18.9	-7.6	-	44	50	542
SVE-3	06/29/10	0.0	18.7	-8.9	-	54	50	130
SVE-3	07/23/10	0.0	18.8	-7.4	-	53	50	152
SVE-3	08/27/10	6.1	7.5	-5.8	-	53	50	NA [6]
SVE-3	10/01/10	5.9	7.3	-5.3	-	47	50	NA [6]
SVE-3	10/22/10	0.0	18.4	-6.3	-	34	50	9,830
SVE-3	11/29/10	0.0	19.4	-2.6	-	49	50	151
SVE-3	12/22/10	0.0	20.7	-6.1	-	46	50	152
SVE-3	01/24/11	0.0	20.6	-4.6	-	46	50	310
SVE-3	02/28/11	0.0	18.7	-5.2	-	54	50	178
SVE-3	04/13/11	0.0	19.1	-8.6	-	49	50	295
SVE-3	04/29/11	0.0	19.8	-7.2	-	53	50	269
SVE-3	05/27/11	0.0	19.6	-8.0	-	45	50	377
SVE-3	06/24/11	0.0	19.5	-12.9	-	57	50	240
SVE-3	07/22/11	0.0	17.8	-12.8	-	50	50	23
SVE-3	08/25/11	0.1	18.4	-11.4	-	55	50	16,510
SVE-3	09/30/11	0.0	17.8	-8.8	-	51	50	2,350
SVE-3	10/26/11	0.0	18.3	-10.1	-	47	50	16
SVE-3	11/22/11	0.0	19.2	-6.4	-	54	50	270
SVE-3	12/29/11	0.0	21.0	-5.7	-	49	50	300
SVE-3	01/26/12	0.0	19.2	-3.8	-	50	50	96
SVE-3	02/21/12	0.0	19.8	-6.6	-	46	50	210
SVE-3	03/30/12	0.0	19.8	-5.0	-	0 [4]	50	220
SVE-3	04/27/12	0.0	18.2	-5.4	-	56	50	190
SVE-3	05/25/12	0.0	18.0	-7.7	-	51	50	430
SVE-3	06/26/12	0.0	19.1	-5.5	-	48	50	120

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-3	07/25/12	0.0	18.2	-5.7	-	45	50	130
SVE-3	08/22/12	0.0	18.4	-6.0	-	47	50	300
SVE-3	09/25/12	0.0	19.0	-5.9	-	0 [4]	50	35
SVE-3	10/30/12	0.0	19.0	-5.4	-	52	50	NA [11]
SVE-3	11/21/12	0.0	19.4	-5.5	-	45	50	56
SVE-3	12/21/12 [12]	0.6	16.4	-6.6	-	46	50	4,680
SVE-3	01/03/13 [12]	0.0	19.6	-6.8	-	46	50	115
SVE-3	01/28/13	0.0	20.9	-6.7	-	73	50	601
SVE-3	02/27/13	0.0	20.1	-5.6	-	54	50	239
SVE-3	03/25/13	0.0	19.8	-6.9	-	53	50	430
SVE-3	04/26/13	0.0	18.9	-5.4	-	50	50	260
SVE-3	05/30/13	0.0	19.6	-8.4	-	51	50	280
SVE-3	06/27/13	0.0	18.8	-11.8	-	63	50	22
SVE-3	07/25/13	0.0	18.6	-11.5	-	50	50	47
SVE-3	08/30/13	0.0	19.4	-11.2	-	57	50	82
SVE-3	09/25/13	0.0	18.9	-20.5	-	54	50	120
SVE-3	10/23/13	0.0	19.3	-11.2	-	51	50	6
SVE-3	11/20/13	0.0	19.7	-5.8	-	56	50	87
SVE-3	12/18/13	0.0	19.7	0.0	-	46	50	23
SVE-3	05/13/14 [13]	0.0	15.3	0.0	-	47	50	200
SVE-3	05/28/14 [13]	0.0	17.0	-7.2	-	59	50	730
SVE-3	06/26/14	0.0	18.8	-8.7	-	41	50	6 [11]
SVE-3	07/31/14	0.0	17.8	-13.4	-	44	50	81
SVE-3	08/28/14	0.1	14.1	-15.2	-	52	50	454
SVE-3	09/26/14	0.0	18.2	-14.1	-	64	50	44
SVE-3	10/24/14	0.0	18.9	-14.6	-	50	50	160
SVE-3	11/19/14	0.0	19.8	-12.4	-	42	50	66
SVE-3	12/17/14	0.0	19.8	-11.7	-	52	50	110
SVE-3	01/21/15	0.0	19.5	-11.8	-	56	50	33
SVE-3	02/26/15	0.0	19.7	-11.2	-	46	50	600
SVE-3	03/17/15	0.0	19.6	-10.5	-	51	50	14
SVE-3	04/17/15	0.0	19.2	-9.8	-	58	50	13
SVE-3	05/12/15	0.0	19.2	-13.5	-	48	50	11
SVE-3	06/25/15	0.0	17.9	-10.6	-	47	50	47
SVE-3	07/31/15	0.0	18.7	-11.4	-	52	50	3
SVE-3	08/19/15	0.0	19.1	-11.9	-	44	50	50
SVE-3	09/24/15	0.0	18.6	-14.1	-	0 [4]	50	100
SVE-3	10/22/15	0.0	19.4	-13.3	-	0 [4]	50	70
SVE-3	04/22/16	0.0	17.8	-1.7	50	0	-	48
SVE-3	10/26/16	0.0	12.5	0.0	51	0	-	NA [6]
SVE-3	04/05/17	0.0	20.5	0.0	50	0	-	1,108
SVE-3	10/30/17	0.0	14.4	-0.6	54	0	-	NA [6]
SVE-3	05/17/18	0.0	14.2	-9.0	56	0	-	-
SVE-3	11/16/18	0.2	13.2	-11.8	50	0	-	2,936

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-3	04/26/19	0.0	15.5	-10.8	46	0	-	36
SVE-3	10/31/19	0.0	14.9	-11.2	54	0	-	5
SVE-3	06/23/20	0.0	19.1	-0.4	70	0	-	0
SVE-3	11/05/20	0.0	13.1	-10.4	52	0	-	12
SVE-3	04/22/21	0.0	20.3	-13.1	48	0	-	47
SVE-3	10/21/21	0.0	17.7	-9.6	61	0	-	20
SVE-3	04/28/22	0.0	20.2	-9.2	46	0	-	109
SVE-3	10/27/22	0.0	15.6	-7.8	58	0	-	10
SVE-3	12/21/23	0.0	-	-10.2	46	42	-	0
SVE-4	08/27/08 [1]	3.3	17.9	0.3	-	-	-	-
SVE-4	09/23/08	46.8	0.0	-47.4	-	0	90 - 100	-
SVE-4	09/25/08	0.0	19.6	-19.8	-	0	90 - 100	-
SVE-4	10/01/08	1.4	6.9	-49.5	-	43	90 - 100	-
SVE-4	10/07/08	0.7	10.7	-47.6	-	36	90 - 100	-
SVE-4	10/15/08	0.3	13.2	-48.2	-	31	90 - 100	-
SVE-4	10/30/08	0.1	15.1	-48.0	-	30	90 - 100	2,700
SVE-4	11/13/08	0.0	16.0	-47.4	-	44	90 - 100	-
SVE-4	11/26/08	0.0	17.1	-49.5	-	47	90 - 100	-
SVE-4	01/22/09 [2]	0.2	16.1	-21.0	-	105	90 - 100	10,400
SVE-4	02/05/09	0.0	17.4	-17.4	-	95	90 - 100	616
SVE-4	02/16/09	0.0	18.9	-19.4	-	94	90 - 100	159
SVE-4	03/16/09	0.0	18.3	-21.3	-	105	90 - 100	452
SVE-4	04/24/09	0.0	18.0	-20.1	-	98	90 - 100	3,720
SVE-4	05/20/09	0.0	18.7	-19.0	-	92	90 - 100	1,210
SVE-4	06/23/09	0.0	17.8	-18.6	-	90	90 - 100	1,550
SVE-4	07/23/09	0.0	18.0	-20.1	-	103	90 - 100	5,880
SVE-4	08/20/09	0.0	17.5	-27.8	-	146	150	7,540
SVE-4	09/23/09	0.0	17.5	-28.1	-	146	150	5,340
SVE-4	10/20/09	0.0	18.5	-30.0	-	154	150	5,080
SVE-4	11/24/09	0.0	18.0	-29.4	-	156	150	4,160
SVE-4	12/29/09	0.0	17.2	-30.5	-	153	150	1,516
SVE-4	01/29/10	0.0	18.0	-30.4	-	149	150	1,247
SVE-4	02/22/10	0.0	18.4	-25.5	-	147	150	1,350
SVE-4	03/26/10	0.0	17.9	-28.9	-	147	150	2,160
SVE-4	04/22/10	0.0	18.2	-29.4	-	147	150	412
SVE-4	05/18/10	0.0	18.0	-29.4	-	147	150	2,830
SVE-4	06/29/10	0.0	18.6	-29.8	-	145	150	1,780
SVE-4	07/23/10	0.0	17.6	-28.6	-	150	150	3,120
SVE-4	08/27/10	0.0	14.9	-28.0	-	153	150	4,680
SVE-4	10/01/10	0.1	14.0	-28.3	-	154	150	26,600
SVE-4	10/22/10	0.1	15.9	-27.8	-	153	150	NA [6]
SVE-4	11/29/10	0.0	18.1	-25.2	-	151	150	5,930
SVE-4	12/22/10	0.1	18.4	-25.5	-	146	150	1,150

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-4	01/24/11	0.1	17.9	-27.7	-	154	150	2,890
SVE-4	02/28/11	0.2	16.8	-28.2	-	150	150	4,781
SVE-4	04/13/11	0.4	18.6	-29.9	-	152	150	6,320
SVE-4	04/29/11	0.0	18.4	-30.3	-	149	150	2,870
SVE-4	05/27/11	0.0	19.5	-30.4	-	145	150	605
SVE-4	06/24/11	0.0	18.8	-32.5	-	157	150	590
SVE-4	07/22/11	0.0	17.7	-33.3	-	146	150	28
SVE-4	08/25/11	0.0	17.3	-32.6	-	156	150	620
SVE-4	09/30/11	0.0	20.8	-40.7	-	148	150	320
SVE-4	10/26/11	0.0	19.3	-43.9	-	133	150	8,850
SVE-4	11/22/11	0.0	19.8	-38.3	-	155	150	6,680
SVE-4	12/29/11	0.0	20.0	-36.8	-	155	150	2,980
SVE-4	01/26/12	0.0	17.6	-35.1	-	153	150	4,740
SVE-4	02/21/12	0.0	18.3	-18.8	-	147	150	2,820
SVE-4	03/30/12	0.0	19.5	-25.5	-	149	150	195
SVE-4	04/27/12	0.0	18.3	-28.4	-	152	150	1,150
SVE-4	05/25/12	0.0	19.4	-22.5	-	150	150	150
SVE-4	06/26/12	0.0	18.7	-28.8	-	155	150	20
SVE-4	07/25/12	0.0	19.4	-33.2	-	148	150	30
SVE-4	08/22/12	0.0	19.4	-39.7	-	149	150	4,960
SVE-4	09/25/12	0.1	19.7	-40.2	-	144	150	7,510
SVE-4	10/30/12	0.0	20.1	-40.4	-	60	150	370 [11]
SVE-4	11/21/12	0.0	18.6	-36.3	-	149	150	1,920
SVE-4	12/21/12 [12]	0.0	18.2	-34.8	-	152	150	28,360
SVE-4	01/03/13 [12]	0.3	18.2	-19.8	-	150	150	11,020
SVE-4	01/28/13	0.0	20.2	-16.9	-	115	150	1,160
SVE-4	02/27/13	0.0	19.3	-9.0	-	156	150	256
SVE-4	03/25/13	0.0	20.0	-24.6	-	147	150	650
SVE-4	04/26/13	0.2	18.2	-35.2	-	149	150	16,640
SVE-4	05/30/13	0.0	18.6	-37.0	-	149	150	3,710
SVE-4	06/27/13	0.1	18.0	-43.4	-	86	150	2,056
SVE-4	07/25/13	0.0	18.1	-40.8	-	90	150	64
SVE-4	08/30/13	0.0	18.4	-37.2	-	0 [4]	150	760
SVE-4	09/25/13	0.0	19.8	-48.8	-	88	150	7,590
SVE-4	10/23/13	0.0	18.1	-44.3	-	143	150	1,070
SVE-4	11/20/13	0.0	18.0	-45.6	-	150	150	3,090
SVE-4	12/18/13	0.0	17.8	-47.2	-	155	150	1,790
SVE-4	05/13/14 [13]	0.1	9.7	17.0	-	148	150	NA [6]
SVE-4	05/28/14 [13]	0.0	17.9	-43.8	-	0 [4]	150	3,970
SVE-4	06/26/14	0.0	18.4	-45.1	-	149	150	1,930 [11]
SVE-4	07/31/14	0.0	13.4	-44.0	-	141	150	2,380
SVE-4	08/28/14	0.6	11.7	-45.0	-	147	150	NA [6]
SVE-4	09/26/14	0.0	17.4	-45.6	-	138	150	310
SVE-4	10/24/14	0.0	17.8	-46.4	-	164	150	450

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-4	11/19/14	0.0	18.1	-46.2	-	161	150	300
SVE-4	12/17/14	0.0	18.7	-34.2	-	170	150	170
SVE-4	01/21/15	0.0	18.4	-33.6	-	168	150	80
SVE-4	02/26/15	0.0	18.6	-31.9	-	152	150	170
SVE-4	03/17/15	0.0	18.7	-31.2	-	143	150	46
SVE-4	04/17/15	0.0	19.7	-24.8	-	144	150	9
SVE-4	05/12/15	0.0	18.5	-27.6	-	155	150	30
SVE-4	06/25/15	0.0	18.5	-37.4	-	117	150	37
SVE-4	07/31/15	0.0	18.7	-37.7	-	155	150	56
SVE-4	08/19/15	0.0	19.0	-34.2	-	153	150	88
SVE-4	09/24/15	0.0	18.6	-30.3	-	147	150	140
SVE-4	10/22/15	0.0	19.8	-27.2	-	150	150	70
SVE-4	11/12/15	0.0	19.7	-6.4	-	69	40 - 50	140
SVE-4	12/17/15	0.0	19.9	-17.2	-	47	40 - 50	340
SVE-4	01/21/16	0.0	17.1	-15.6	35	52	40-50	450
SVE-4	02/24/16	0.0	16.2	-14.9	38	0 [4, 17]	40-50	300
SVE-4	03/22/16	0.0	15.7	-16.1	42	0 [4, 17]	40-50	NA [6]
SVE-4	04/22/16	0.0	17.0	-8.3	50	0 [4]	40-50	33
SVE-4	05/19/16	0.0	16.9	-11.3	55	43	40-50	1,010
SVE-4	06/14/16	0.0	16.4	-10.6	62	0 [4, 17]	40-50	1,670
SVE-4	07/27/16	0.2	15.1	-9.2	70	0 [4, 17]	40-50	520
SVE-4	08/10/16	0.1	15.9	-10.2	70	0 [4]	40-50	600
SVE-4	09/15/16	0.6	14.8	-9.6	68	0 [4]	40-50	NA [6]
SVE-4	10/26/16	0.1	14.7	-11.5	51	40	40-50	900
SVE-4	11/23/16	0.0	14.0	-11.3	50	44	40-50	NA [6]
SVE-4	12/13/16	0.3	15.9	-13.3	45	63	40-50	NA [6]
SVE-4	01/10/17	0.0	13.5	-10.8	40	58	40-50	NA [6]
SVE-4	02/14/17	0.0	15.5	-14.3	44	58	40-50	NA [6]
SVE-4	03/07/17	0.0	14.3	-14.8	40	57	40-50	NA [6]
SVE-4	04/05/17	0.0	14.0	-12.3	50	54	40-50	NA [6]
SVE-4	05/25/17	0.0	12.9	-16.4	53	0 [4]	40-50	NA [6]
SVE-4	06/28/17	0.0	16.3	-14.0	63	0 [4]	40-50	492
SVE-4	07/24/17	0.0	15.7	-14.0	68	0 [4]	40-50	611
SVE-4	08/14/17	0.0	15.0	-14.0	66	0 [4]	40-50	NA [6]
SVE-4	09/13/17	0.3	15.5	-12.4	67	42	40-50	NA [6]
SVE-4	10/30/17	0.5	14.4	-16.1	54	56	40-50	NA [6]
SVE-4	11/17/17	0.5	16.0	-12.4	55	64	40-50	NA [6]
SVE-4	12/07/17	0.4	16.0	-12.4	52	0 [4]	40-50	NA [6]
SVE-4	01/24/18	4.3	13.3	-11.6	37	0 [4]	40-50	NA [6]
SVE-4	02/13/18	1.1	15.8	-16.1	44	42	40-50	NA [6]
SVE-4	03/05/18	1.6	15.7	-15.8	45	43	40-50	NA [6]
SVE-4	04/04/18	1.9	14.8	-11.3	36	0 [4]	40-50	NA [6]
SVE-4	05/17/18	0.5	14.0	-9.1	56	0 [4]	40-50	-
SVE-4	07/03/18	0.3	16.1	-8.0	68	0 [4]	40-50	-

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-4	07/31/18	0.0	15.0	-10.1	69	0 [4]	40-50	-
SVE-4	08/30/18	0.0	19.0	-9.6	64	0 [4]	40-50	-
SVE-4	09/28/18	0.7	14.2	-12.4	56	0 [4]	40-50	2,873
SVE-4	11/16/18	1.5	15.4	-12.8	50	72	40-50	> 4,194
SVE-4	12/13/18	0.2	14.6	-12.6	42	0 [4]	40-50	5,038
SVE-4	01/23/19	0.3	14.3	-12.0	37	72	40-50	3,709
SVE-4	02/22/19	0.0	18.7	-11.9	36	90	40-50	244
SVE-4	04/02/19	0.0	14.7	-11.8	41	74	40-50	162
SVE-4	04/26/19	0.1	15.3	-12.9	46	47	40-50	5,297
SVE-4	05/29/19	0.0	14.9	-12.8	54	46	40-50	3,023
SVE-4	06/18/19	0.0	16.4	-12.2	64	42	40-50	2,264
SVE-4	07/23/19	0.0	16.1	-11.9	68	14	40-50	647
SVE-4	08/29/19	0.0	14.6	-11.9	66	39	40-50	3,062
SVE-4	09/12/19	0.2	14.8	-11.7	59	60	40-50	7,344
SVE-4	10/31/19	0.3	16.2	-14.2	54	50	40-50	607
SVE-4	11/25/19	4.4	17.6	-13.1	46	73	40-50	-
SVE-4	02/18/20	0.0	18.5	-15.4	41	44	40-50	5
SVE-4	06/23/20	0.0	16.7	-13.6	70	36	40-50	29
SVE-4	08/17/20	0.0	15.6	-13.8	72	14	40-50	32
SVE-4	11/05/20	0.3	14.8	-12.8	52	44	40-50	-
SVE-4	01/20/21	0.0	16.0	-10.4	36	57	40-50	42
SVE-4	02/19/21	0.0	20.3	-9.7	34	0 [4]	40-50	7
SVE-4	03/25/21	0.0	13.4	-13.9	44	52	40-50	NA [18]
SVE-4	04/22/21	0.0	17.1	-11.6	48	15	40-50	610
SVE-4	05/21/21	0.0	17.8	-12.5	56	0 [4]	40-50	0
SVE-4	06/17/21	0.0	18.1	-7.6	65	195	40-50	67
SVE-4	07/15/21	0.0	17.6	-9.5	70	0 [4]	40-50	NA [18]
SVE-4	08/12/21	0.0	16.3	-11.3	67	0 [4]	40-50	133
SVE-4	09/23/21	0.0	13.3	-10.8	60	0 [4]	40-50	3,265
SVE-4	10/21/21	0.5	17.2	-11.8	61	94	40-50	10,160
SVE-4	11/30/21	0.0	14.2	-10.7	40	35	40-50	88
SVE-4	12/21/21	0.0	15.1	-10.7	39	35	40-50	873
SVE-4	01/31/22	0.0	14.1	-11.3	35	61	40-50	62
SVE-4	02/28/22	0.0	17.7	-9.8	42	31	40-50	1,603
SVE-4	03/28/22	0.0	14.5	-12.0	36	0	40-50	84
SVE-4	04/28/22	0.0	17.4	-12.6	46	42	40-50	160
SVE-4	05/26/22	0.0	16.7	-8.9	54	0	40-50	7
SVE-4	06/23/22	0.0	18.9	-11.8	68	14	40-50	9
SVE-4	07/26/22	0.0	18.4	-11.2	68	0	40-50	37
SVE-4	08/23/22	0.0	17.5	-10.4	74	0	40-50	6.6
SVE-4	09/29/22	0.0	17.1	-10.0	68	30	40-50	516
SVE-4	10/27/22	0.0	17.4	-8.8	58	37	40-50	3,077
SVE-4	12/06/22	0.0	15.3	-9.8	45	45	40-50	1,641
SVE-4	1/12/2023	0.0	16.8	-10.4	42	35	40-50	105

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-4	2/16/2023	0.0	14.5	-13.7	38	83	40-50	1,127
SVE-4	3/20/2023	0.0	19.2	-14.6	38	38	40-50	13
SVE-4	4/13/2023	0.0	14.1	-17.6	44	0	40-50	10
SVE-4	5/2/2023	0.0	16.1	-16.1	44	75	40-50	5
SVE-4	6/22/2023	0.0	17.2	-12.9	67	34	40-50	310
SVE-4	7/31/2023	0.0	16.1	-10.9	71	0	40-50	1,690
SVE-4	8/31/2023	0.0	16.4	-10.6	71	0	40-50	3,089
SVE-4	9/28/2023	0.0	5.2	-10.6	67	30	40-50	5,137
SVE-4	12/21/2023	0.0	-	-12.4	46	0	40-50	0
SVE-5	08/27/08 [1]	5.5	14.8	0.3	-	-	-	-
SVE-5	09/23/08 [2]	-	-	-	-	-	90 - 100	-
SVE-5	09/25/08 [2]	-	-	-	-	-	90 - 100	-
SVE-5	10/01/08 [2]	-	-	-	-	-	90 - 100	-
SVE-5	10/07/08	3.1	6.1	-47.7	-	0	90 - 100	-
SVE-5	10/15/08	1.2	10.6	-48.1	-	0	90 - 100	-
SVE-5	10/30/08	0.4	12.4	-47.9	-	0	90 - 100	10,100
SVE-5	11/13/08	0.3	12.6	-33.1	-	164	90 - 100	-
SVE-5	11/26/08	0.0	13.1	-49.4	-	31	90 - 100	-
SVE-5	01/22/09 [3]	0.0	13.8	-50.7	-	34	90 - 100	6,910
SVE-5	02/05/09	0.0	14.2	-50.3	-	34	90 - 100	NA [6]
SVE-5	02/16/09	0.0	15.1	-51.2	-	27	90 - 100	2,560
SVE-5	03/16/09	0.0	15.8	-49.7	-	-	90 - 100	4,320
SVE-5	04/24/09	0.0	16.2	-44.6	-	0	90 - 100	7,890
SVE-5	05/20/09	0.0	16.5	-47.2	-	0	90 - 100	4,910
SVE-5	06/23/09	0.0	16.0	-44.9	-	0	90 - 100	5,880
SVE-5	07/23/09	0.0	16.2	-44.7	-	0	90 - 100	20,900
SVE-5	08/20/09	0.0	16.9	-42.8	-	0	100	8,710
SVE-5	09/23/09	0.0	16.9	-43.8	-	0	100	5,610
SVE-5	10/20/09	0.0	17.8	-46.4	-	0	100	5,900
SVE-5	11/24/09	0.0	17.2	-45.8	-	0	100	8,460
SVE-5	12/29/09	0.0	16.5	-46.8	-	0	100	3,480
SVE-5	01/29/10	0.0	17.9	-46.9	-	31	100	2,802
SVE-5	02/22/10	0.0	17.3	-46.2	-	32	100	4,710
SVE-5	03/26/10	0.0	16.3	-46.1	-	0	100	5,850
SVE-5	04/22/10	0.0	17.4	-44.0	-	0	100	2,520
SVE-5	05/18/10	0.0	16.9	-44.4	-	0	100	13,900
SVE-5	06/29/10	0.0	17.1	-44.4	-	0	100	5,430
SVE-5	07/23/10	0.0	17.4	-41.8	-	0	100	5,210
SVE-5	08/27/10	0.8	13.5	-43.7	-	0	100	4,060
SVE-5	10/01/10	0.4	14.0	-46.5	-	0	100	42,900
SVE-5	10/22/10	0.1	14.5	-45.9	-	0	100	26,800
SVE-5	11/29/10	0.1	17.4	-46.5	-	0	100	13,600
SVE-5	12/22/10	0.2	18.0	-48.9	-	31	100	4,130

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-5	01/24/11	0.1	18.0	-48.6	-	0	100	3,940
SVE-5	02/28/11	0.0	16.8	-49.4	-	0	100	1,554
SVE-5	04/13/11	0.0	16.7	-48.8	-	0	100	1,010
SVE-5	04/29/11	0.0	18.0	-47.6	-	0	100	2,160
SVE-5	05/27/11	0.0	18.3	-46.5	-	46	100	2,990
SVE-5	06/24/11	0.0	17.7	-45.0	-	0	100	2,120
SVE-5	07/22/11	0.0	17.0	-43.3	-	0	100	470
SVE-5	08/25/11	0.0	17.1	-44.8	-	0	100	4,300
SVE-5	09/30/11	0.0	18.8	-42.1	-	0	100	470
SVE-5	10/26/11	0.0	17.3	-44.0	-	0	100	3,010
SVE-5	11/22/11	0.0	18.0	-45.0	-	0	100	1,830
SVE-5	12/29/11	0.0	19.8	-44.9	-	0	100	1,820
SVE-5	01/26/12	0.0	17.3	-45.8	-	46	100	6,564
SVE-5	02/21/12	0.0	18.2	-46.6	-	89	100	1,932
SVE-5	03/30/12	0.0	18.0	-46.8	-	49	100	1,888
SVE-5	04/27/12	0.0	16.8	-46.9	-	0 [4]	100	2,360
SVE-5	05/25/12	0.1	18.3	-34.3	-	0 [4]	100	2,220
SVE-5	06/26/12	0.0	16.9	-44.4	-	0 [4]	100	3,050
SVE-5	07/25/12	0.0	16.4	-45.1	-	0 [4]	100	3,500
SVE-5	08/22/12	0.0	16.8	-40.5	-	0 [4]	100	2,390
SVE-5	09/25/12	0.0	16.7	-38.0	-	0 [4]	100	2,270
SVE-5	10/30/12	0.0	17.5	-40.6	-	0 [4]	100	87 [11]
SVE-5	11/21/12	0.0	17.8	-43.4	-	0 [4]	100	170
SVE-5	12/21/12 [12]	0.0	14.1	-45.3	-	0 [4]	100	2,490
SVE-5	01/03/13 [12]	0.0	17.1	-45.8	-	74	100	1,030
SVE-5	01/28/13	0.0	18.5	-49.1	-	50	100	1,850
SVE-5	02/27/13	0.0	17.9	-49.1	-	91	100	2,780
SVE-5	03/25/13	0.0	17.6	-49.4	-	0 [4]	100	6,620
SVE-5	04/26/13	0.1	13.8	-49.3	-	0 [4]	100	7,090
SVE-5	05/30/13	0.0	17.7	-47.6	-	0 [4]	100	180
SVE-5	06/27/13	0.0	16.8	-43.9	-	96	100	280
SVE-5	07/25/13	0.0	17.8	-41.0	-	0 [4]	100	78
SVE-5	08/30/13	0.0	18.8	-40.0	-	0 [4]	100	52
SVE-5	09/25/13	0.0	18.5	-41.6	-	0 [4]	100	150
SVE-5	10/23/13	0.0	19.1	-44.3	-	55	100	24
SVE-5	11/20/13	0.0	18.9	-45.7	-	107	100	150
SVE-5	12/18/13	0.0	19.3	-47.6	-	112	100	58
SVE-5	05/13/14 [13]	1.9	7.9	61.0	-	96	100	NA [6]
SVE-5	05/28/14 [13]	0.0	15.9	-43.8	-	0 [4]	100	7,200
SVE-5	06/26/14	0.0	19.0	-45.4	-	0 [4]	100	550 [11]
SVE-5	07/31/14	0.6	18.3	-44.0	-	95	100	12,870
SVE-5	08/28/14	1.4	17.1	-45.1	-	98	100	24,500
SVE-5	09/26/14	0.0	19.5	-45.8	-	108	100	96
SVE-5	10/24/14	0.0	19.9	-46.7	-	91	100	200

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-5	11/19/14	0.0	20.4	-46.0	-	96	100	210
SVE-5	12/17/14	0.0	20.4	-46.2	-	108	100	120
SVE-5	01/21/15	0.0	19.7	-47.7	-	99	100	110
SVE-5	02/26/15	0.0	19.8	-47.2	-	108	100	200
SVE-5	03/17/15	0.0	19.9	-47.1	-	96	100	10
SVE-5	04/17/15	0.0	19.1	-46.0	-	98	100	40
SVE-5	05/12/15	0.0	19.9	-42.5	-	106	100	14
SVE-5	06/25/15	0.0	19.4	-39.7	-	102	100	52
SVE-5	07/31/15	0.0	20.2	-38.6	-	106	100	87
SVE-5	08/19/15	0.0	20.5	-40.1	-	103	100	150
SVE-5	09/24/15	0.0	20.3	-45.5	-	93	100	52
SVE-5	10/22/15	0.0	20.8	-43.7	-	91	100	78
SVE-5	04/22/16	0.0	20.0	-0.2	50	0	-	24
SVE-5	10/26/16	0.0	19.2	0.0	51	0	-	NA [6]
SVE-5	4/5/2017 [14]	-	-	-	-	-	-	-
SVE-5	10/30/17	0.0	20.3	-0.8	54	0	-	427
SVE-5	05/17/18	0.0	19.2	-8.8	56	0	-	-
SVE-5	11/16/18	1.0	21.2	-12.6	50	0	-	0
SVE-5	04/26/19	0.0	19.8	-11.5	46	0	-	74
SVE-5	10/31/19	0.0	19.4	-13.4	54	0	-	485
SVE-5	06/23/20	0.0	19.1	-1.8	70	0	-	165
SVE-5	11/05/20	0.0	19.2	-12.0	52	0	-	29
SVE-5	04/22/21	0.0	19.4	-13.8	48	0	-	43
SVE-5	10/21/21	0.0	21.0	-10.4	61	0	-	21
SVE-5	04/28/22	0.0	18.3	-12.6	46	0	-	439
SVE-5	10/27/22	0.0	20.4	-10.0	58	0	-	92
SVE-5	12/21/23	0.0	-	-11.9	46	347	-	0
SVE-6	08/27/08 [1]	3.0	2.2	0.4	-	-	-	-
SVE-6	09/23/08	27.7	0.3	-15.0	-	96	90 - 100	-
SVE-6	09/25/08	10.7	3.1	-16.9	-	90	90 - 100	-
SVE-6	10/01/08	1.7	6.2	-17.7	-	92	90 - 100	-
SVE-6	10/07/08	0.6	10.0	-17.4	-	91	90 - 100	-
SVE-6	10/15/08	0.1	12.5	-19.4	-	96	90 - 100	-
SVE-6	10/30/08	7.3	14.4	-19.7	-	89	90 - 100	1,150
SVE-6	11/13/08	0.0	15.4	-18.8	-	108	90 - 100	-
SVE-6	11/26/08	0.0	16.5	-20.1	-	103	90 - 100	-
SVE-6	01/22/09 [3]	0.0	15.3	-14.0	-	102	90 - 100	6,100
SVE-6	02/05/09	0.0	16.8	-9.7	-	102	90 - 100	608
SVE-6	02/16/09	0.0	17.4	-13.3	-	92	90 - 100	609
SVE-6	03/16/09	0.0	16.6	-15.5	-	96	90 - 100	2,260
SVE-6	04/24/09	0.0	16.8	-14.6	-	96	90 - 100	1,570
SVE-6	05/20/09	0.0	16.9	-14.6	-	97	90 - 100	985
SVE-6	06/23/09	0.0	16.1	-17.7	-	103	90 - 100	1,830

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-6	07/23/09	0.0	16.0	-18.4	-	106	90 - 100	5,640
SVE-6	08/20/09	0.0	16.6	-26.4	-	151	150	5,910
SVE-6	09/23/09	0.0	16.7	-26.6	-	153	150	3,210
SVE-6	10/20/09	0.0	18.0	-24.4	-	144	150	3,280
SVE-6	11/24/09	0.0	18.0	-22.8	-	156	150	1,740
SVE-6	12/29/09	0.0	17.4	-22.4	-	153	150	551
SVE-6	01/29/10	0.0	18.3	-22.7	-	157	150	12
SVE-6	02/22/10	0.0	17.2	-20.4	-	156	150	2,320
SVE-6	03/26/10	0.0	16.8	-22.6	-	155	150	330
SVE-6	04/22/10	0.0	17.7	-25.7	-	147	150	158
SVE-6	05/18/10	0.0	17.3	-24.2	-	150	150	1,880
SVE-6	06/29/10	0.0	17.3	-25.0	-	154	150	698
SVE-6	07/23/10	0.0	17.4	-23.5	-	152	150	935
SVE-6	08/27/10	1.8	8.9	-25.0	-	152	150	NA [6]
SVE-6	10/01/10	0.8	10.8	-25.2	-	156	150	NA [6]
SVE-6	10/22/10	1.1	12.6	-24.8	-	153	150	NA [6]
SVE-6	11/29/10	0.0	18.1	-22.0	-	151	150	920
SVE-6	12/22/10	0.3	17.1	-23.0	-	154	150	4,650
SVE-6	01/24/11	0.0	19.7	-18.8	-	152	150	400
SVE-6	02/28/11	0.0	18.0	-18.8	-	147	150	208
SVE-6	04/13/11	0.0	18.1	-22.8	-	148	150	310
SVE-6	04/29/11	0.0	18.9	-22.9	-	158	150	565
SVE-6	05/27/11	0.0	19.0	-28.1	-	148	150	530
SVE-6	06/24/11	0.0	18.4	-28.4	-	145	150	340
SVE-6	07/22/11	0.0	17.1	-28.1	-	125	150	325
SVE-6	08/25/11	1.5	13.8	-31.5	-	145	150	>50,000
SVE-6	09/30/11	0.0	19.4	-40.1	-	147	150	3,120
SVE-6	10/26/11	0.0	17.6	-40.0	-	153	150	1,240
SVE-6	11/22/11	0.0	18.7	-36.6	-	154	150	650
SVE-6	12/29/11	0.0	21.0	-43.4	-	145	150	115
SVE-6	01/26/12	0.0	17.8	-43.5	-	147	150	20,566
SVE-6	02/21/12	0.0	19.6	-38.1	-	150	150	237
SVE-6	03/30/12	0.0	19.6	-46.2	-	147	150	202
SVE-6	04/27/12	0.0	18.3	-46.5	-	128	150	200
SVE-6	05/25/12	0.0	19.9	-42.0	-	90	150	120
SVE-6	06/26/12	0.0	18.8	-43.4	-	133	150	870
SVE-6	07/25/12	0.0	18.0	-44.9	-	66	150	1,020
SVE-6	08/22/12	0.0	19.0	-39.6	-	0 [4]	150	310
SVE-6	09/25/12	0.0	19.5	-39.8	-	103	150	80
SVE-6	10/30/12	0.0	19.4	-40.1	-	65	150	NA [11]
SVE-6	11/21/12	0.0	19.8	-42.6	-	98	150	93
SVE-6	12/21/12 [12]	1.5	17.1	-44.4	-	134	150	36,810
SVE-6	01/03/13 [12]	0.0	20.0	-44.5	-	0 [4]	150	210
SVE-6	01/28/13	0.0	21.2	-48.4	-	0 [4]	150	665

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-6	02/27/13	0.0	20.3	-48.2	-	156	150	211
SVE-6	03/25/13	0.0	20.1	-49.9	-	147	150	498
SVE-6	04/26/13	0.0	15.9	-33.6	-	149	150	299
SVE-6	05/30/13	0.0	19.4	-29.2	-	153	150	60
SVE-6	06/27/13	0.0	18.4	-43.7	-	152	150	280
SVE-6	07/25/13	0.0	18.9	-40.6	-	155	150	90
SVE-6	08/30/13	0.0	20.5	-42.0	-	155	150	67
SVE-6	09/25/13	0.0	20.1	-10.2	-	153	150	30
SVE-6	10/23/13	0.0	20.8	-23.4	-	147	150	4
SVE-6	11/20/13	0.0	20.2	-29.5	-	156	150	82
SVE-6	12/18/13	0.0	20.1	-47.4	-	58	150	27
SVE-6	05/13/14 [13]	1.0	11.6	105.0	-	151	150	48,250
SVE-6	05/28/14 [13]	0.0	18.5	-45.2	-	60	150	230
SVE-6	06/26/14	0.0	18.9	-45.1	-	147	150	6 [11]
SVE-6	07/31/14	0.8	17.6	-44.2	-	141	150	7,350
SVE-6	08/28/14	3.7	10.1	-44.9	-	148	150	NA [6]
SVE-6	09/26/14	0.0	18.5	-45.8	-	156	150	50
SVE-6	10/24/14	0.0	19.0	-46.6	-	146	150	180
SVE-6	11/19/14	0.0	17.0	-46.3	-	144	150	2,940
SVE-6	12/17/14	0.0	19.8	-45.8	-	153	150	110
SVE-6	01/21/15	0.0	19.5	-47.5	-	146	150	13
SVE-6	02/26/15	0.0	18.9	-48.1	-	149	150	200
SVE-6	03/17/15	0.0	19.6	-47.6	-	0 [4]	150	58
SVE-6	04/17/15	0.0	18.8	-46.0	-	159	150	11
SVE-6	05/12/15	0.0	19.6	-42.2	-	149	150	29
SVE-6	06/25/15	0.0	18.5	-39.7	-	151	150	44
SVE-6	07/31/15	0.0	19.0	-38.6	-	147	150	6
SVE-6	08/19/15	0.0	19.3	-40.1	-	120	150	50
SVE-6	09/24/15	0.0	19.3	-45.5	-	159	150	59
SVE-6	10/22/15	0.0	19.4	-43.9	-	147	150	83
SVE-6	11/12/15	0.0	21.0	-5.8	-	0 [4]	40 - 50	34
SVE-6	12/17/15 [14]	-	-	-	-	-	40 - 50	-
SVE-6	1/21/2016 [18]	-	-	-	-	-	40-50	-
SVE-6	02/24/16	0.0	18.2	0.0	38	0 [16, 17]	40-50	770
SVE-6	03/22/16	0.0	16.6	-16.1	42	44	40-50	NA [6]
SVE-6	04/22/16	0.0	18.1	-8.1	50	0 [4]	40-50	34
SVE-6	05/19/16	0.0	18.1	-10.3	55	0 [4, 17]	40-50	480
SVE-6	06/14/16	0.0	17.3	-10.8	62	0 [4, 17]	40-50	450
SVE-6	07/27/16	0.0	15.9	-9.4	70	0 [4, 17]	40-50	670
SVE-6	08/10/16	0.0	16.1	-10.3	70	0 [4, 17]	40-50	970
SVE-6	09/15/16	0.0	14.7	-10.1	68	0 [4, 17]	40-50	NA [6]
SVE-6	10/26/16	0.0	12.4	-11.7	51	47	40-50	NA [6]
SVE-6	11/23/16	0.0	13.1	-11.6	50	54	40-50	NA [6]
SVE-6	12/13/16	0.0	16.4	-0.1	45	49	40-50	830

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-6	01/10/17	0.0	18.8	-11.6	40	61	40-50	1,101
SVE-6	02/14/17	0.0	18.3	-14.4	44	48	40-50	949
SVE-6	03/07/17	0.0	18.1	-13.6	40	47	40-50	1,110
SVE-6	04/05/17	0.0	15.0	-13.4	50	41	40-50	NA [6]
SVE-6	05/25/17	0.0	15.4	-16.4	53	0 [4]	40-50	NA [6]
SVE-6	06/28/17	0.0	17.5	-14.0	63	0 [4]	40-50	NA [6]
SVE-6	07/24/17	0.0	16.8	-12.8	68	0 [4]	40-50	991
SVE-6	08/14/17	0.0	17.1	-13.1	66	0 [4]	40-50	1,106
SVE-6	09/13/17	0.0	16.5	-11.9	67	42	40-50	NA [6]
SVE-6	10/30/17	0.0	15.2	-16.0	54	46	40-50	NA [6]
SVE-6	11/17/17	0.0	17.5	-11.9	55	0 [4]	40-50	511
SVE-6	12/07/17	0.0	18.4	-11.9	52	48	40-50	720
SVE-6	01/24/18	1.6	16.1	-11.7	37	0 [4]	40-50	NA [6]
SVE-6	02/13/18	0.0	16.9	-16.2	44	0 [4]	40-50	811
SVE-6	03/05/18	0.1	16.9	-15.8	45	0 [4]	40-50	1,208
SVE-6	04/04/18	0.4	15.1	-11.1	36	0 [4]	40-50	NA [6]
SVE-6	05/17/18	0.0	14.9	-9.3	56	0 [4]	40-50	-
SVE-6	07/03/18	0.0	16.7	-8.4	68	0 [4]	40-50	-
SVE-6	07/31/18	0.0	15.5	-10.1	69	0 [4]	40-50	-
SVE-6	08/30/18	0.0	15.4	-9.4	64	0 [4]	40-50	-
SVE-6	09/28/18	0.0	14.6	-12.0	56	0 [4]	40-50	NA [6]
SVE-6	11/16/18	0.1	16.0	-13.1	50	57	40-50	2,129
SVE-6	12/13/18	0.0	14.7	-12.7	42	0 [4]	40-50	1,073
SVE-6	01/23/19	0.0	16.9	-11.9	37	104	40-50	22
SVE-6	02/22/19	0.0	18.7	-12.2	36	72	40-50	58
SVE-6	04/02/19	0.0	16.1	-11.8	41	59	40-50	65
SVE-6	04/26/19	0.0	17.2	-11.8	46	61	40-50	12
SVE-6	05/29/19	0.0	17.6	-13.2	54	54	40-50	0
SVE-6	06/18/19	0.0	17.6	-12.2	64	45	40-50	0
SVE-6	07/23/19	0.0	17.4	-11.9	68	52	40-50	59
SVE-6	08/29/19	0.0	16.2	-12.0	66	66	40-50	29
SVE-6	09/12/19	0.0	17.9	-12.2	59	0 [4]	40-50	37
SVE-6	10/31/19	0.0	18.2	-15.4	54	72	40-50	29
SVE-6	11/25/19	0.1	18.8	-12.0	46	94	40-50	-
SVE-6	02/18/20	0.0	17.6	-15.4	41	73	40-50	62
SVE-6	06/23/20	0.0	17.4	-13.7	70	63	40-50	10
SVE-6	08/17/20	0.0	16.2	-13.6	72	61	40-50	220
SVE-6	11/05/20	0.0	16.0	-12.3	52	69	40-50	362
SVE-6	01/20/21	0.0	17.9	-10.2	36	77	40-50	71
SVE-6	02/19/21	0.0	21.0	-9.8	34	0	40-50	233
SVE-6	03/25/21	0.0	19.4	-13.8	44	60	40-50	NA [18]
SVE-6	04/22/21	0.0	18.2	-12.2	48	86	40-50	2
SVE-6	05/21/21	0.0	18.2	-12.4	56	0 [4]	40-50	0
SVE-6	06/17/21	0.0	18.4	-9.9	65	0 [4]	40-50	28

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-6	07/15/21	0.0	17.3	-9.6	70	90	40-50	NA [18]
SVE-6	08/12/21	0.0	15.8	-9.5	67	0 [4]	40-50	1,030
SVE-6	09/23/21	0.0	10.6	-10.9	60	0 [4]	40-50	3,255
SVE-6	10/21/21	0.0	18.6	-11.8	61	87	40-50	194
SVE-6	11/30/21	0.0	16.2	-10.7	40	49	40-50	97
SVE-6	12/21/21	0.0	16.6	-10.7	39	0 [4]	40-50	702
SVE-6	01/31/22	0.0	15.6	-10.7	35	92	40-50	322
SVE-6	02/28/22	0.0	18.5	-10.0	42	0	40-50	19
SVE-6	03/28/22	0.0	15.4	-11.7	36	98	40-50	22
SVE-6	04/28/22	0.0	17.4	-13.1	46	0	40-50	275
SVE-6	05/26/22	0.0	16.9	-8.8	54	0	40-50	14
SVE-6	06/23/22	0.0	18.8	-11.9	68	71	40-50	6
SVE-6	07/26/22	0.0	17.9	-11.1	68	43	40-50	392
SVE-6	08/23/22	0.0	17.2	-10.5	74	74	40-50	249
SVE-6	09/29/22	0.0	18.2	-10.0	68	77	40-50	62
SVE-6	10/27/22	0.0	17.7	-8.5	58	0	40-50	316
SVE-6	12/06/22	0.0	16.6	-9.8	45	42	40-50	140
SVE-6	1/12/2023	0.0	16.3	-10.6	42	0	40-50	41
SVE-6	2/16/2023	0.0	15.4	-12.0	38	88	40-50	737
SVE-6	3/20/2023	0.0	18.3	-14.6	38	49	40-50	0
SVE-6	4/13/2023	0.0	15.0	-17.4	44	128	40-50	0
SVE-6	5/2/2023	0.0	16.6	-16.2	44	77	40-50	0
SVE-6	6/22/2023	0.0	17.3	-13.0	67	74	40-50	448
SVE-6	7/31/2023	0.0	16.8	-10.6	71	0	40-50	267
SVE-6	8/31/2023	0.0	17.7	-10.3	71	68	40-50	320
SVE-6	9/28/2023	0.0	5.4	-10.6	67	73	40-50	358
SVE-6	12/21/2023	0.0	-	-12.4	46	79	40-50	0
SVE-7	08/27/08 [1]	0.3	19.3	0.3	-	-	-	-
SVE-7	09/23/08	44.5	0.0	-19.6	-	117	90 - 100	-
SVE-7	09/25/08	16.1	2.5	-23.9	-	102	90 - 100	-
SVE-7	10/01/08	3.0	6.7	-23.8	-	103	90 - 100	-
SVE-7	10/07/08	1.0	10.5	-24.4	-	103	90 - 100	-
SVE-7	10/15/08	0.6	12.7	-25.4	-	108	90 - 100	-
SVE-7	10/30/08	0.3	14.3	-25.4	-	92	90 - 100	7,320
SVE-7	11/13/08	0.1	15.3	-25.4	-	100	90 - 100	-
SVE-7	11/26/08	0.0	16.7	-26.3	-	106	90 - 100	-
SVE-7	01/22/09 [3]	1.0	14.9	-45.9	-	103	90 - 100	40,400
SVE-7	02/05/09	0.0	15.7	-38.8	-	99	90 - 100	4,200
SVE-7	02/16/09	0.0	16.5	-35.9	-	101	90 - 100	4,560
SVE-7	03/16/09	0.0	16.8	-35.7	-	91	90 - 100	5,770
SVE-7	04/24/09	0.0	17.9	-34.1	-	92	90 - 100	608
SVE-7	05/20/09	0.0	18.1	-33.3	-	90	90 - 100	135
SVE-7	06/23/09	0.0	17.4	-35.6	-	93	90 - 100	262

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-7	07/23/09	0.0	17.2	-41.8	-	101	90 - 100	1,360
SVE-7	08/20/09	0.0	17.6	-43.7	-	114	150	1,530
SVE-7	09/23/09	0.0	17.7	-44.6	-	109	150	1,500
SVE-7	10/20/09	0.0	18.1	-47.3	-	117	150	3,380
SVE-7	11/24/09	0.0	17.6	-46.7	-	122	150	5,590
SVE-7	12/29/09	0.0	16.5	-47.7	-	123	150	1,380
SVE-7	01/29/10	0.0	18.8	-47.8	-	151	150	2
SVE-7	02/22/10	0.0	18.2	-46.9	-	147	150	192
SVE-7	03/26/10	0.0	16.7	-46.7	-	159	150	3,070
SVE-7	04/22/10	0.0	17.7	-44.6	-	145	150	600
SVE-7	05/18/10	0.0	17.5	-43.6	-	149	150	4,280
SVE-7	06/29/10	0.0	16.8	-37.0	-	145	150	10,100
SVE-7	07/23/10	0.0	18.2	-33.9	-	151	150	1,710
SVE-7	08/27/10	0.0	16.1	-19.8	-	154	150	1,880
SVE-7	10/01/10	0.0	16.3	-22.1	-	150	150	3,450
SVE-7	10/22/10	0.0	18.5	-17.4	-	153	150	1,120
SVE-7	11/29/10	0.0	20.1	-13.8	-	152	150	42
SVE-7	12/22/10	0.1	19.6	-17.0	-	151	150	150
SVE-7	01/24/11	0.4	18.2	-26.8	-	145	150	9,630
SVE-7	02/28/11	0.5	17.6	-21.7	-	154	150	11,182
SVE-7	04/13/11	0.0	19.3	-17.4	-	153	150	3,140
SVE-7	04/29/11	0.0	20.2	-17.0	-	150	150	560
SVE-7	05/27/11	0.0	20.4	-10.8	-	152	150	280
SVE-7	06/24/11	0.0	19.9	-12.0	-	123	150	240
SVE-7	07/22/11	0.0	18.7	-10.5	-	122	150	200
SVE-7	08/25/11	0.0	19.6	-20.5	-	150	150	1,310
SVE-7	09/30/11	0.0	20.7	-21.7	-	145	150	230
SVE-7	10/26/11	0.0	18.7	-22.9	-	152	150	130
SVE-7	11/22/11	0.0	19.4	-18.0	-	151	150	300
SVE-7	12/29/11	0.0	21.3	-16.3	-	154	150	100
SVE-7	01/26/12	0.0	19.2	-15.2	-	147	150	89
SVE-7	02/21/12	0.0	19.9	-12.9	-	151	150	167
SVE-7	03/30/12	0.0	20.2	-8.2	-	146	150	173
SVE-7	04/27/12	0.0	19.1	-7.6	-	45	150	180
SVE-7	05/25/12	0.0	19.7	-11.7	-	0 [4]	150	110
SVE-7	06/26/12	0.0	19.2	-9.6	-	70	150	30
SVE-7	07/25/12	2.5	15.3	-19.5	-	94	150	16,800
SVE-7	08/22/12	0.0	19.3	-10.7	-	92	150	300
SVE-7	09/25/12	0.0	20.2	-10.6	-	90	150	6
SVE-7	10/30/12	0.0	20.0	-9.3	-	98	150	NA [11]
SVE-7	11/21/12	0.0	20.2	-23.4	-	155	150	15
SVE-7	12/21/12 [12]	0.0	16.4	-19.8	-	147	150	3,550
SVE-7	01/03/13 [12]	0.0	19.5	-15.8	-	150	150	301
SVE-7	01/28/13	0.0	19.5	-18.1	-	136	150	888

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-7	02/27/13	0.0	19.3	-16.5	-	127	150	886
SVE-7	03/25/13	0.0	18.6	-17.0	-	143	150	4,360
SVE-7	04/26/13	0.0	16.3	-12.4	-	39	150	2,090
SVE-7	05/30/13	0.0	19.4	-13.1	-	0 [4]	150	120
SVE-7	06/27/13	1.7	15.9	-43.4	-	145	150	42,800
SVE-7	07/25/13	0.0	17.5	-39.4	-	153	150	2,590
SVE-7	08/30/13	0.2	18.3	-40.6	-	146	150	5,130
SVE-7	09/25/13	0.4	17.8	-40.0	-	147	150	5,960
SVE-7	10/23/13	0.0	18.5	-42.9	-	152	150	5,020
SVE-7	11/20/13	0.1	18.3	-43.6	-	106	150	4,050
SVE-7	12/18/13	0.0	18.1	-45.8	-	157	150	1,920
SVE-7	05/13/14 [13]	1.6	6.5	253.0	-	197	150	NA [6]
SVE-7	05/28/14 [13]	0.1	16.1	-44.0	-	125	150	19,400
SVE-7	06/26/14	0.2	16.2	-44.4	-	0 [9]	150	2 [11]
SVE-7	07/31/14	1.7	13.4	-43.2	-	0 [9]	150	67
SVE-7	08/28/14	7.6	11.3	-45.1	-	0 [9]	150	NA [6]
SVE-7	09/26/14	0.0	16.7	-46.1	-	0 [9]	150	3,650
SVE-7	10/24/14	0.0	17.3	-47.0	-	0 [9]	150	4,930
SVE-7	11/19/14	0.0	17.5	-48.4	-	0 [9]	150	1,110
SVE-7	12/17/14	0.0	17.9	-49.5	-	0 [9]	150	180
SVE-7	01/21/15	0.0	17.3	-49.8	-	0 [9]	150	110
SVE-7	02/26/15	0.0	17.3	-48.8	-	0 [9]	150	130
SVE-7	03/17/15	0.0	16.6	-47.6	-	0 [9]	150	77
SVE-7	04/17/15	0.0	16.4	-44.1	-	0 [9]	150	58
SVE-7	05/12/15	0.0	17.5	-42.5	-	0 [9]	150	43
SVE-7	06/25/15	0.0	16.1	-39.2	-	0 [9]	150	90
SVE-7	07/31/15	0.0	17.2	-38.7	-	0 [9]	150	680
SVE-7	08/19/15	0.0	17.7	-40.7	-	0 [9]	150	660
SVE-7	09/24/15	0.9	17.5	-45.9	-	0 [9]	150	810
SVE-7	10/22/15	0.1	18.4	-43.2	-	0 [9]	150	1,980
SVE-7	11/12/15	0.6	15.7	-29.2	-	170	40 - 50	610
SVE-7	12/17/15	0.9	15.4	-21.6	-	141	40 - 50	1,140
SVE-7	01/21/16	0.3	16.2	-16.0	35	147 [5]	40-50	8,730
SVE-7	02/24/16	0.4	14.0	0.2	38	50	40-50	NA [6]
SVE-7	03/22/16	0.2	15.2	-16.1	42	45	40-50	NA [6]
SVE-7	04/22/16	0.4	17.1	-8.1	50	0 [4]	40-50	2,360
SVE-7	05/19/16	0.2	16.8	-11.1	55	0 [4, 17]	40-50	5,090
SVE-7	06/14/16	0.2	16.7	-10.6	62	0 [4]	40-50	7,020
SVE-7	07/27/16	0.7	16.0	-9.1	70	0 [4]	40-50	7,390
SVE-7	08/10/16	0.6	16.7	-10.0	70	0 [4]	40-50	7,520
SVE-7	09/15/16	1.4	15.4	-10.0	68	0 [4]	40-50	NA [6]
SVE-7	10/26/16	0.9	15.8	-10.4	51	52	40-50	NA [6]
SVE-7	11/23/16	0.3	15.2	-12.2	50	45	40-50	NA [6]
SVE-7	12/13/16	0.7	16.5	0.0	45	46	40-50	290

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-7	01/10/17	0.3	14.0	-10.8	40	54	40-50	NA [6]
SVE-7	02/14/17	0.0	16.1	-14.4	44	55	40-50	740
SVE-7	03/07/17	0.0	14.7	-14.1	40	41	40-50	NA [6]
SVE-7	04/05/17	0.1	13.5	-12.8	50	41	40-50	NA [6]
SVE-7	05/25/17	0.6	11.4	-16.3	53	0 [4]	40-50	NA [6]
SVE-7	06/28/17	0.3	15.5	-14.1	63	0 [4]	40-50	NA [6]
SVE-7	07/24/17	0.5	15.8	-12.6	68	0 [4]	40-50	408
SVE-7	08/14/17	0.2	16.4	-13.1	66	0 [4]	40-50	593
SVE-7	09/13/17	0.7	16.5	-12.0	67	41	40-50	NA [6]
SVE-7	10/30/17	0.8	15.5	-16.2	54	44	40-50	NA [6]
SVE-7	11/17/17	0.3	16.9	-12.0	55	0 [4]	40-50	840
SVE-7	12/07/17	0.2	16.8	-12.0	52	0 [4]	40-50	825
SVE-7	01/24/18	4.1	14.8	-11.7	37	0 [4]	40-50	NA [6]
SVE-7	02/13/18	0.8	17.1	-16.1	44	0 [4]	40-50	1,092
SVE-7	03/05/18	0.0	18.2	-15.9	45	38	40-50	981
SVE-7	04/04/18	0.0	17.6	-11.3	36	0 [4]	40-50	1,208
SVE-7	05/17/18	0.0	13.8	-9.1	56	0 [4]	40-50	-
SVE-7	07/03/18	0.0	16.0	-8.1	68	0 [4]	40-50	-
SVE-7	07/31/18	0.0	14.7	-10.2	69	0 [4]	40-50	-
SVE-7	08/30/18	0.0	14.7	-9.6	64	0 [4]	40-50	-
SVE-7	09/28/18	0.7	13.5	-12.5	56	0 [4]	40-50	> 4,293
SVE-7	11/16/18	2.6	14.8	-12.5	50	64	40-50	NA [6]
SVE-7	12/13/18	0.5	14.2	-12.7	42	0 [4]	40-50	> 5,745
SVE-7	01/23/19	0.6	13.3	-12.0	37	73	40-50	9,395
SVE-7	02/22/19	0.0	19.4	-12.0	36	64	40-50	86
SVE-7	04/02/19	0.0	13.8	-11.8	41	49	40-50	35
SVE-7	04/26/19	0.1	14.6	-12.8	46	59	40-50	4,633
SVE-7	05/29/19	0.0	14.9	-13.3	54	47	40-50	2,193
SVE-7	06/18/19	0.0	15.7	-12.2	64	54	40-50	2,513
SVE-7	07/23/19	0.0	16.4	-11.9	68	50	40-50	567
SVE-7	08/29/19	0.0	16.1	-11.8	66	30	40-50	2,407
SVE-7	09/12/19	0.0	16.7	-12.1	59	33	40-50	3,885
SVE-7	10/31/19	0.8	17.0	-15.0	54	37	40-50	13,670
SVE-7	11/25/19	0.5	18.5	-12.7	46	72	40-50	-
SVE-7	02/18/20	0.3	16.3	-15.2	41	48	40-50	5,799
SVE-7	06/23/20	0.0	16.8	-13.7	70	33	40-50	648
SVE-7	08/17/20	0.4	15.5	-13.7	72	39	40-50	4,267
SVE-7	11/05/20	0.0	19.4	-12.9	52	15	40-50	4,327
SVE-7	01/20/21	0.0	18.4	-10.4	36	50	40-50	1,015
SVE-7	02/19/21	0.0	20.6	-10.9	34	0	40-50	194
SVE-7	03/25/21	0.0	13.9	-12.9	44	55	40-50	NA [18]
SVE-7	04/22/21	0.0	16.8	-12.2	48	155	40-50	2,108
SVE-7	05/21/21	0.0	17.3	-11.7	56	96	40-50	89
SVE-7	06/17/21	0.0	17.7	-9.4	65	87	40-50	4

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-7	07/15/21	0.0	17.2	-9.6	70	30	40-50	NA [18]
SVE-7	08/12/21	0.0	16.7	-9.6	67	105	40-50	1,112
SVE-7	09/23/21	0.0	12.0	-11.1	60	0 [4]	40-50	321
SVE-7	10/21/21	0.0	18.4	-11.9	61	57	40-50	1,485
SVE-7	11/30/21	0.0	15.6	-10.8	40	53	40-50	252
SVE-7	12/21/21	0.0	15.5	-10.6	39	0 [4]	40-50	577
SVE-7	01/31/22	0.0	14.0	-11.4	35	57	40-50	146
SVE-7	02/28/22	0.0	17.1	-10.1	42	15	40-50	894
SVE-7	03/28/22	0.0	14.4	-11.4	36	0	40-50	486
SVE-7	04/28/22	0.0	16.1	-13.1	46	48	40-50	692
SVE-7	05/26/22	0.0	16.1	-11.7	54	44	40-50	10
SVE-7	06/23/22	0.0	18.3	-11.8	68	0	40-50	47
SVE-7	07/26/22	0.0	17.8	-11.1	68	33	40-50	20
SVE-7	08/23/22	0.0	17.0	-9.7	74	33	40-50	149
SVE-7	09/29/22	0.0	18.2	-10.0	68	33	40-50	85
SVE-7	10/27/22	0.0	18.0	-8.7	58	0	40-50	442
SVE-7	12/06/22	0.0	16.5	-9.9	45	38	40-50	223
SVE-7	1/12/2023	0.0	17.0	-10.8	42	45	40-50	172
SVE-7	2/16/2023	0.0	14.8	-13.7	38	56	40-50	1,426
SVE-7	3/20/2023	0.0	18.7	-14.6	38	69	40-50	308
SVE-7	4/13/2023	0.0	14.2	-17.4	44	38	40-50	126
SVE-7	5/2/2023	0.0	14.6	-15.9	44	34	40-50	390
SVE-7	6/22/2023	0.0	16.8	-12.9	67	0	40-50	340
SVE-7	7/31/2023	0.0	16.6	-11.3	71	0	40-50	1,322
SVE-7	8/31/2023	0.0	17.7	-10.6	71	56	40-50	1,990
SVE-7	9/28/2023	0.0	5.5	-10.6	67	0	40-50	2,068
SVE-7	12/21/2023	0.4	-	-12.4	46	16	40-50	0
SVE-8	08/27/08 [1]	7.6	15.7	0.3	-	-	-	-
SVE-8	09/23/08 [2]	-	-	-	-	-	90 - 100	-
SVE-8	09/25/08 [2]	-	-	-	-	-	90 - 100	-
SVE-8	10/01/08 [2]	-	-	-	-	-	90 - 100	-
SVE-8	10/07/08 [2]	-	-	-	-	-	90 - 100	-
SVE-8	10/15/08	1.1	4.3	-48.3	-	0	90 - 100	-
SVE-8	10/30/08	0.6	8.1	-48.1	-	0	90 - 100	NA [6]
SVE-8	11/13/08	0.5	10.0	-47.5	-	34	90 - 100	-
SVE-8	11/26/08	0.3	10.9	-49.6	-	0	90 - 100	-
SVE-8	01/22/09 [3]	3.7	6.8	-50.8	-	31	90 - 100	NA [6]
SVE-8	02/05/09	0.0	7.7	-50.7	-	13	90 - 100	NA [6]
SVE-8	02/16/09	0.1	8.7	-51.2	-	58	90 - 100	NA [6]
SVE-8	03/16/09	0.3	9.7	-50.0	-	-	90 - 100	NA [6]
SVE-8	04/24/09	0.0	10.2	-48.1	-	0	90 - 100	NA [6]
SVE-8	05/20/09	0.0	11.0	-47.6	-	0	90 - 100	NA [6]
SVE-8	06/23/09	0.0	10.1	-45.4	-	0	90 - 100	6,370

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-8	07/23/09	0.3	9.9	-45.0	-	0	90 - 100	35,400
SVE-8	08/20/09	0.2	10.8	-43.8	-	0	100	43,300
SVE-8	09/23/09	0.5	10.6	-44.7	-	0	100	47,600
SVE-8	10/20/09	0.5	12.0	-47.3	-	0	100	39,200
SVE-8	11/24/09	0.0	12.7	-46.8	-	0	100	12,900
SVE-8	12/29/09	0.0	12.7	-47.8	-	0	100	8,440
SVE-8	01/29/10	0.1	14.7	-47.9	-	13	100	480
SVE-8	02/22/10	0.0	12.9	-47.0	-	25	100	6,410
SVE-8	03/26/10	0.0	12.1	-46.6	-	0	100	6,150
SVE-8	04/22/10	0.0	13.9	-44.6	-	0	100	2,910
SVE-8	05/18/10	0.0	12.5	-44.9	-	0	100	25,100
SVE-8	06/29/10	0.0	13.7	-45.4	-	0	100	6,580
SVE-8	07/23/10	0.0	13.1	-42.4	-	0	100	20,400
SVE-8	08/27/10	3.3	8.3	-45.1	-	0	100	NA [6]
SVE-8	10/01/10	3.9	6.7	-47.6	-	0	100	NA [6]
SVE-8	10/22/10	5.0	9.4	-46.7	-	0	100	NA [6]
SVE-8	11/29/10	0.4	16.7	-47.0	-	0	100	24,400
SVE-8	12/22/10	0.5	16.6	-49.5	-	44	100	8,700
SVE-8	01/24/11	0.1	15.3	-49.2	-	0	100	3,420
SVE-8	02/28/11	0.1	15.6	-50.1	-	0	100	1,418
SVE-8	04/13/11	0.2	13.7	-49.5	-	0	100	3,560
SVE-8	04/29/11	0.0	15.4	-48.4	-	0	100	8,725
SVE-8	05/27/11	0.0	15.9	-47.3	-	13	100	10,620
SVE-8	06/24/11	0.1	15.7	-45.6	-	30	100	7,210
SVE-8	07/22/11	0.0	15.0	-44.0	-	0	100	2,035
SVE-8	08/25/11	1.0	13.4	-45.1	-	0	100	>50,000
SVE-8	09/30/11	0.3	17.5	-43.7	-	0 [4]	100	1,890
SVE-8	10/26/11	0.0	16.9	-44.4	-	31	100	4,220
SVE-8	11/22/11	0.0	18.7	-46.1	-	63	100	860
SVE-8	12/29/11	0.0	19.6	-45.5	-	70	100	1,550
SVE-8	01/26/12	0.0	18.4	-46.3	-	71	100	7,170
SVE-8	02/21/12	0.0	19.3	-38.0	-	98	100	1,230
SVE-8	03/30/12	0.0	19.4	-41.7	-	96	100	650
SVE-8	04/27/12	0.0	18.6	-46.6	-	92	100	480
SVE-8	05/25/12	0.0	16.6	-46.4	-	0 [4]	100	1,310
SVE-8	06/26/12	0.0	15.6	-44.5	-	0 [4]	100	5,840
SVE-8	07/25/12	0.0	15.6	-45.6	-	0 [4]	100	5,100
SVE-8	08/22/12	0.0	16.6	-40.5	-	0 [4]	100	5,830
SVE-8	09/25/12	0.1	18.8	-40.0	-	56	100	1,870
SVE-8	10/30/12	0.0	19.1	-40.8	-	68	100	270 [11]
SVE-8	11/21/12	0.0	19.5	-43.3	-	83	100	270
SVE-8	12/21/12 [12]	0.9	17.9	-45.0	-	94	100	3,890
SVE-8	01/03/13 [12]	0.0	19.2	0.0	-	0 [4]	100	926
SVE-8	01/28/13	0.0	20.4	-23.1	-	110	100	750

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-8	02/27/13	0.0	17.4	1.2	-	0 [4]	100	1,030
SVE-8	03/25/13	0.0	19.1	4.1	-	0 [4]	100	740
SVE-8	04/26/13	0.0	17.6	0.3	-	0 [4]	100	13,200
SVE-8	05/30/13	0.0	19.6	-14.5	-	0 [4]	100	100
SVE-8	06/27/13	0.0	16.2	-43.0	-	0 [4]	100	780
SVE-8	07/25/13	0.0	18.1	-40.4	-	0 [4]	100	120
SVE-8	08/30/13	0.0	19.8	-42.7	-	66	100	62
SVE-8	09/25/13	0.0	19.5	-47.4	-	47	100	130
SVE-8	10/23/13	0.0	20.0	-44.1	-	97	100	19
SVE-8	11/20/13	0.0	19.8	-45.6	-	107	100	100
SVE-8	12/18/13	0.0	19.7	-47.3	-	87	100	50
SVE-8	05/13/14 [13]	5.0	7.8	-42.9	-	90	100	NA [6]
SVE-8	05/28/14 [13]	0.0	10.7	-44.0	-	200	100	NA [6]
SVE-8	06/26/14	0.0	16.3	-44.2	-	114	100	120 [11]
SVE-8	07/31/14	2.8	15.7	-42.8	-	80	100	1,010
SVE-8	08/28/14	4.8	12.9	-44.8	-	89	100	20
SVE-8	09/26/14	0.0	19.0	-45.6	-	162	100	64
SVE-8	10/24/14	0.0	19.9	-46.8	-	107	100	240
SVE-8	11/19/14	0.0	20.4	-46.0	-	116	100	110
SVE-8	12/17/14	0.0	20.3	-46.5	-	98	100	490
SVE-8	01/21/15	0.0	19.6	-47.8	-	107	100	240
SVE-8	02/26/15	0.0	19.4	-49.0	-	97	100	280
SVE-8	03/17/15	0.0	19.4	-47.5	-	108	100	89
SVE-8	04/17/15	0.0	18.2	-44.2	-	104	100	61
SVE-8	05/12/15	0.0	19.5	-42.5	-	100	100	73
SVE-8	06/25/15	0.0	18.9	-10.4	-	92	100	48
SVE-8	07/31/15	0.0	19.3	-22.9	-	106	100	17
SVE-8	08/19/15	0.0	20.1	-40.6	-	70	100	110
SVE-8	09/24/15	0.0	18.9	-46.0	-	99	100	160
SVE-8	10/22/15	0.0	20.0	-43.2	-	102	100	180
SVE-8	04/22/16	0.0	18.8	-0.8	50	0	-	39
SVE-8	10/26/2016 [14]	-	-	-	-	-	-	-
SVE-8	04/05/17 [14]	-	-	-	-	-	-	-
SVE-8	10/30/17	0.0	19.6	-0.3	54	0	-	729
SVE-8	05/17/18	0.0	18.1	-8.9	56	0	-	-
SVE-8	11/16/18	0.0	21.0	-12.8	50	0	-	0
SVE-8	04/26/19	0.0	18.3	-12.4	46	0	-	56
SVE-8	10/31/19	0.0	20.4	-13.7	54	0	-	0
SVE-8	06/23/20	0.0	19.2	-0.5	70	0	-	6
SVE-8	11/05/20	0.0	19.7	-12.2	52	0	-	645
SVE-8	04/22/21	0.0	20.4	-14.2	48	0	-	1,103
SVE-8	10/21/21	0.0	20.7	-10.1	61	0	-	239
SVE-8	04/28/22	1.0	13.5	-12.6	46	0	-	NA [1]
SVE-8	10/27/22	0.0	18.0	-8.3	58	0	-	4,385

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-8	12/21/23	0.0	-	-11.4	46	16	-	0
SVE-9	08/27/08 [1]	40.8	2.1	0.2	-	-	-	-
SVE-9	09/23/08 [2]	-	-	-	-	-	90 - 100	-
SVE-9	09/25/08 [2]	-	-	-	-	-	90 - 100	-
SVE-9	10/01/08 [2]	-	-	-	-	-	90 - 100	-
SVE-9	10/07/08	0.2	15.5	-47.8	-	0	90 - 100	-
SVE-9	10/15/08	0.0	17.1	-48.2	-	0	90 - 100	-
SVE-9	10/30/08	0.0	17.8	-47.8	-	0	90 - 100	NA [6]
SVE-9	11/13/08	0.0	17.9	-47.4	-	0	90 - 100	-
SVE-9	11/26/08	0.0	18.6	-49.5	-	0	90 - 100	-
SVE-9	01/22/09 [3,7]	0.0	15.1	-50.7	-	-	90 - 100	5,480
SVE-9	02/05/09	0.0	16.7	-50.6	-	40	90 - 100	1,030
SVE-9	02/16/09	0.0	17.2	-51.4	-	28	90 - 100	1,160
SVE-9	03/16/09	0.0	16.3	-49.9	-	-	90 - 100	1,310
SVE-9	04/24/09	0.0	17.0	-47.9	-	0	90 - 100	995
SVE-9	05/20/09	0.0	17.0	-47.4	-	0	90 - 100	411
SVE-9	06/23/09	0.0	15.9	-45.2	-	0	90 - 100	604
SVE-9	07/23/09	0.0	15.7	-44.8	-	0	90 - 100	1,430
SVE-9	08/20/09	0.0	15.7	-43.8	-	0	100	1,320
SVE-9	09/23/09	0.0	16.0	-44.6	-	0	100	740
SVE-9	10/20/09	0.0	17.1	-47.2	-	0	100	411
SVE-9	11/24/09	0.0	17.0	-46.6	-	0	100	355
SVE-9	12/29/09	0.0	17.5	-47.6	-	0	100	60
SVE-9	01/29/10	0.0	20.6	-47.5	-	70	100	16
SVE-9	02/22/10	0.0	19.3	-46.5	-	50	100	174
SVE-9	03/26/10	0.0	18.6	-46.0	-	105	100	83
SVE-9	04/22/10	0.0	19.7	-43.9	-	104	100	13
SVE-9	05/18/10	0.0	19.4	-44.1	-	94	100	561
SVE-9	06/29/10	0.0	18.9	-44.6	-	75	100	95
SVE-9	07/23/10	0.0	19.3	-41.8	-	61	100	130
SVE-9	08/27/10	1.8	14.1	-44.6	-	0	100	490
SVE-9	10/01/10	1.1	12.9	-47.8	-	0	100	>50,000
SVE-9	10/22/10	0.0	18.7	-45.8	-	90	100	10,600
SVE-9	11/29/10	0.0	19.9	-46.3	-	90	100	39
SVE-9	12/22/10	0.1	19.5	-48.8	-	98	100	620
SVE-9	01/24/11	0.1	18.8	-48.9	-	78	100	240
SVE-9	02/28/11	0.0	18.8	-49.7	-	94	100	257
SVE-9	04/13/11	0.0	20.1	-16.3	-	0 [4]	100	251
SVE-9	04/29/11	0.0	20.0	-47.0	-	0 [4]	100	1,475
SVE-9	05/27/11	0.0	20.6	-46.4	-	96	100	320
SVE-9	06/24/11	0.0	20.0	-44.5	-	100	100	205
SVE-9	07/22/11	0.0	18.4	-43.2	-	30	100	180
SVE-9	08/25/11	0.2	18.2	-44.4	-	100	100	19,410

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-9	09/30/11	0.0	20.5	-30.1	-	149 [8]	100	290
SVE-9	10/26/11	0.0	18.9	-10.3	-	100	100	33
SVE-9	11/22/11	0.0	20.0	-9.3	-	103	100	280
SVE-9	12/29/11	0.0	21.1	-7.2	-	97	100	358
SVE-9	01/26/12	0.0	19.5	-7.2	-	100	100	649
SVE-9	02/21/12	0.0	20.3	-8.7	-	102	100	194
SVE-9	03/30/12	0.0	20.5	-2.1	-	101	100	179
SVE-9	04/27/12	0.0	19.3	-25.2	-	97	100	180
SVE-9	05/25/12	0.0	19.5	-21.2	-	103	100	120
SVE-9	06/26/12	0.0	20.0	-15.7	-	97	100	50
SVE-9	07/25/12	0.0	19.2	-44.4	-	96	100	60
SVE-9	08/22/12	0.0	18.8	-21.2	-	102	100	200
SVE-9	09/25/12	0.0	19.7	-25.6	-	106	100	14
SVE-9	10/30/12	0.0	19.6	-9.4	-	102	100	NA [11]
SVE-9	11/21/12	0.0	20.2	-8.7	-	96	100	25
SVE-9	12/21/12 [12]	0.8	18.8	-11.5	-	96	100	46,340
SVE-9	01/03/13 [12]	0.0	20.2	-8.8	-	104	100	230
SVE-9	01/28/13	0.0	21.2	-4.6	-	99	100	571
SVE-9	02/27/13	0.0	20.5	-17.8	-	98	100	120
SVE-9	03/25/13	0.0	19.8	-28.6	-	105	100	489
SVE-9	04/26/13	0.1	18.5	-28.1	-	102	100	391
SVE-9	05/30/13	0.0	20.4	-5.4	-	0 [4]	100	100
SVE-9	06/27/13	0.0	19.5	-38.6	-	92	100	750
SVE-9	07/25/13	0.0	19.7	-17.9	-	105	100	64
SVE-9	08/30/13	0.0	20.4	-19.8	-	100	100	65
SVE-9	09/25/13	0.0	20.1	-26.7	-	100	100	56
SVE-9	10/23/13	0.0	20.4	-31.7	-	103	100	5
SVE-9	11/20/13	0.0	20.3	-34.4	-	99	100	140
SVE-9	12/18/13	0.0	20.6	-2.2	-	0 [4]	100	22
SVE-9	05/13/14 [13]	0.4	14.7	21.0	-	68	100	28,900
SVE-9	05/28/14 [13]	0.0	19.2	-43.1	-	102	100	230
SVE-9	06/26/14	0.0	19.7	-42.9	-	0 [4]	100	9 [11]
SVE-9	07/31/14	0.6	19.8	-40.6	-	116	100	7,860
SVE-9	08/28/14	1.4	18.9	-42.7	-	101	100	17,950
SVE-9	09/26/14	0.0	20.0	-9.6	-	98	100	17
SVE-9	10/24/14	0.0	20.1	-10.9	-	108	100	190
SVE-9	11/19/14	0.0	21.0	-8.8	-	98	100	58
SVE-9	12/17/14	0.0	20.7	-13.0	-	0 [4]	100	100
SVE-9	01/21/15	0.0	19.9	-22.2	-	104	100	52
SVE-9	02/26/15	0.0	20.1	-16.3	-	93	100	97
SVE-9	03/17/15	0.0	20.3	-24.8	-	102	100	34
SVE-9	04/17/15	0.0	19.7	-27.9	-	99	100	19
SVE-9	05/12/15	0.0	20.1	-26.2	-	97	100	11
SVE-9	06/25/15	0.0	19.1	-30.5	-	98	100	55

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-9	07/31/15	0.0	20.2	-26.7	-	101	100	18
SVE-9	08/19/15	0.0	20.8	-38.4	-	101	100	50
SVE-9	09/24/15	0.0	20.6	-44.3	-	105	100	55
SVE-9	10/22/15	0.0	21.2	-40.8	-	104	100	78
SVE-9	04/22/16	0.0	19.8	0.1	50	0 [16]	-	73
SVE-9	10/26/16	0.0	14.1	0.0	51	0	-	NA [6]
SVE-9	04/05/17	0.0	15.0	-0.1	50	0	-	NA [6]
SVE-9	10/30/17	0.2	13.8	0.0	54	0	-	NA [6]
SVE-9	05/17/18	0.0	18.4	-9.0	56	0	-	-
SVE-9	11/16/18	0.0	20.5	-12.6	50	0	-	0
SVE-9	04/26/19	0.0	14.7	-12.2	46	0	-	40
SVE-9	10/31/19	0.0	20.4	-14.6	54	0	-	40
SVE-9	06/23/20	0.0	17.2	-0.1	70	0	-	29
SVE-9	11/05/20	0.0	19.6	-11.6	52	0	-	0
SVE-9	04/22/21	0.0	20.5	-11.8	48	0	-	20
SVE-9	10/21/21	0.0	19.9	-11.4	61	0	-	1,508
SVE-9	04/28/22	0.0	18.6	-11.6	46	0	-	3,721
SVE-9	10/27/22	0.0	20.0	-7.8	58	0	-	18
SVE-9	12/21/23	0.0	-	-11.4	46	46	-	1
SVE-10	08/27/08 [1]	0.0	19.9	0.4	-	-	-	-
SVE-10	09/23/08	40.4	0.0	-18.8	-	105	90 - 100	-
SVE-10	09/25/08	15.3	0.7	-21.0	-	101	90 - 100	-
SVE-10	10/01/08	1.5	8.5	-21.8	-	107	90 - 100	-
SVE-10	10/07/08	0.6	11.7	-22.4	-	104	90 - 100	-
SVE-10	10/15/08	0.3	13.5	-22.9	-	109	90 - 100	-
SVE-10	10/30/08	0.2	14.7	-22.8	-	103	90 - 100	6,120
SVE-10	11/13/08	0.2	15.9	-22.9	-	110	90 - 100	-
SVE-10	11/26/08	0.0	16.7	-21.4	-	95	90 - 100	-
SVE-10	01/22/09 [3,7]	0.0	21.0	-18.9	-	-	90 - 100	30,800
SVE-10	02/05/09	0.0	20.5	-15.4	-	101	90 - 100	5,600
SVE-10	02/16/09	0.0	20.9	-29.9	-	100	90 - 100	209
SVE-10	03/16/09 [5]	0.0	20.0	-10.1	-	-	90 - 100	4,880
SVE-10	04/24/09	0.0	17.7	-19.6	-	104	90 - 100	3,310
SVE-10	05/20/09	0.0	17.6	-19.0	-	103	90 - 100	1,880
SVE-10	06/23/09	0.0	16.8	-19.4	-	102	90 - 100	2,810
SVE-10	07/23/09	0.0	16.8	-18.9	-	106	90 - 100	11,300
SVE-10	08/20/09	0.0	16.9	-29.0	-	155	150	12,900
SVE-10	09/23/09	0.0	16.8	-32.4	-	144	150	9,850
SVE-10	10/20/09	0.0	16.8	-31.1	-	151	150	16,700
SVE-10	11/24/09	0.1	16.7	-25.0	-	153	150	22,200
SVE-10	12/29/09	0.1	15.8	-23.2	-	156	150	8,690
SVE-10	01/29/10	0.2	19.0	-23.3	-	157	150	4,800
SVE-10	02/22/10	0.0	19.0	-18.6	-	155	150	2,650

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-10	03/26/10	0.0	19.4	-12.1	-	280 [8]	150	36
SVE-10	04/22/10	0.0	20.0	-14.4	-	156	150	9
SVE-10	05/18/10	0.0	20.1	-11.7	-	147	150	1,410
SVE-10	06/29/10	0.0	18.9	-17.1	-	139	150	6,460
SVE-10	07/23/10	0.0	18.8	-17.5	-	145	150	2,290
SVE-10	08/27/10	0.0	19.8	-12.3	-	142	150	150
SVE-10	10/01/10	0.0	19.1	-20.8	-	153	150	7,730
SVE-10	10/22/10	0.3	14.3	-21.0	-	143	150	>50,000
SVE-10	11/29/10	0.1	17.9	-18.7	-	154	150	9,570
SVE-10	12/22/10	0.3	17.5	-17.5	-	150	150	3,250
SVE-10	01/24/11	0.1	17.5	-13.5	-	147	150	1,320
SVE-10	02/28/11	0.1	19.1	-18.6	-	147	150	143
SVE-10	04/13/11	0.0	19.9	-16.4	-	147	150	970
SVE-10	04/29/11	0.0	17.6	-29.3	-	153	150	10,330
SVE-10	04/27/11	0.1	17.0	-31.8	-	142	150	16,430
SVE-10	06/24/11	0.3	15.7	-31.0	-	145	150	15,520
SVE-10	07/22/11	0.1	14.9	-30.4	-	131	150	2,715
SVE-10	08/25/11	0.5	13.9	-26.8	-	129	150	44,430
SVE-10	09/30/11	0.2	17.7	-28.9	-	- [9]	150	2,570
SVE-10	10/26/11	0.0	16.1	-38.0	-	- [9]	150	10,270
SVE-10	11/22/11	0.2	16.8	-23.0	-	153	150	10,630
SVE-10	12/29/11	0.0	18.2	-23.0	-	153	150	5,280
SVE-10	01/26/12	0.0	16.0	-23.0	-	153	150	6,691
SVE-10	02/21/12	0.2	17.0	-16.6	-	149	150	6,700
SVE-10	03/30/12	0.0	18.2	-14.9	-	145	150	490
SVE-10	04/27/12	0.0	17.7	-15.7	-	44 [10]	150	580
SVE-10	05/25/12	0.0	17.9	-15.3	-	30 [10]	150	690
SVE-10	06/26/12	0.0	16.6	-13.5	-	54 [10]	150	770
SVE-10	07/25/12	0.0	18.0	-3.8	-	0 [4]	150	620
SVE-10	08/22/12	0.0	17.5	-33.6	-	153	150	930
SVE-10	09/25/12	0.6	17.2	-33.2	-	155	150	7,020
SVE-10	10/30/12	0.0	17.5	-25.8	-	150	150	340 [11]
SVE-10	11/21/12	0.0	18.0	-25.8	-	154	150	2,040
SVE-10	12/21/12 [12]	1.0	12.6	-29.6	-	135	150	NA [6]
SVE-10	01/03/13 [12]	0.0	18.4	-14.6	-	157	150	846
SVE-10	01/28/13	0.0	20.5	-13.0	-	101	150	1,040
SVE-10	02/27/13	0.0	20.3	-11.4	-	149	150	240
SVE-10	03/25/13	0.0	19.7	-12.4	-	90	150	655
SVE-10	04/26/13	0.1	16.8	-6.4	-	147	150	6,510
SVE-10	05/30/13	0.0	19.9	-7.6	-	0 [4]	150	110
SVE-10	06/27/13	0.0	20.1	0.0	-	0 [4]	150	35
SVE-10	07/25/13	0.0	19.6	-1.5	-	0 [4]	150	110
SVE-10	08/30/13	0.0	20.5	-0.7	-	0 [4]	150	92
SVE-10	09/25/13	0.0	20.4	-1.0	-	0 [4]	150	62

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-10	10/23/13	0.0	20.8	-1.4	-	142	150	0
SVE-10	11/20/13	0.0	20.6	-0.6	-	0 [4]	150	10
SVE-10	12/18/13	0.0	20.8	-0.9	-	156	150	47
SVE-10	05/13/14 [13]	0.0	20.6	-4.1	-	0 [4]	150	270
SVE-10	05/28/14 [13]	0.0	19.6	-2.4	-	38	150	170
SVE-10	06/26/14	0.0	20.1	-2.4	-	0 [4]	150	3 [11]
SVE-10	07/31/14	0.0	20.7	0.2	-	0 [4]	150	80
SVE-10	08/28/14	0.0	20.7	-1.2	-	32	150	95
SVE-10	09/26/14	0.0	20.2	-0.8	-	0 [4]	150	47
SVE-10	10/24/14	0.0	20.4	-1.5	-	15	150	210
SVE-10	11/19/14	0.0	21.5	-0.6	-	0 [4]	150	23
SVE-10	12/17/14	0.0	20.9	-2.5	-	0 [4]	150	64
SVE-10	01/21/15	0.0	20.2	-16.1	-	0 [15]	150	9
SVE-10	02/26/15	0.0	20.6	-1.4	-	0 [15]	150	56
SVE-10	03/17/15	0.0	21.0	-3.1	-	0 [15]	150	40
SVE-10	04/17/15	0.0	20.2	-1.5	-	0 [15]	150	19
SVE-10	05/12/15	0.0	20.3	-4.0	-	0 [15]	150	6
SVE-10	06/25/15	0.0	19.2	-1.7	-	0 [15]	150	48
SVE-10	07/31/15	0.0	20.3	-3.0	-	0 [15]	150	35
SVE-10	08/19/15	0.0	20.9	-4.0	-	0 [15]	150	44
SVE-10	09/24/15	0.0	21.2	-5.1	-	0 [15]	150	210
SVE-10	10/22/15	0.0	21.0	-3.8	-	0 [15]	150	180
SVE-10	04/22/16	0.0	20.3	-15.7	50	0 [4, 5]	-	45
SVE-10	10/26/16	0.0	20.5	-0.3	51	0	-	380
SVE-10	04/05/17	0.0	20.1	0.0	50	0	-	599
SVE-10	10/30/17	0.0	15.0	0.0	54	0	-	NA [6]
SVE-10	05/17/18	0.0	19.4	-9.1	56	0	-	-
SVE-10	11/16/18	0.0	20.0	-12.5	50	0	-	0
SVE-10	04/26/19	0.0	16.5	-12.4	46	0	-	784
SVE-10	10/31/19	0.0	18.5	-14.8	54	0	-	548
SVE-10	06/23/20	0.0	14.6	-13.5	70	0	-	1,835
SVE-10	11/05/20	0.0	16.0	-12.9	52	0	-	1,214
SVE-10	04/22/21	0.3	15.3	-12.1	48	0	-	9,412
SVE-10	10/21/21	0.0	18.0	-11.8	61	0	-	2,075
SVE-10	04/28/22	0.0	13.3	-10.6	46	0	-	1,410
SVE-10	10/27/22	0.0	17.8	-8.8	58	0	-	1,267
SVE-10	12/21/23	0.0	-	-12.2	46	45	-	0
SVE-11	08/27/08 [1]	0.9	19.0	0.4	-	-	-	-
SVE-11	09/23/08	47.1	0.0	-16.8	-	94	90 - 100	-
SVE-11	09/25/08	47.0	0.0	-18.4	-	88	90 - 100	-
SVE-11	10/01/08	9.7	0.0	-19.2	-	92	90 - 100	-
SVE-11	10/07/08	3.3	2.4	-19.3	-	88	90 - 100	-
SVE-11	10/15/08	1.9	5.3	-19.6	-	90	90 - 100	-

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-11	10/30/08	1.1	6.7	-19.2	-	68	90 - 100	NA [6]
SVE-11	11/13/08	0.9	9.1	-20.6	-	86	90 - 100	-
SVE-11	11/26/08	0.5	10.8	-20.6	-	103	90 - 100	-
SVE-11	01/22/09 [3]	6.7	5.9	-15.6	-	101	90 - 100	NA [6]
SVE-11	02/05/09	0.3	9.9	-12.9	-	94	90 - 100	26,800
SVE-11	02/16/09	0.0	14.9	-9.1	-	99	90 - 100	13,400
SVE-11	03/16/09	0.1	15.9	-13.0	-	98	90 - 100	38,500
SVE-11	04/24/09	0.1	10.1	-15.0	-	98	90 - 100	NA [6]
SVE-11	05/20/09	0.0	10.6	-14.3	-	92	90 - 100	NA [6]
SVE-11	06/23/09	0.1	9.7	-14.2	-	94	90 - 100	10,600
SVE-11	07/23/09	0.4	10.5	-13.2	-	91	90 - 100	41,900
SVE-11	08/20/09	0.3	10.5	-18.6	-	148	150	41,200
SVE-11	09/23/09	0.5	12.7	-17.6	-	146	150	39,000
SVE-11	10/20/09	0.2	16.4	-20.8	-	153	150	30,200
SVE-11	11/24/09	0.0	19.2	-11.9	-	156	150	410
SVE-11	12/29/09	0.0	18.5	-11.3	-	156	150	1,400
SVE-11	01/29/10	0.1	20.2	-12.7	-	145	150	1,825
SVE-11	02/22/10	0.0	17.4	-20.9	-	147	150	5,810
SVE-11	03/26/10	0.0	17.2	-12.9	-	410 [8]	150	6,490
SVE-11	04/22/10	0.0	18.7	-12.1	-	148	150	2,620
SVE-11	05/18/10	0.0	18.2	-10.9	-	150	150	20,200
SVE-11	06/29/10	0.0	19.7	-5.8	-	0 [10]	150	96
SVE-11	07/23/10	0.3	13.0	-26.4	-	116 [10]	150	34,400
SVE-11	08/27/10	2.4	9.3	-27.2	-	128 [10]	150	NA [6]
SVE-11	10/01/10	2.6	8.1	-35.1	-	60 [10]	150	NA [6]
SVE-11	10/22/10	0.4	14.0	-37.9	-	50 [10]	150	NA [6]
SVE-11	11/29/10	0.9	13.6	-41.8	-	0 [10]	150	>50,000
SVE-11	12/22/10	0.6	15.0	-43.1	-	109 [10]	150	15,200
SVE-11	01/24/11	0.5	16.9	-39.0	-	164	150	14
SVE-11	02/28/11	0.1	19.0	-45.1	-	110	150	211
SVE-11	04/13/11	0.0	20.1	-40.2	-	0 [4]	150	620
SVE-11	04/29/11	0.0	20.5	-31.0	-	0 [4]	150	33,125
SVE-11	05/27/11	0.0	20.6	-35.5	-	0 [4]	150	16,020
SVE-11	06/24/11	0.0	20.2	-40.6	-	0 [4]	150	30,860
SVE-11	07/22/11	0.0	18.8	-41.2	-	0 [4]	150	6,500
SVE-11	08/25/11	0.0	19.7	-43.3	-	105	150	> 50,000
SVE-11	09/30/11	0.5	16.9	-41.8	-	147	150	10,120
SVE-11	10/26/11	0.2	15.6	-16.0	-	154	150	18,660
SVE-11	11/22/11	0.4	17.9	-12.9	-	146	150	260
SVE-11	12/29/11	0.0	19.2	-13.0	-	147	150	390
SVE-11	01/26/12	0.2	17.2	-12.6	-	146	150	260
SVE-11	02/21/12	0.0	20.4	-10.7	-	150	150	1,610
SVE-11	03/30/12	0.5	15.6	-15.4	-	149	150	149
SVE-11	04/27/12	0.0	17.1	-39.5	-	156	150	3,710

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-11	05/25/12	0.5	14.1	-45.7	-	108	150	2,880
SVE-11	06/26/12	0.2	14.4	-26.7	-	150	150	5,290
SVE-11	07/25/12	0.0	18.4	-44.1	-	49	150	4,310
SVE-11	08/22/12	0.3	15.3	-39.6	-	75	150	220
SVE-11	09/25/12	0.9	16.7	-36.9	-	0 [4]	150	12,760
SVE-11	10/30/12	0.1	18.1	-40.1	-	92	150	NA [11]
SVE-11	11/21/12	0.0	18.6	-41.4	-	93	150	130
SVE-11	12/21/12 [12]	4.1	8.8	-44.2	-	78	150	NA [6]
SVE-11	01/03/13 [12]	0.8	14.6	-17.3	-	146	150	1,820
SVE-11	01/28/13	0.2	16.3	-47.3	-	102	150	4,620
SVE-11	02/27/13	0.2	16.8	-47.1	-	100	150	216
SVE-11	03/25/13	0.3	16.2	-47.1	-	150	150	651
SVE-11	04/26/13	0.6	14.6	-9.4	-	156	150	2,470
SVE-11	05/30/13	0.0	17.3	-41.6	-	0 [4]	150	230
SVE-11	06/27/13	0.0	20.0	-42.2	-	0 [4]	150	55
SVE-11	07/25/13	0.0	19.7	-42.4	-	0 [4]	150	21
SVE-11	08/30/13	0.0	20.4	-41.4	-	0 [4]	150	34
SVE-11	09/25/13	0.0	20.5	-20.8	-	0 [4]	150	120
SVE-11	10/23/13	0.0	20.6	-45.7	-	110	150	4
SVE-11	11/20/13	0.0	20.7	-48.5	-	143	150	79
SVE-11	12/18/13	0.0	20.7	-47.0	-	60	150	48
SVE-11	05/13/14 [13]	0.9	16.6	89.0	-	156	150	1,350
SVE-11	05/28/14 [13]	0.0	19.3	-45.8	-	50	150	155
SVE-11	06/26/14	0.0	20.0	-47.4	-	156	150	5 [11]
SVE-11	07/31/14	0.2	20.2	-43.2	-	182	150	66
SVE-11	08/28/14	0.6	20.2	-44.8	-	100	150	1,370
SVE-11	09/26/14	0.0	20.1	-44.8	-	191	150	NA [6]
SVE-11	10/24/14	0.0	20.4	-47.7	-	157	150	300
SVE-11	11/19/14	0.0	21.2	-47.1	-	142	150	110
SVE-11	12/17/14	0.0	20.8	-47.9	-	153	150	160
SVE-11	01/21/15	0.0	20.2	-47.8	-	156	150	13
SVE-11	02/26/15	0.0	20.5	-50.1	-	0 [4]	150	170
SVE-11	03/17/15	0.0	20.9	-48.1	-	143	150	52
SVE-11	04/17/15	0.0	19.9	-44.4	-	162	150	38
SVE-11	05/12/15	0.0	20.0	-43.2	-	152	150	59
SVE-11	06/25/15	0.0	19.2	-36.3	-	151	150	51
SVE-11	07/31/15	0.0	20.0	-38.3	-	145	150	43
SVE-11	08/19/15	0.0	20.3	-39.0	-	88	150	210
SVE-11	09/24/15	0.0	20.6	-45.0	-	162	150	290
SVE-11	10/22/15	0.2	19.9	-42.3	-	165	150	2,350
SVE-11	04/22/16	0.0	20.3	0.0	50	0	-	460
SVE-11	10/26/16	0.0	19.9	-10.0	51	0	-	610
SVE-11	04/05/17	0.0	18.7	-0.4	50	0	-	781
SVE-11	10/30/17	0.0	15.2	0.0	54	0	-	NA [6]

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-11	05/17/18	3.2	12.8	-8.8	56	0	-	-
SVE-11	11/16/18	1.2	16.4	-12.9	50	0	-	> 4,193
SVE-11	04/26/19	1.0	13.9	-12.6	46	0	-	27,144
SVE-11	10/31/19	0.0	20.8	-15.1	54	0	-	698
SVE-11	06/23/20	0.2	16.0	-13.3	70	0	-	4,084
SVE-11	11/05/20	1.7	13.8	-12.6	52	0	-	31,505
SVE-11	04/22/21	1.9	15.9	-14.2	48	0	-	38,711
SVE-11	10/21/21	1.9	15.9	-10.6	61	0	-	NA [6]
SVE-11	04/28/22	1.5	16.0	-13.0	46	0	-	NA [1]
SVE-11	10/27/22	0.7	18.1	-8.4	58	0	-	18,985
SVE-11	12/21/23	0.7	-	-11.9	46	0	-	0
SVE-12	08/27/08 [1]	0.0	19.3	0.7	-	-	-	-
SVE-12	09/23/08	13.7	0.0	-35.2	-	96	90 - 100	-
SVE-12	09/25/08	9.1	0.0	-36.9	-	98	90 - 100	-
SVE-12	10/01/08	0.9	3.2	-36.6	-	104	90 - 100	-
SVE-12	10/07/08	0.3	6.5	-35.4	-	101	90 - 100	-
SVE-12	10/15/08	0.0	9.8	-36.2	-	102	90 - 100	-
SVE-12	10/30/08	0.0	11.9	-36.6	-	85	90 - 100	1,050
SVE-12	11/13/08	0.0	14.1	-17.3	-	87	90 - 100	-
SVE-12	11/26/08	0.0	13.7	-6.2	-	34	90 - 100	-
SVE-12	01/22/09 [3]	0.5	12.3	-43.4	-	102	90 - 100	24,100
SVE-12	02/05/09	0.0	14.3	-42.4	-	102	90 - 100	3,150
SVE-12	02/16/09	0.0	15.1	-35.6	-	96	90 - 100	3,750
SVE-12	03/16/09	0.0	15.7	-38.7	-	97	90 - 100	3,480
SVE-12	04/24/09	0.0	16.1	-37.4	-	92	90 - 100	3,030
SVE-12	05/20/09	0.0	16.2	-41.0	-	104	90 - 100	1,630
SVE-12	06/23/09	0.0	15.5	-39.5	-	95	90 - 100	2,290
SVE-12	07/23/09	0.0	15.6	-39.1	-	93	90 - 100	8,520
SVE-12	08/20/09	0.0	16.1	-42.1	-	102	150	9,410
SVE-12	09/23/09	0.0	16.3	-42.8	-	96	150	7,220
SVE-12	10/20/09	0.0	17.0	-45.1	-	109	150	7,610
SVE-12	11/24/09	0.0	16.5	-44.4	-	109	150	6,440
SVE-12	12/29/09	0.0	15.4	-45.7	-	94	150	3,240
SVE-12	01/29/10	0.0	18.2	-45.8	-	120	150	2,300
SVE-12	02/22/10	0.0	16.4	-44.3	-	108	150	5,130
SVE-12	03/26/10	0.0	15.4	-44.7	-	111	150	4,810
SVE-12	04/22/10	0.0	16.2	-42.4	-	96	150	2,960
SVE-12	05/18/10	0.0	15.9	-42.6	-	98	150	14,400
SVE-12	06/29/10	0.0	15.9	-44.4	-	91	150	8,090
SVE-12	07/23/10	0.0	16.9	-41.0	-	82	150	4,930
SVE-12	08/27/10	2.6	10.7	-43.8	-	94	150	NA [6]
SVE-12	10/01/10	0.9	11.0	-46.6	-	103	150	NA [6]
SVE-12	10/22/10	0.4	13.7	-45.2	-	100	150	21,300

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-12	11/29/10	0.1	17.2	-45.8	-	93	150	10,400
SVE-12	12/22/10	0.4	16.4	-48.2	-	112	150	5,770
SVE-12	01/24/11	0.3	16.7	-47.8	-	102	150	5,870
SVE-12	02/28/11	0.2	16.4	-49.1	-	87	150	4,195
SVE-12	04/13/11	0.3	16.0	-48.8	-	93	150	6,170
SVE-12	04/29/11	0.0	17.3	-47.2	-	84	150	10,750
SVE-12	05/27/11	0.0	18.3	-46.1	-	91	150	1,460
SVE-12	06/24/11	0.0	18.0	-45.0	-	97	150	420
SVE-12	07/22/11	0.0	16.4	-43.4	-	45	150	97
SVE-12	08/25/11	0.0	16.0	-44.3	-	76	150	8,250
SVE-12	09/30/11	0.0	18.3	-41.8	-	40	150	310
SVE-12	10/26/11	0.0	16.6	-44.4	-	46	150	890
SVE-12	11/22/11	0.0	17.6	-45.3	-	61	150	2,530
SVE-12	12/29/11	0.0	18.6	-44.8	-	70	150	7,840
SVE-12	01/26/12	0.0	17.3	-44.9	-	102	150	27,614
SVE-12	02/21/12	0.0	17.6	-46.2	-	108	150	4,800
SVE-12	03/30/12	0.0	18.0	-47.1	-	123	150	1,771
SVE-12	04/27/12	0.0	18.1	-46.1	-	149	150	2,730
SVE-12	05/25/12	0.0	18.1	-44.8	-	106	150	802
SVE-12	06/26/12	0.0	16.8	-41.8	-	113	150	5,430
SVE-12	07/25/12	0.2	15.7	-44.2	-	110	150	6,360
SVE-12	08/22/12	0.0	17.3	-38.7	-	98	150	6,320
SVE-12	09/25/12	0.2	17.8	-5.7	-	152	150	2,520
SVE-12	10/30/12	0.0	18.8	-21.8	-	0 [4]	150	440 [11]
SVE-12	11/21/12	0.0	19.0	-36.1	-	147	150	1,360
SVE-12	12/21/12 [12]	2.4	15.0	-30.2	-	151	150	>50,000
SVE-12	01/03/13 [12]	0.2	18.7	-23.8	-	153	150	5,420
SVE-12	01/28/13	0.0	19.7	-23.2	-	144	150	3,940
SVE-12	02/27/13	0.1	19.3	-20.8	-	154	150	5,710
SVE-12	03/25/13	0.1	19.0	-21.8	-	147	150	7,960
SVE-12	04/26/13	1.6	12.8	-12.6	-	151	150	NA [6]
SVE-12	05/30/13	0.0	17.0	-42.1	-	122	150	2,340
SVE-12	06/27/13	0.0	20.1	-39.0	-	99	150	230
SVE-12	07/25/13	0.0	18.4	-38.6	-	156	150	1,740
SVE-12	08/30/13	0.0	19.1	-38.5	-	157	150	1,610
SVE-12	09/25/13	0.1	19.0	-46.4	-	155	150	2,300
SVE-12	10/23/13	0.0	19.4	-19.6	-	149	150	1,900
SVE-12	11/20/13	0.1	19.5	-19.3	-	146	150	3,120
SVE-12	12/18/13	0.0	19.8	-13.8	-	147	150	20
SVE-12	05/13/14 [13]	5.4	6.7	464.0	-	149	150	NA [6]
SVE-12	05/28/14 [13]	0.0	17.0	-22.1	-	147	150	27,700
SVE-12	06/26/14	0.0	18.0	-25.7	-	148	150	6,390 [11]
SVE-12	07/31/14	0.6	18.5	-17.6	-	153	150	10,160
SVE-12	08/28/14	2.0	17.4	-21.9	-	155	150	18,770

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-12	09/26/14	0.0	19.0	-36.9	-	141	150	920
SVE-12	10/24/14	0.0	19.3	-21.0	-	150	150	2,080
SVE-12	11/19/14	0.0	20.0	-17.2	-	160	150	1,330
SVE-12	12/17/14	0.0	20.1	-22.4	-	159	150	1,390
SVE-12	01/21/15	0.0	19.4	-23.1	-	145	150	780
SVE-12	02/26/15	0.0	19.9	-16.5	-	0 [4]	150	1,190
SVE-12	03/17/15	0.0	20.2	-22.2	-	151	150	410
SVE-12	04/17/15	0.0	19.1	-18.2	-	0 [4]	150	400
SVE-12	05/12/15	0.0	19.6	-19.2	-	155	150	110
SVE-12	06/25/15	0.0	18.4	-16.5	-	153	150	530
SVE-12	07/31/15	0.0	19.6	-17.7	-	153	150	250
SVE-12	08/19/15	0.0	20.1	-19.3	-	88	150	500
SVE-12	09/24/15	0.1	19.8	-41.6	-	144	150	780
SVE-12	10/22/15	0.0	20.5	-37.8	-	150	150	520
SVE-12	11/12/15	0.4	17.0	-10.8	-	0 [15]	40 - 50	690
SVE-12	12/17/15	0.1	18.1	-16.2	-	0 [15]	40 - 50	1,020
SVE-12	01/21/16	0.0	18.9	-7.2	35	43	40-50	4,140
SVE-12	02/24/16	0.1	18.7	0.1	38	51	40-50	2,340
SVE-12	03/22/16	0.0	16.2	-7.5	42	46	40-50	NA [6]
SVE-12	04/22/16	0.2	18.5	-4.1	50	0 [4]	40-50	100
SVE-12	05/19/16	0.0	18.5	-6.2	55	49	40-50	2,810
SVE-12	06/14/16	0.0	18.2	-5.6	62	0 [4]	40-50	4,260
SVE-12	07/27/16	0.3	17.6	-4.5	70	0 [4]	40-50	4,050
SVE-12	08/10/16	0.2	18.5	-4.8	70	0 [4]	40-50	1,430
SVE-12	09/15/16	0.2	18.0	-6.6	68	0 [4]	40-50	1,610
SVE-12	10/26/16	0.6	18.4	-6.4	51	0 [4]	40-50	1,240
SVE-12	11/23/16	0.6	17.8	-7.2	50	52	40-50	1,000
SVE-12	12/13/16	0.3	18.4	-7.9	45	56	40-50	1,330
SVE-12	01/10/17	0.8	17.0	-6.4	40	70	40-50	1,244
SVE-12	02/14/17	0.0	18.1	-8.8	44	49	40-50	1,314
SVE-12	03/07/17	0.2	18.0	-10.3	40	55	40-50	841
SVE-12	04/05/17	0.1	18.3	-11.9	50	47	40-50	1,011
SVE-12	05/25/17	0.8	12.9	-12.0	53	0 [4]	40-50	NA [6]
SVE-12	06/28/17	0.1	17.9	-8.6	63	0 [4]	40-50	911
SVE-12	07/24/17	0.1	18.1	-8.7	68	0 [4]	40-50	1,022
SVE-12	08/14/17	0.1	19.0	-9.0	66	0 [4]	40-50	989
SVE-12	09/13/17	0.2	18.6	-7.7	67	42	40-50	904
SVE-12	10/30/17	0.1	19.1	0.0	54	52	40-50	1,410
SVE-12	11/17/17	0.0	19.1	-7.7	55	0 [4]	40-50	1,591
SVE-12	12/07/17	0.0	19.6	-7.7	52	0 [4]	40-50	1,308
SVE-12	01/24/18	5.4	18.8	-7.2	37	0 [4]	40-50	1,691
SVE-12	02/13/18	0.4	19.0	-10.4	44	44	40-50	1,725
SVE-12	03/05/18	0.0	19.6	-16.1	45	0 [4]	40-50	1,449
SVE-12	04/04/18	0.0	18.9	-6.8	36	0 [4]	40-50	1,911

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-12	05/17/18	0.1	19.1	-9.6	56	0 [4]	40-50	-
SVE-12	07/03/18	0.0	18.3	-7.6	68	0 [4]	40-50	-
SVE-12	07/31/18	0.0	18.2	-7.0	69	0 [4]	40-50	-
SVE-12	08/30/18	0.0	18.1	-8.8	64	0 [4]	40-50	-
SVE-12	09/28/18	0.3	18.6	-12.1	56	0 [4]	40-50	NA [6]
SVE-12	11/16/18	0.8	17.9	-11.7	50	0 [4]	40-50	> 4,193
SVE-12	12/13/18	0.5	18.4	-11.8	42	0 [4]	40-50	> 5,745
SVE-12	01/23/19	0.3	16.5	-11.6	37	84	40-50	4,372
SVE-12	02/22/19	0.0	19.5	-12.0	36	84	40-50	295
SVE-12	04/02/19	0.0	17.2	-11.2	41	71	40-50	115
SVE-12	04/26/19	0.0	18.4	-11.7	46	52	40-50	457
SVE-12	05/29/19	0.0	17.0	-13.5	54	66	40-50	588
SVE-12	06/18/19	0.0	17.5	-11.3	64	73	40-50	447
SVE-12	07/23/19	0.0	18.1	-11.1	68	69	40-50	195
SVE-12	08/29/19	0.0	17.3	-11.5	66	72	40-50	1,665
SVE-12	09/12/19	0.0	18.6	-12.0	59	0 [4]	40-50	3,081
SVE-12	10/31/19	0.2	18.5	-14.2	54	85	40-50	2,683
SVE-12	11/25/19	0.5	20.3	-12.2	46	22	40-50	-
SVE-12	02/18/20	0.0	18.3	-14.9	41	92	40-50	1,055
SVE-12	06/23/20	0.0	18.7	-12.8	70	80	40-50	68
SVE-12	08/17/20	0.0	17.5	-13.1	72	42	40-50	243
SVE-12	11/05/20	0.0	18.0	-11.8	52	64	40-50	619
SVE-12	01/20/21	0.0	19.3	-9.5	36	60	40-50	646
SVE-12	02/19/21	0.0	20.5	-10.3	34	0 [4]	40-50	200
SVE-12	03/25/21	0.0	14.0	-14.6	44	92	40-50	NA [18]
SVE-12	04/22/21	0.0	18.8	-14.0	48	59	40-50	377
SVE-12	05/21/21	0.0	18.2	-11.9	56	98	40-50	0
SVE-12	06/17/21	0.0	18.5	-9.4	65	80	40-50	34
SVE-12	07/15/21	0.0	18.5	-8.9	70	53	40-50	NA [18]
SVE-12	08/12/21	0.0	19.3	-9.4	67	0 [4]	40-50	132
SVE-12	09/23/21	0.0	10.0	-9.7	60	0 [4]	40-50	3,520
SVE-12	10/21/21	0.0	18.8	-10.6	61	102	40-50	1,535
SVE-12	11/30/21	0.0	16.7	-10.5	40	45	40-50	2,990
SVE-12	12/21/21	0.0	17.2	-10.2	39	74	40-50	4,579
SVE-12	01/31/22	0.0	15.9	-11.0	35	128	40-50	476
SVE-12	02/28/22	0.0	18.9	-9.6	42	74	40-50	201
SVE-12	03/28/22	0.0	14.1	-11.7	36	0	40-50	194
SVE-12	04/28/22	0.0	17.8	-11.7	46	0	40-50	1,810
SVE-12	05/26/22	0.0	16.9	-11.6	54	96	40-50	40
SVE-12	06/23/22	0.0	19.0	-11.3	68	69	40-50	19
SVE-12	07/26/22	0.0	18.6	-10.9	68	99	40-50	157
SVE-12	08/23/22	0.0	17.9	-9.9	74	43	40-50	300
SVE-12	09/29/22	0.0	18.8	-9.4	68	55	40-50	619
SVE-12	10/27/22	0.0	18.5	-8.4	58	74	40-50	1,073

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-12	12/06/22	0.0	17.3	-9.2	45	84	40-50	1,141
SVE-12	1/12/2023	0.0	17.9	-10.2	42	60	40-50	167
SVE-12	2/16/2023	0.0	14.2	-13.3	38	49	40-50	1,855
SVE-12	3/20/2023	0.0	19.0	-14.0	38	93	40-50	718
SVE-12	4/13/2023	0.0	16.1	-17.0	44	114	40-50	2,461
SVE-12	5/2/2023	0.0	16.8	-15.6	44	121	40-50	2,680
SVE-12	6/22/2023	0.0	17.4	-12.2	67	54	40-50	647
SVE-12	7/31/2023	0.0	19.1	-10.5	71	85	40-50	442
SVE-12	8/31/2023	0.0	18.8	-9.8	71	78	40-50	485
SVE-12	9/28/2023	0.0	6.0	-9.8	67	85	40-50	582
SVE-12	12/21/2023	0.0	-	-11.6	46	175	40-50	0
SVE-13	08/27/08 [1]	0.5	16.2	0.3	-	-	-	-
SVE-13	09/23/08	34.2	0.0	-46.7	-	0	90 - 100	-
SVE-13	09/25/08 [2]	-	-	-	-	-	90 - 100	-
SVE-13	10/01/08	0.0	11.0	-48.6	-	46	90 - 100	-
SVE-13	10/07/08	0.0	14.9	-47.2	-	0	90 - 100	-
SVE-13	10/15/08	0.0	16.3	-47.7	-	0	90 - 100	-
SVE-13	10/30/08	0.0	17.0	-47.3	-	33	90 - 100	365
SVE-13	11/13/08	0.0	17.9	-47.4	-	0	90 - 100	-
SVE-13	11/26/08	0.0	18.1	-48.7	-	0	90 - 100	-
SVE-13	01/22/09 [3]	0.0	18.4	-11.9	-	99	90 - 100	2,040
SVE-13	02/05/09	0.0	18.8	-11.5	-	103	90 - 100	303
SVE-13	02/16/09	0.0	19.4	-12.8	-	90	90 - 100	364
SVE-13	03/16/09	0.0	18.6	-11.4	-	97	90 - 100	1,030
SVE-13	04/24/09	0.0	18.8	-12.0	-	94	90 - 100	750
SVE-13	05/20/09	0.0	18.4	-11.8	-	104	90 - 100	510
SVE-13	06/23/09	0.0	16.9	-11.9	-	100	90 - 100	594
SVE-13	07/23/09	0.0	16.7	-11.5	-	99	90 - 100	1,740
SVE-13	08/20/09	0.0	15.9	-12.8	-	99	100	2,430
SVE-13	09/23/09	0.0	16.1	-12.8	-	98	100	1,580
SVE-13	10/20/09	0.0	16.8	-14.0	-	96	100	1,560
SVE-13	11/24/09	0.0	17.5	-13.2	-	103	100	1,550
SVE-13	12/29/09	0.0	16.8	-12.8	-	94	100	545
SVE-13	01/29/10	0.0	19.5	-12.8	-	104	100	404
SVE-13	02/22/10	0.0	18.7	-11.4	-	101	100	620
SVE-13	03/26/10	0.0	17.8	-13.4	-	96	100	1,720
SVE-13	04/22/10	0.0	18.4	-11.8	-	105	100	664
SVE-13	05/18/10	0.0	17.8	-11.7	-	94	100	3,730
SVE-13	06/29/10	0.0	16.3	-12.7	-	106	100	1,830
SVE-13	07/23/10	0.0	16.1	-12.7	-	101	100	1,630
SVE-13	08/27/10	0.0	13.0	-10.3	-	102	100	1,790
SVE-13	10/01/10	0.0	14.0	-10.4	-	99	100	4,930
SVE-13	10/22/10	0.0	13.9	-9.8	-	100	100	6,680

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-13	11/29/10	0.0	17.3	-9.8	-	94	100	1,640
SVE-13	12/22/10	0.1	18.0	-10.3	-	106	100	350
SVE-13	01/24/11	0.2	17.6	-10.2	-	102	100	1,770
SVE-13	02/28/11	0.1	17.3	-11.0	-	95	100	1,243
SVE-13	04/13/11	0.0	18.3	-10.1	-	97	100	1,120
SVE-13	04/29/11	0.0	18.3	-12.2	-	100	100	4,184
SVE-13	05/27/11	0.0	18.7	-11.9	-	98	100	2,150
SVE-13	06/24/11	0.0	17.1	-13.2	-	102	100	1,170
SVE-13	07/22/11	0.0	16.1	-12.8	-	109	100	248
SVE-13	08/25/11	0.0	15.6	-12.3	-	100	100	3,180
SVE-13	09/30/11	0.0	17.9	-13.3	-	98	100	440
SVE-13	10/26/11	0.0	16.9	-14.2	-	99	100	860
SVE-13	11/22/11	0.0	18.5	-12.4	-	105	100	650
SVE-13	12/29/11	0.0	19.9	-13.3	-	102	100	850
SVE-13	01/26/12	0.0	18.0	-11.4	-	105	100	10,905
SVE-13	02/21/12	0.0	18.7	-8.3	-	102	100	2,260
SVE-13	03/30/12	0.0	19.1	-11.4	-	106	100	483
SVE-13	04/27/12	0.0	18.3	-14.8	-	102	100	1,210
SVE-13	05/25/12	0.0	18.3	-13.6	-	103	100	280
SVE-13	06/26/12	0.0	16.3	-14.8	-	103	100	1,680
SVE-13	07/25/12	0.0	14.2	-17.0	-	101	100	2,100
SVE-13	08/22/12	0.0	16.8	-16.8	-	101	100	1,690
SVE-13	09/25/12	0.0	17.5	-16.8	-	108	100	540
SVE-13	10/30/12	0.0	18.3	-16.2	-	110	100	280 [11]
SVE-13	11/21/12	0.0	18.2	-16.0	-	103	100	260
SVE-13	12/21/12 [12]	0.0	14.5	-14.6	-	97	100	4,470
SVE-13	01/03/13 [12]	0.0	19.2	-14.1	-	101	100	750
SVE-13	01/28/13	0.0	19.6	-14.9	-	101	100	1,700
SVE-13	02/27/13	0.0	19.8	-8.0	-	101	100	275
SVE-13	03/25/13	0.0	19.6	-9.0	-	97	100	515
SVE-13	04/26/13	0.0	17.5	-32.1	-	92	100	207
SVE-13	05/30/13	0.1	18.0	-37.3	-	99	100	4,460
SVE-13	06/27/13	0.1	15.5	-35.7	-	0 [4]	100	2,420
SVE-13	07/25/13	0.0	17.2	-23.9	-	97	100	700
SVE-13	08/30/13	0.0	18.0	-20.7	-	103	100	480
SVE-13	09/25/13	0.0	17.7	-21.6	-	101	100	120
SVE-13	10/23/13	0.0	18.6	-11.9	-	101	100	260
SVE-13	11/20/13	0.0	18.9	-10.8	-	106	100	290
SVE-13	12/18/13	0.0	19.2	-13.2	-	94	100	220
SVE-13	05/13/14 [13]	1.2	5.3	56.0	-	96	100	NA [6]
SVE-13	05/28/14 [13]	0.0	17.5	-20.2	-	92	100	620
SVE-13	06/26/14	0.0	16.7	-21.4	-	71	100	140 [11]
SVE-13	07/31/14	0.2	17.7	-16.0	-	0 [4]	100	2,290
SVE-13	08/28/14	0.4	10.4	-18.0	-	94	100	NA [6]

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-13	09/26/14	0.0	17.4	-8.0	-	111	100	46
SVE-13	10/24/14	0.0	18.4	-8.5	-	106	100	110
SVE-13	11/19/14	0.0	18.6	-8.8	-	107	100	1,050
SVE-13	12/17/14	0.0	20.0	-9.1	-	98	100	93
SVE-13	01/21/15	0.0	19.6	-8.9	-	0	100	90
SVE-13	02/26/15	0.0	19.7	-43.4	-	102	100	80
SVE-13	03/17/15	0.0	18.2	-45.2	-	110	100	27
SVE-13	04/17/15	0.0	18.5	-28.1	-	108	100	33
SVE-13	05/12/15	0.0	18.8	-29.2	-	105	100	19
SVE-13	06/25/15	0.0	17.5	-27.5	-	94	100	64
SVE-13	07/31/15	0.0	18.2	-28.3	-	110	100	42
SVE-13	08/19/15	0.0	18.8	-21.9	-	101	100	150
SVE-13	09/24/15	0.0	17.4	-23.6	-	125	100	55
SVE-13	10/22/15	0.0	18.9	-18.6	-	0	100	59
SVE-13	11/12/15	0.0	18.7	-2.9	-	0	40 - 50	110
SVE-13	12/17/15	0.0	17.7	-5.8	-	46	40 - 50	250
SVE-13	01/21/16	0.0	17.2	-1.2	35	55	40-50	150
SVE-13	02/24/16	0.0	15.8	0.1	38	44	40-50	22
SVE-13	03/22/16	0.0	13.5	-14.2	42	42	40-50	NA [6]
SVE-13	04/22/16	0.0	16.6	-9.0	50	48	40-50	15
SVE-13	05/19/16	0.0	16.3	-11.0	55	44	40-50	540
SVE-13	06/14/16	0.0	15.3	-10.6	62	0 [4]	40-50	NA [6]
SVE-13	07/27/16	0.0	12.5	-8.9	70	0 [4]	40-50	NA [6]
SVE-13	08/10/16	0.0	13.1	-8.4	70	0 [4]	40-50	NA [6]
SVE-13	09/15/16	0.0	10.9	-10.1	68	0 [4]	40-50	NA [6]
SVE-13	10/26/16	0.0	11.5	-12.0	51	0 [4]	40-50	NA [6]
SVE-13	11/23/16	0.0	12.5	-12.7	50	58	40-50	NA [6]
SVE-13	12/13/16	0.0	15.0	-0.2	45	111	40-50	NA [6]
SVE-13	01/10/17	0.0	13.4	-10.9	40	50	40-50	NA [6]
SVE-13	02/14/17	0.0	15.7	-15.0	44	48	40-50	NA [6]
SVE-13	03/07/17	0.0	14.0	-14.9	40	51	40-50	NA [6]
SVE-13	04/05/17	0.0	14.8	-13.6	50	44	40-50	NA [6]
SVE-13	05/25/17	0.0	12.2	-16.2	53	0 [4]	40-50	NA [6]
SVE-13	06/28/17	0.0	14.9	-14.2	63	0 [4]	40-50	NA [6]
SVE-13	07/24/17	0.0	14.3	-14.0	68	0 [4]	40-50	NA [6]
SVE-13	08/14/17	0.0	13.9	-14.1	66	48	40-50	NA [6]
SVE-13	09/13/17	0.0	13.6	-12.1	67	44	40-50	NA [6]
SVE-13	10/30/17	0.0	13.9	0.0	54	49	40-50	NA [6]
SVE-13	11/17/17	0.0	14.2	-12.1	55	0 [4]	40-50	NA [6]
SVE-13	12/07/17	0.0	14.6	-12.1	52	40	40-50	NA [6]
SVE-13	01/24/18	4.2	12.7	-11.9	37	0 [4]	40-50	NA [6]
SVE-13	02/13/18	0.0	14.9	-16.4	44	0 [4]	40-50	NA [6]
SVE-13	03/05/18	0.0	20.0	-15.9	45	52	40-50	727
SVE-13	04/04/18	0.0	19.5	-11.4	36	44	40-50	806

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-13	05/17/18	0.0	13.2	-9.1	56	0 [4]	40-50	-
SVE-13	07/03/18	0.0	15.4	-8.2	68	0 [4]	40-50	-
SVE-13	07/31/18	0.0	13.7	-10.3	69	0 [4]	40-50	-
SVE-13	08/30/18	0.0	12.4	-9.7	64	0 [4]	40-50	-
SVE-13	09/28/18	0.0	9.2	-12.8	56	0 [4]	40-50	NA [6]
SVE-13	11/16/18	0.6	11.4	-13.4	50	30	40-50	> 4,194
SVE-13	12/13/18	0.0	11.6	-12.6	42	0 [4]	40-50	951
SVE-13	01/23/19	0.2	10.0	-11.8	37	45	40-50	3,727
SVE-13	02/22/19	0.0	15.3	-12.7	36	56	40-50	33
SVE-13	04/02/19	0.0	13.3	-11.9	41	45	40-50	55
SVE-13	04/26/19	0.0	14.2	-12.2	46	31	40-50	28
SVE-13	05/29/19	0.0	14.9	-13.3	54	41	40-50	20
SVE-13	06/18/19	0.0	14.9	-12.2	64	36	40-50	14
SVE-13	07/23/19	0.0	14.6	-11.9	68	14	40-50	66
SVE-13	08/29/19	0.0	12.3	-12.3	66	33	40-50	842
SVE-13	09/12/19	0.0	14.6	-10.0	59	0 [4]	40-50	208
SVE-13	10/31/19	0.0	15.2	-15.4	54	30	40-50	905
SVE-13	11/25/19	0.3	17.1	-13.8	46	93	40-50	-
SVE-13	02/18/20	0.0	16.4	-14.9	41	34	40-50	67
SVE-13	06/23/20	0.0	15.4	-13.5	70	0 [4]	40-50	121
SVE-13	08/17/20	0.0	13.4	-13.6	72	0 [4]	40-50	0
SVE-13	11/05/20	0.0	13.4	-12.9	52	0 [4]	40-50	8
SVE-13	01/20/21	0.0	16.2	-10.3	36	36	40-50	9
SVE-13	02/19/21	0.0	20.8	-3.8	34	0 [4]	40-50	NA [18]
SVE-13	03/25/21	0.0	14.4	-14.0	44	45	40-50	NA [18]
SVE-13	04/22/21	0.0	16.6	-12.8	48	119	40-50	284
SVE-13	05/21/21	0.0	16.5	-11.1	56	0 [4]	40-50	0
SVE-13	06/17/21	0.0	16.1	-9.8	70	0 [4]	40-50	158
SVE-13	07/15/21	0.0	14.9	-9.5	70	0 [4]	40-50	NA [18]
SVE-13	08/12/21	0.0	13.7	-10.7	67	0 [4]	40-50	NA [18]
SVE-13	09/23/21	0.0	10.9	-11.9	60	0 [4]	40-50	1,055
SVE-13	10/21/21	0.0	14.7	-11.7	61	0 [4]	40-50	778
SVE-13	11/30/21	0.0	12.3	-10.7	40	35	40-50	343
SVE-13	12/21/21	0.0	13.3	-10.7	39	0 [4]	40-50	245
SVE-13	01/31/22	0.0	13.9	-11.4	35	39	40-50	188
SVE-13	02/28/22	0.0	15.7	-10.0	42	0	40-50	137
SVE-13	03/28/22	0.0	16.1	-11.7	36	0	40-50	886
SVE-13	04/28/22	0.0	16.3	-13.0	46	0	40-50	120
SVE-13	05/26/22	0.0	16.0	-12.3	54	0	40-50	7
SVE-13	06/23/22	0.0	17.3	-11.1	68	39	40-50	29
SVE-13	07/26/22	0.0	16.3	-10.7	68	114	40-50	242
SVE-13	08/23/22	0.0	14.8	-10.2	74	36	40-50	119
SVE-13	09/29/22	0.0	15.7	-10.0	68	33	40-50	51
SVE-13	10/27/22	0.0	16.1	-8.8	58	46	40-50	165

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-13	12/06/22	0.0	15.4	-9.8	45	15	40-50	157
SVE-13	01/12/23	0.0	16.9	-10.8	42	56	40-50	13
SVE-13	02/16/23	0.0	16.4	-13.8	38	34	40-50	48
SVE-13	03/20/23	0.0	19.2	-14.6	38	49	40-50	0
SVE-13	04/13/23	0.0	14.8	-17.7	44	31	40-50	25
SVE-13	05/02/23	0.0	14.7	-16.6	44	67	40-50	5
SVE-13	06/22/23	0.0	14.9	-12.8	67	0	40-50	282
SVE-13	07/31/23	0.0	6.8	-11.4	71	46	40-50	1,390
SVE-13	08/31/23	0.0	14.4	-10.5	71	0	40-50	1,853
SVE-13	09/28/23	0.0	4.5	-10.6	67	0	40-50	29
SVE-13	12/21/23	0.0	-	-12.4	46	0	40-50	0
SVE-14	08/27/08 [1]	0.0	3.4	0.6	-	-	-	-
SVE-14	09/23/08	7.4	1.4	-10.8	-	104	90 - 100	-
SVE-14	09/25/08	6.2	5.6	-12.6	-	102	90 - 100	-
SVE-14	10/01/08	0.5	9.9	-13.0	-	103	90 - 100	-
SVE-14	10/07/08	0.4	11.9	-13.3	-	86	90 - 100	-
SVE-14	10/15/08	0.0	15.9	-9.8	-	81	90 - 100	-
SVE-14	10/30/08	0.0	17.0	-8.8	-	83	90 - 100	263
SVE-14	11/13/08	0.0	18.1	-7.7	-	97	90 - 100	-
SVE-14	11/26/08	0.0	16.1	-11.4	-	105	90 - 100	-
SVE-14	01/22/09 [3]	0.8	13.4	-14.9	-	101	90 - 100	39,800
SVE-14	02/05/09	0.0	14.4	-13.4	-	102	90 - 100	4,100
SVE-14	02/16/09	0.0	15.8	-12.6	-	102	90 - 100	5,450
SVE-14	03/16/09	0.0	15.0	-13.4	-	102	90 - 100	4,360
SVE-14	04/24/09	0.0	15.4	-14.5	-	97	90 - 100	3,890
SVE-14	05/20/09	0.0	15.6	-13.9	-	94	90 - 100	1,710
SVE-14	06/23/09	0.0	14.6	-14.6	-	92	90 - 100	3,050
SVE-14	07/23/09	0.0	14.4	-14.0	-	90	90 - 100	13,500
SVE-14	08/20/09	0.0	15.0	-14.5	-	96	100	22,200
SVE-14	09/23/09	0.1	14.9	-14.6	-	97	100	17,050
SVE-14	10/20/09	0.1	15.7	-15.5	-	98	100	19,100
SVE-14	11/24/09	0.0	15.4	-14.5	-	104	100	17,300
SVE-14	12/29/09	0.0	14.8	-14.6	-	101	100	5,510
SVE-14	01/29/10	0.1	17.2	-14.4	-	107	100	3,340
SVE-14	02/22/10	0.0	15.6	-13.2	-	103	100	7,610
SVE-14	03/26/10	0.0	14.6	-14.0	-	108	100	2,200
SVE-14	04/22/10	0.0	15.3	-13.8	-	98	100	3,660
SVE-14	05/18/10	0.0	14.9	-13.4	-	98	100	25,100
SVE-14	06/29/10	0.0	14.6	-14.9	-	96	100	17,800
SVE-14	07/23/10	0.0	15.1	-15.0	-	103	100	16,300
SVE-14	08/27/10	1.0	8.5	-13.1	-	106	100	NA [6]
SVE-14	10/01/10	0.8	8.7	-12.1	-	96	100	NA [6]
SVE-14	10/22/10	1.2	12.7	-12.8	-	106	100	NA [6]

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-14	11/29/10	0.4	15.1	-13.3	-	104	100	2,100
SVE-14	12/22/10	0.6	14.5	-14.3	-	104	100	3,200
SVE-14	01/24/11	0.5	14.8	-13.3	-	105	100	16,140
SVE-14	02/28/11	0.8	13.8	-14.4	-	93	100	23,210
SVE-14	04/13/11	1.0	14.1	-13.6	-	99	100	NA [6]
SVE-14	04/29/11	0.3	15.8	-14.9	-	105	100	35,701
SVE-14	05/27/11	0.1	16.0	-14.5	-	106	100	21,400
SVE-14	06/24/11	0.2	15.6	-16.8	-	104	100	9,240
SVE-14	07/22/11	0.1	14.4	-17.2	-	109	100	2,505
SVE-14	08/25/11	0.4	13.6	-17.5	-	102	100	36,400
SVE-14	09/30/11	0.4	15.9	-18.0	-	101	100	3,640
SVE-14	10/26/11	0.1	15.0	-17.6	-	105	100	16,510
SVE-14	11/22/11	0.1	15.4	-27.4	-	154	150	9,250
SVE-14	12/29/11	0.0	16.4	-29.3	-	155	150	8,710
SVE-14	01/26/12	0.1	15.3	-29.8	-	130	150	28,259
SVE-14	02/21/12	0.3	15.5	-15.9	-	140	150	16,370
SVE-14	03/30/12	0.2	16.3	-14.9	-	106	150	8,810
SVE-14	04/27/12	0.0	18.0	-35.5	-	146	150	12,820
SVE-14	05/25/12	0.1	15.7	-36.2	-	136	150	3,560
SVE-14	06/26/12	0.1	14.9	-28.6	-	152	150	16,330
SVE-14	07/25/12	1.0	14.0	-36.2	-	145	150	19,200
SVE-14	08/22/12	0.0	14.7	-37.8	-	109	150	10,630
SVE-14	09/25/12	0.5	14.4	-39.7	-	139	150	6,760
SVE-14	10/30/12	0.0	15.9	-40.9	-	138	150	NA [11]
SVE-14	11/21/12	0.0	15.8	-42.4	-	143	150	2,130
SVE-14	12/21/12 [12]	2.4	12.3	-44.8	-	140	150	NA [6]
SVE-14	01/03/13 [12]	0.2	15.4	-47.6	-	144	150	140
SVE-14	01/28/13	0.0	16.4	-48.6	-	168	150	2,070
SVE-14	02/27/13	0.0	16.9	-47.2	-	141	150	11,260
SVE-14	03/25/13	0.1	16.1	-48.4	-	149	150	11,020
SVE-14	04/26/13	2.7	13.4	-48.3	-	153	150	NA [6]
SVE-14	05/30/13	0.0	16.3	-45.6	-	33	150	3,980
SVE-14	06/27/13	0.5	15.0	-42.6	-	0 [4]	150	13,140
SVE-14	07/25/13	0.0	16.1	-43.2	-	67	150	3,430
SVE-14	08/30/13	0.2	16.4	0.3	-	71	150	4,940
SVE-14	09/25/13	0.3	16.1	-38.1	-	85	150	7,590
SVE-14	10/23/13	0.0	16.5	-45.9	-	152	150	9,840
SVE-14	11/20/13	0.3	15.9	-47.3	-	74	150	5,880
SVE-14	12/18/13	0.0	17.2	-46.7	-	38	150	2,920
SVE-14	05/13/14 [13]	4.5	8.0	-46.6	-	156	150	NA [6]
SVE-14	05/28/14 [13]	0.2	13.4	-46.4	-	78	150	24,600
SVE-14	06/26/14	0.0	15.3	-47.5	-	141	150	2,890 [11]
SVE-14	07/31/14	0.4	14.2	-43.2	-	146	150	8,450
SVE-14	08/28/14	2.2	12.0	-45.6	-	124	150	NA [6]

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-14	09/26/14	0.0	14.5	-46.1	-	122	150	2,020
SVE-14	10/24/14	0.0	15.6	-48.2	-	58	150	3,420
SVE-14	11/19/14	0.0	14.8	-47.7	-	136	150	2,360
SVE-14	12/17/14	0.0	16.3	-48.0	-	122	150	1,580
SVE-14	01/21/15	0.0	15.8	-48.5	-	142	125 - 150	960
SVE-14	02/26/15	0.0	15.9	-49.0	-	144	125 - 150	840
SVE-14	03/17/15	0.0	15.3	-48.2	-	131	125 - 150	NA [6]
SVE-14	04/17/15	0.0	14.6	-44.5	-	0 [4]	125 - 150	NA [6]
SVE-14	05/12/15	0.0	15.7	-42.7	-	129	125 - 150	NA [6]
SVE-14	06/25/15	0.0	15.3	-37.4	-	135	125 - 150	720
SVE-14	07/31/15	0.0	15.7	-37.9	-	154	125 - 150	2,140
SVE-14	08/19/15	0.0	16.7	-39.7	-	88	125 - 150	1,120
SVE-14	09/24/15	0.2	16.5	-46.1	-	125	125 - 150	200
SVE-14	10/22/15	0.1	16.9	-43.8	-	126	125 - 150	1,470
SVE-14	11/12/15	0.2	15.2	-29.0	-	167	40 - 50	1,330
SVE-14	12/17/15	0.4	14.2	-9.7	-	45	40 - 50	NA [6]
SVE-14	01/21/16	0.3	13.3	-6.1	35	67	40-50	NA [6]
SVE-14	2/24/2016 [14]	-	-	-	-	-	40-50	-
SVE-14	03/22/16	0.0	14.5	-11.9	42	0 [4]	40-50	NA [6]
SVE-14	04/22/16	0.7	13.2	-9.4	50	0 [4]	40-50	4,660
SVE-14	05/19/16	0.2	13.9	-9.4	55	41	40-50	NA [6]
SVE-14	06/14/16	0.1	13.9	-9.9	62	0 [4]	40-50	NA [6]
SVE-14	07/27/16	0.7	13.3	-8.3	70	0 [4]	40-50	NA [6]
SVE-14	08/10/16	0.6	13.9	-8.8	70	0 [4]	40-50	NA [6]
SVE-14	09/15/16	1.2	12.8	-9.5	68	0 [4]	40-50	NA [6]
SVE-14	10/26/16	1.4	13.3	-11.2	51	0 [4]	40-50	NA [6]
SVE-14	11/23/16	1.0	12.8	-12.0	50	48	40-50	NA [6]
SVE-14	12/13/16	1.4	12.5	0.0	45	54	40-50	NA [6]
SVE-14	01/10/17	0.4	13.8	-9.2	40	44	40-50	NA [6]
SVE-14	02/14/17	0.0	13.2	-13.9	44	59	40-50	NA [6]
SVE-14	03/07/17	0.2	12.7	-14.0	40	53	40-50	NA [6]
SVE-14	04/05/17	0.2	13.4	-13.6	50	50	40-50	NA [6]
SVE-14	05/25/17	0.7	11.0	-15.0	53	0 [4]	40-50	NA [6]
SVE-14	06/28/17	0.2	13.6	-13.2	63	0 [4]	40-50	NA [6]
SVE-14	07/24/17	0.3	13.3	-13.1	68	0 [4]	40-50	NA [6]
SVE-14	08/14/17	0.2	13.4	-13.4	66	0 [4]	40-50	NA [6]
SVE-14	09/13/17	0.5	14.3	-11.8	67	54	40-50	NA [6]
SVE-14	10/30/17	0.4	14.2	0.0	54	44	40-50	NA [6]
SVE-14	11/17/17	0.4	14.6	-11.8	55	0 [4]	40-50	NA [6]
SVE-14	12/07/17	0.3	15.1	-11.8	52	0 [4]	40-50	NA [6]
SVE-14	01/24/18	4.3	14.9	-11.3	37	0 [4]	40-50	NA [6]
SVE-14	02/13/18	0.2	15.4	-16.1	44	0 [4]	40-50	NA [6]
SVE-14	03/05/18	0.0	18.7	-15.9	45	0 [4]	40-50	899
SVE-14	04/04/18	0.0	19.5	-11.3	36	47	40-50	1,007

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-14	05/17/18	0.4	11.1	-8.1	56	0 [4]	40-50	-
SVE-14	07/03/18	0.0	13.2	-7.6	68	0 [4]	40-50	-
SVE-14	07/31/18	0.0	12.9	-9.6	69	0 [4]	40-50	-
SVE-14	08/30/18	0.0	20.6	-7.2	64	0 [4]	40-50	-
SVE-14	09/28/18	0.8	11.6	-12.0	56	0 [4]	40-50	NA [6]
SVE-14	11/16/18	3.1	11.0	-12.8	50	37	40-50	NA [6]
SVE-14	12/13/18	0.6	13.5	-12.4	42	0 [4]	40-50	> 5,745
SVE-14	01/23/19	0.8	11.4	-12.0	37	15	40-50	10,628
SVE-14	02/22/19	0.0	17.0	-12.5	36	0 [14]	40-50	53
SVE-14	04/02/19	0.0	12.8	-11.8	41	15	40-50	NA [6]
SVE-14	04/26/19	0.1	11.9	-12.9	46	45	40-50	NA [6]
SVE-14	05/29/19	0.0	14.0	-14.0	54	0 [4]	40-50	28
SVE-14	06/18/19	0.0	12.5	-12.1	64	14	40-50	22
SVE-14	07/23/19	0.0	13.5	-11.9	68	0 [4]	40-50	13
SVE-14	08/29/19	0.0	12.1	-12.2	66	0 [4]	40-50	557
SVE-14	09/12/19	0.0	14.8	-12.1	59	0 [4]	40-50	11
SVE-14	10/31/19	0.3	14.6	-15.2	54	21	40-50	548
SVE-14	11/25/19	0.7	15.9	-13.8	46	81	40-50	-
SVE-14	02/18/20	0.6	11.6	-15.4	41	0 [4]	40-50	NA [6]
SVE-14	06/23/20	0.0	14.4	-13.7	70	14	40-50	11
SVE-14	08/17/20	0.0	12.3	-13.6	72	0 [4]	40-50	0
SVE-14	11/05/20	0.2	11.0	-12.8	52	0 [4]	40-50	-
SVE-14	01/20/21	0.0	15.4	-10.2	36	46	40-50	16
SVE-14	02/19/21	0.0	21.1	-7.8	34	0 [4]	40-50	NA [18]
SVE-14	03/25/21	0.0	12.5	-14.5	44	42	40-50	NA [18]
SVE-14	04/22/21	0.0	14.2	-14.3	48	126	40-50	47
SVE-14	05/21/21	0.0	13.3	-12.5	56	68	40-50	0
SVE-14	06/17/21	0.0	14.2	-10.2	65	134	40-50	43
SVE-14	07/15/21	0.0	13.3	-9.3	70	0 [4]	40-50	NA [18]
SVE-14	08/12/21	0.0	12.7	-11.6	67	0 [4]	40-50	36
SVE-14	09/23/21	0.0	10.0	-12.3	60	0 [4]	40-50	305
SVE-14	10/21/21	0.1	13.2	-10.9	61	102	40-50	6,193
SVE-14	11/30/21	0.0	13.1	-10.8	40	45	40-50	60
SVE-14	12/21/21	0.0	13.8	-10.8	39	0 [4]	40-50	2,478
SVE-14	01/31/22	0.0	13.4	-11.4	35	0	40-50	63
SVE-14	02/28/22	0.0	17.7	-10.0	42	15	40-50	751
SVE-14	03/28/22	0.0	12.7	-12.3	36	32	40-50	343
SVE-14	04/28/22	0.0	13.3	-12.5	46	0	40-50	4,385
SVE-14	05/26/22	0.0	13.2	-12.2	54	34	40-50	26
SVE-14	06/23/22	0.0	15.3	-11.2	68	0	40-50	9
SVE-14	07/26/22	0.0	14.9	-11.3	68	0	40-50	59
SVE-14	08/23/22	0.0	14.3	-10.5	74	0	40-50	315
SVE-14	09/29/22	0.0	14.7	-9.8	68	0	40-50	876
SVE-14	10/27/22	0.0	13.7	-9.6	58	130	40-50	1,259

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-14	12/06/22	0.0	14.9	-9.8	45	38	40-50	279
SVE-14	01/12/23	0.0	14.4	-10.8	42	42	40-50	4,757
SVE-14	02/16/23	0.0	12.5	-13.6	38	63	40-50	1,856
SVE-14	03/20/23	0.0	15.4	-14.6	38	45	40-50	57
SVE-14	04/13/23	0.0	7.0	-17.5	44	41	40-50	259
SVE-14	05/02/23	0.0	6.6	-16.3	44	104	40-50	40
SVE-14	06/22/23	0.0	13.8	-12.8	67	0	40-50	518
SVE-14	07/31/23	0.0	5.9	-11.6	71	0	40-50	2,844
SVE-14	08/31/24	0.0	12.6	-10.5	71	0	40-50	5,839
SVE-14	09/28/23	0.0	3.7	-10.6	67	0	40-50	6
SVE-14	12/21/23	1.0	-	-12.2	46	0	40-50	0
SVE-15	08/27/08 [1]	1.3	17.8	0.4	-	-	-	-
SVE-15	09/23/08 [2]	-	-	-	-	-	90 - 100	-
SVE-15	09/25/08 [2]	-	-	-	-	-	90 - 100	-
SVE-15	10/01/08	1.1	4.6	-48.3	-	90	90 - 100	-
SVE-15	10/07/08	0.4	10.0	-47.0	-	80	90 - 100	-
SVE-15	10/15/08	0.2	13.0	-47.0	-	80	90 - 100	-
SVE-15	10/30/08	0.1	14.9	-46.5	-	72	90 - 100	4,220
SVE-15	11/13/08	0.1	15.9	-46.6	-	96	90 - 100	-
SVE-15	11/26/08	0.0	16.4	-47.2	-	96	90 - 100	-
SVE-15	01/22/09 [3]	0.0	14.7	-49.6	-	36	90 - 100	5,280
SVE-15	02/05/09	0.0	16.3	-49.3	-	78	90 - 100	3,830
SVE-15	02/16/09	0.0	17.2	-47.8	-	91	90 - 100	3,920
SVE-15	03/16/09	0.0	16.8	-48.6	-	90	90 - 100	4,050
SVE-15	04/24/09	0.0	17.6	-46.7	-	58	90 - 100	4,040
SVE-15	05/20/09	0.0	17.5	-46.2	-	70	90 - 100	2,040
SVE-15	06/23/09	0.0	16.8	-44.3	-	55	90 - 100	2,030
SVE-15	07/23/09	0.0	16.5	-43.9	-	57	90 - 100	6,080
SVE-15	08/20/09	0.0	16.8	-42.7	-	39	100	7,930
SVE-15	09/23/09	0.0	17.5	-43.5	-	69	100	3,870
SVE-15	10/20/09	0.0	17.7	-46.6	-	50	100	4,130
SVE-15	11/24/09	0.0	17.3	-46.3	-	56	100	4,570
SVE-15	12/29/09	0.0	16.6	-47.0	-	34	100	1,600
SVE-15	01/29/10	0.0	19.3	-46.8	-	92	100	1,465
SVE-15	02/22/10	0.1	18.8	-45.8	-	34	100	10,200
SVE-15	03/26/10	0.0	16.5	-46.3	-	34	100	1,680
SVE-15	04/22/10	0.0	17.6	-43.6	-	57	100	1,090
SVE-15	05/18/10	0.0	17.0	-44.8	-	76	100	4,920
SVE-15	06/29/10	0.0	16.8	-45.5	-	52	100	1,990
SVE-15	07/23/10	0.0	17.3	-42.1	-	49	100	1,930
SVE-15	08/27/10	0.9	12.2	-43.8	-	51	100	2,510
SVE-15	10/01/10	0.8	11.3	-47.3	-	72	100	NA [6]
SVE-15	10/22/10	0.4	13.9	-45.9	-	98	100	42,200

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-15	11/29/10	0.0	18.1	-37.7	-	103	100	3,400
SVE-15	12/22/10	0.7	17.0	-40.3	-	103	100	10,800
SVE-15	01/24/11	0.2	16.9	-33.0	-	117	100	3,610
SVE-15	02/28/11	0.1	16.4	-27.1	-	97	100	250
SVE-15	04/13/11	0.0	16.0	-14.1	-	105	100	2,110
SVE-15	04/29/11	0.0	16.9	-12.8	-	101	100	1,020
SVE-15	05/27/11	0.0	18.3	-9.9	-	104	100	2,060
SVE-15	06/24/11	0.0	17.5	-4.3	-	100	100	260
SVE-15	07/22/11	0.0	17.2	-8.0	-	99	100	197
SVE-15	08/25/11	0.0	15.5	-9.8	-	103	100	6,900
SVE-15	09/30/11	0.0	18.3	-6.8	-	99	100	210
SVE-15	10/26/11	0.0	18.4	-9.3	-	104	100	55
SVE-15	11/22/11	0.0	19.0	-14.3	-	102	100	250
SVE-15	12/29/11	0.0	19.8	-16.3	-	103	100	560
SVE-15	01/26/12	0.0	17.9	-12.3	-	95	100	2,907
SVE-15	02/21/12	0.0	18.8	-13.4	-	0 [4]	100	197
SVE-15	03/30/12	0.0	18.6	-27.2	-	100	100	200
SVE-15	04/27/12	0.0	18.6	-19.8	-	96	100	240
SVE-15	05/25/12	0.0	19.6	-36.7	-	0 [4]	100	438
SVE-15	06/26/12	0.0	19.0	-14.8	-	102	100	430
SVE-15	07/25/12	0.0	17.6	-41.8	-	105	100	480
SVE-15	08/22/12	0.0	18.4	-4.0	-	100	100	150
SVE-15	09/25/12	0.0	19.4	-5.4	-	98	100	26
SVE-15	10/30/12	0.0	19.1	-5.4	-	104	100	27 [11]
SVE-15	11/21/12	0.0	19.7	-5.8	-	104	100	71
SVE-15	12/21/12 [12]	0.1	16.4	-7.6	-	98	100	3,170
SVE-15	01/03/13 [12]	0.0	18.5	-3.2	-	105	100	223
SVE-15	01/28/13	0.0	20.2	-2.6	-	0 [4]	100	547
SVE-15	02/27/13	0.0	20.3	-1.8	-	101	100	272
SVE-15	03/25/13	0.0	20.2	-2.9	-	100	100	361
SVE-15	04/26/13	0.0	20.0	-2.8	-	86	100	1,060
SVE-15	05/30/13	0.0	19.4	-15.8	-	0 [4]	100	140
SVE-15	06/27/13	0.0	20.1	-2.2	-	0 [4]	100	120
SVE-15	07/25/13	0.0	19.1	-0.8	-	100	100	180
SVE-15	08/30/13	0.0	20.0	-36.0	-	106	100	120
SVE-15	09/25/13	0.0	20.1	-37.7	-	98	100	222
SVE-15	10/23/13	0.0	19.4	-41.0	-	98	100	100
SVE-15	11/20/13	0.0	19.3	-42.8	-	96	100	110
SVE-15	12/18/13	0.0	19.0	-42.5	-	99	100	30
SVE-15	05/13/14 [13]	3.4	8.6	-40.7	-	99	100	NA [6]
SVE-15	05/28/14 [13]	0.0	17.0	-5.4	-	122	100	350
SVE-15	06/26/14	0.0	18.4	-2.3	-	111	100	33 [11]
SVE-15	07/31/14	0.0	19.4	-0.4	-	100	100	420
SVE-15	08/28/14	0.3	18.5	-2.5	-	119	100	4,180

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-15	09/26/14	0.0	19.9	-0.3	-	98	100	160
SVE-15	10/24/14	0.0	19.8	-1.6	-	96	100	53
SVE-15	11/19/14	0.0	20.0	-2.0	-	103	100	33
SVE-15	12/17/14	0.0	19.3	-2.6	-	97	100	52
SVE-15	01/21/15	0.0	19.7	-3.1	-	98	100	110
SVE-15	02/26/15	0.0	20.1	-1.4	-	106	100	41
SVE-15	03/17/15	0.0	20.4	-2.5	-	111	100	15
SVE-15	04/17/15	0.0	19.6	-34.3	-	104	100	17
SVE-15	05/12/15	0.0	19.9	-31.8	-	92	100	17
SVE-15	06/25/15	0.0	18.5	-23.2	-	108	100	68
SVE-15	07/31/15	0.0	19.8	-23.0	-	93	100	39
SVE-15	08/19/15	0.0	20.1	-23.3	-	167 [10]	100	130
SVE-15	09/24/15	0.0	19.9	-36.7	-	161 [10]	100	180
SVE-15	10/22/15	0.0	20.6	-34.0	-	103	100	16
SVE-15	04/22/16	0.0	19.8	-1.2	50	0	-	690
SVE-15	10/26/16	0.0	19.7	-1.4	51	0	-	740
SVE-15	04/05/17	0.0	19.6	-0.1	50	0	-	940
SVE-15	10/30/17	0.1	17.4	0.0	54	0	-	1,230
SVE-15	05/17/18	0.0	20.2	-11.9	56	0	-	-
SVE-15	11/16/18	0.0	19.6	-12.2	50	0	-	0
SVE-15	04/26/19	0.0	20.3	-13.0	46	0	-	42
SVE-15	10/31/19	0.0	20.5	-14.6	54	0	-	74
SVE-15	06/23/20	0.0	20.1	-13.1	70	0	-	12
SVE-15	11/05/20	0.0	19.0	-12.2	52	0	-	135
SVE-15	04/22/21	0.0	20.3	-14.5	48	0	-	36
SVE-15	10/21/21	0.0	20.9	-11.0	61	0	-	47
SVE-15	04/28/22	0.0	19.9	-12.5	46	0	-	3,734
SVE-15	10/27/22	0.0	20.1	-8.8	58	0	-	133
SVE-15	12/21/23	0.0	-	-12.2	46	161	-	0
SVE-16	08/27/08 [1]	3.9	14.3	0.3	-	-	-	-
SVE-16	09/23/08	32.5	0.0	-31.8	-	93	90 - 100	-
SVE-16	09/25/08	13.7	0.3	-33.5	-	93	90 - 100	-
SVE-16	10/01/08	1.2	8.4	-34.2	-	91	90 - 100	-
SVE-16	10/07/08	0.4	13.0	-35.0	-	94	90 - 100	-
SVE-16	10/15/08	0.2	14.5	-35.1	-	95	90 - 100	-
SVE-16	10/30/08	0.1	15.8	-34.6	-	101	90 - 100	3,250
SVE-16	11/13/08	0.0	16.5	-34.9	-	110	90 - 100	-
SVE-16	11/26/08	0.0	17.3	-35.7	-	100	90 - 100	-
SVE-16	01/22/09 [3]	0.5	12.9	-33.8	-	100	90 - 100	26,900
SVE-16	02/05/09	0.0	16.0	-35.2	-	98	90 - 100	2,330
SVE-16	02/16/09	0.0	16.7	-33.9	-	104	90 - 100	2,310
SVE-16	03/16/09	0.0	16.4	-35.2	-	95	90 - 100	2,750
SVE-16	04/24/09	0.0	16.9	-34.5	-	95	90 - 100	2,350

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-16	05/20/09	0.0	16.8	-38.6	-	100	90 - 100	1,210
SVE-16	06/23/09	0.0	15.8	-37.6	-	91	90 - 100	1,680
SVE-16	07/23/09	0.0	16.5	-26.6	-	96	90 - 100	3,390
SVE-16	08/20/09	0.0	17.5	-21.5	-	100	100	3,110
SVE-16	09/23/09	0.0	18.0	-14.7	-	95	100	1,700
SVE-16	10/20/09	0.0	18.3	-16.8	-	95	100	1,060
SVE-16	11/24/09	0.0	17.5	-19.9	-	97	100	3,240
SVE-16	12/29/09	0.0	16.4	-21.7	-	92	100	1,960
SVE-16	01/29/10	0.0	19.2	-26.2	-	108	100	1,540
SVE-16	02/22/10	0.0	17.1	-24.4	-	92	100	2,920
SVE-16	03/26/10	0.0	15.9	-46.3	-	96	100	5,080
SVE-16	04/22/10	0.0	17.3	-44.2	-	0 [4]	100	1,140
SVE-16	05/18/10	0.0	16.9	-13.9	-	100	100	4,660
SVE-16	06/29/10	0.0	16.1	-17.7	-	103	100	3,050
SVE-16	07/23/10	0.0	16.4	-14.9	-	100	100	1,830
SVE-16	08/27/10	0.4	11.8	-8.8	-	52	100	2,470
SVE-16	10/01/10	0.0	12.4	-13.7	-	95	100	15,300
SVE-16	10/22/10	0.2	13.1	-11.9	-	98	100	36,300
SVE-16	11/29/10	0.0	16.8	-10.8	-	104	100	1,920
SVE-16	12/22/10	0.1	16.1	-13.2	-	103	100	662
SVE-16	01/24/11	0.2	16.2	-10.7	-	97	100	4,670
SVE-16	02/28/11	0.2	15.3	-14.9	-	97	100	3,460
SVE-16	04/13/11	0.3	15.5	-12.8	-	96	100	3,620
SVE-16	04/29/11	0.0	16.3	-13.1	-	92	100	8,910
SVE-16	05/27/11	0.0	16.9	-14.1	-	97	100	6,960
SVE-16	06/24/11	0.0	16.0	-15.0	-	98	100	4,230
SVE-16	07/22/11	0.0	15.4	-13.9	-	94	100	405
SVE-16	08/25/11	0.1	14.5	-15.3	-	100	100	20,410
SVE-16	09/30/11	0.0	20.7	-11.9	-	- [9]	100	0
SVE-16	10/26/11	0.0	16.4	-19.6	-	- [9]	100	2,080
SVE-16	11/22/11	0.0	20.2	-28.6	-	105	100	2,000
SVE-16	12/29/11	0.0	20.1	-39.1	-	104	100	1,600
SVE-16	01/26/12	0.0	18.8	-28.5	-	106	100	6,720
SVE-16	02/21/12	0.0	19.6	-13.3	-	92	100	1,500
SVE-16	03/30/12	0.0	19.1	-15.2	-	96	100	2,365
SVE-16	04/27/12	0.0	19.0	-36.3	-	99	100	2,250
SVE-16	05/25/12	0.1	19.8	-45.5	-	58	100	1,422
SVE-16	06/26/12	0.0	18.4	-13.1	-	107	100	420
SVE-16	07/25/12	0.0	18.6	-38.6	-	95	100	350
SVE-16	08/22/12	0.0	19.6	-23.9	-	105	100	340
SVE-16	09/25/12	0.0	20.1	-9.3	-	100	100	6
SVE-16	10/30/12	0.0	20.1	-6.2	-	97	100	NA [11]
SVE-16	11/21/12	0.0	20.4	-6.0	-	102	100	83
SVE-16	12/21/12 [12]	0.0	20.5	-9.1	-	86	100	731

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-16	01/03/13 [12]	0.0	20.4	-12.5	-	106	100	20
SVE-16	01/28/13	0.0	20.8	-34.0	-	0 [4]	100	190
SVE-16	02/27/13	0.0	21.1	-44.8	-	0 [4]	100	84
SVE-16	03/25/13	0.0	18.4	-48.3	-	105	100	2,400
SVE-16	04/26/13	0.0	20.0	-46.8	-	0 [4]	100	501
SVE-16	05/30/13	0.0	20.3	-42.8	-	97	100	21
SVE-16	06/27/13	0.0	20.2	-40.8	-	0 [4]	100	28
SVE-16	07/25/13	0.0	19.7	-42.3	-	0 [4]	100	120
SVE-16	08/30/13	0.0	20.0	-40.1	-	0 [4]	100	10
SVE-16	09/25/13	0.0	20.3	-40.8	-	0 [4]	100	56
SVE-16	10/23/13	0.0	20.5	-43.8	-	102	100	8
SVE-16	11/20/13	0.0	20.2	-44.6	-	109	100	1
SVE-16	12/18/13	0.0	20.1	-44.4	-	103	100	14
SVE-16	05/13/14 [13]	0.0	20.4	-43.5	-	0 [4]	100	25,620
SVE-16	05/28/14 [13]	0.0	19.8	-17.7	-	83	100	3,630
SVE-16	06/26/14	0.0	20.0	-6.8	-	0 [4]	100	27 [11]
SVE-16	07/31/14	0.0	17.8	-9.6	-	0 [4]	100	1,120
SVE-16	08/28/14	0.0	20.7	-12.9	-	0 [4]	100	5,250
SVE-16	09/26/14	0.0	20.2	-1.4	-	0 [4]	100	22
SVE-16	10/24/14	0.0	20.4	-2.2	-	0 [4]	100	88
SVE-16	11/19/14	0.0	20.5	-2.8	-	0 [4]	100	4
SVE-16	12/17/14	0.0	20.9	-4.3	-	97	100	95
SVE-16	01/21/15	0.0	20.3	-4.3	-	0 [15]	100	70
SVE-16	02/26/15	0.0	20.8	-3.8	-	94	100	93
SVE-16	03/17/15	0.0	21.0	-4.7	-	0 [15]	100	20
SVE-16	04/17/15	0.0	20.2	-3.6	-	0 [15]	100	18
SVE-16	05/12/15	0.0	20.3	-5.8	-	0 [15]	100	31
SVE-16	06/25/15	0.0	19.1	-2.2	-	0 [15]	100	8
SVE-16	07/31/15	0.0	20.4	-2.0	-	0 [15]	100	38
SVE-16	08/19/15	0.0	21.1	-4.2	-	0 [15]	100	25
SVE-16	09/24/15	0.0	20.9	-2.4	-	0 [15]	100	56
SVE-16	10/22/15	0.0	21.3	-2.4	-	0 [15]	100	9
SVE-16	04/22/16	0.0	18.9	-2.7	50	0	-	77
SVE-16	10/26/16	0.0	19.2	-0.9	51	0	-	88
SVE-16	04/05/17	0.0	19.4	0.3	50	0	-	407
SVE-16	10/30/17	0.0	19.1	0.0	54	0	-	611
SVE-16	05/17/18	0.0	17.3	-9.0	56	0	-	-
SVE-16	11/16/18	0.0	21.0	-12.9	50	0	-	453
SVE-16	04/26/19	0.0	20.4	-11.5	46	0	-	48
SVE-16	10/31/19	0.0	21.7	-15.0	54	0	-	208
SVE-16	06/23/20	0.0	19.5	-3.6	70	0	-	4
SVE-16	11/05/20	0.0	19.0	-12.6	52	0	-	0
SVE-16	04/22/21	0.0	20.4	-14.0	48	0	-	32
SVE-16	10/21/21	0.0	19.1	-10.9	61	0	-	0

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-16	04/28/22	0.0	20.9	-12.0	46	0	-	0
SVE-16	10/27/22	0.0	20.1	-9.6	58	0	-	1
SVE-16	12/21/23	0.0	-	-12.2	46	0	-	0
SVE-17	08/27/08 [1]	1.1	0.7	0.4	-	-	-	-
SVE-17	09/23/08 [2]	-	-	-	-	-	90 - 100	-
SVE-17	09/25/08 [2]	-	-	-	-	-	90 - 100	-
SVE-17	10/01/08 [2]	-	-	-	-	-	90 - 100	-
SVE-17	10/07/08	0.0	9.6	-47.2	-	0	90 - 100	-
SVE-17	10/15/08	0.0	12.6	-47.3	-	0	90 - 100	-
SVE-17	10/30/08	0.0	14.4	-47.0	-	0	90 - 100	290
SVE-17	11/13/08	0.0	16.0	-47.0	-	0	90 - 100	-
SVE-17	11/26/08	0.0	16.9	-47.9	-	0	90 - 100	-
SVE-17	01/22/09 [3,7]	0.0	15.9	-49.5	-	-	90 - 100	430
SVE-17	02/05/09	0.0	16.9	-49.9	-	28	90 - 100	70
SVE-17	02/16/09	0.0	17.9	-48.2	-	39	90 - 100	134
SVE-17	03/16/09	0.0	17.5	-49.1	-	-	90 - 100	99
SVE-17	04/24/09	0.0	18.1	-47.0	-	0	90 - 100	303
SVE-17	05/20/09	0.0	18.1	-46.5	-	0	90 - 100	77
SVE-17	06/23/09	0.0	17.5	-44.4	-	0	90 - 100	176
SVE-17	07/23/09	0.0	17.5	-43.9	-	0	90 - 100	354
SVE-17	08/20/09	0.0	17.9	-42.7	-	0	50	242
SVE-17	09/23/09	0.0	18.1	-43.6	-	0	50	278
SVE-17	10/20/09	0.0	18.3	-47.0	-	0	50	21
SVE-17	11/24/09	0.0	18.0	-46.6	-	0	50	92
SVE-17	12/29/09	0.0	16.9	-47.2	-	0	50	152
SVE-17	01/29/10	0.0	19.5	-47.4	-	0	50	14
SVE-17	02/22/10	0.0	18.8	-46.2	-	0	50	176
SVE-17	03/26/10	0.0	17.2	-46.4	-	0	50	214
SVE-17	04/22/10	0.0	18.1	-43.7	-	0	50	20
SVE-17	05/18/10	0.0	17.8	-45.2	-	0	50	750
SVE-17	06/29/10	0.0	17.8	-45.6	-	0	50	155
SVE-17	07/23/10	0.0	18.5	-42.4	-	0	50	134
SVE-17	08/27/10	1.1	11.6	-44.2	-	0	50	3,270
SVE-17	10/01/10	1.3	13.6	-47.5	-	0	50	NA [6]
SVE-17	10/22/10	0.2	16.2	-46.3	-	0	50	29,500
SVE-17	11/29/10	0.0	18.3	-47.3	-	0	50	290
SVE-17	12/22/10	0.2	18.1	-49.4	-	31	50	2,170
SVE-17	01/24/11	0.1	17.7	-49.2	-	0	50	250
SVE-17	02/28/11	0.1	17.2	-49.9	-	0	50	139
SVE-17	04/13/11	0.0	18.5	-48.7	-	0	50	220
SVE-17	04/29/11	0.0	19.8	-3.9	-	46	50	615
SVE-17	05/27/11	0.0	20.3	-1.5	-	49	50	660
SVE-17	06/24/11	0.0	20.1	-1.9	-	52	50	200

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-17	07/22/11	0.0	18.7	-3.7	-	48	50	140
SVE-17	08/25/11	0.9	17.6	-27.4	-	48	50	> 50,000
SVE-17	09/30/11	0.0	20.7	-3.2	-	51	50	0
SVE-17	10/26/11	0.0	19.1	-2.4	-	55	50	9
SVE-17	11/22/11	0.0	20.2	-1.9	-	46	50	210
SVE-17	12/29/11	0.0	20.3	-3.5	-	47	50	350
SVE-17	01/26/12	0.0	19.9	-1.6	-	55	50	88
SVE-17	02/21/12	0.0	20.3	-1.1	-	47	50	107
SVE-17	03/30/12	0.0	20.6	-0.2	-	54	50	91
SVE-17	04/27/12	0.0	18.8	-44.8	-	61	50	150
SVE-17	05/25/12	0.0	19.9	-4.1	-	34	50	87
SVE-17	06/26/12	0.0	19.2	-5.4	-	55	50	550
SVE-17	07/25/12	0.0	17.9	-26.2	-	0 [4]	50	540
SVE-17	08/22/12	0.0	19.1	-8.7	-	54	50	110
SVE-17	09/25/12	0.0	19.7	-8.9	-	54	50	6
SVE-17	10/30/12	0.0	19.7	-6.1	-	52	50	NA [11]
SVE-17	11/21/12	0.0	20.2	-1.3	-	49	50	79
SVE-17	12/21/12 [12]	0.2	20.1	-5.5	-	46	50	2,260
SVE-17	01/03/13 [12]	0.0	20.0	-4.3	-	50	50	145
SVE-17	01/28/13	0.0	20.7	-4.6	-	0 [4]	50	271
SVE-17	02/27/13	0.0	20.5	-4.8	-	42	50	107
SVE-17	03/25/13	0.0	20.2	-0.2	-	47	50	318
SVE-17	04/26/13	0.0	18.1	-30.6	-	66	50	2,800
SVE-17	05/30/13	0.0	19.5	-17.3	-	66	50	300
SVE-17	06/27/13	0.0	20.2	-40.9	-	50	50	1,190
SVE-17	07/25/13	0.0	18.9	-36.6	-	54	50	38
SVE-17	08/30/13	0.0	19.9	0.4	-	58	50	33
SVE-17	09/25/13	0.0	20.2	-28.0	-	52	50	48
SVE-17	10/23/13	0.0	20.1	-14.2	-	57	50	8
SVE-17	11/20/13	0.0	20.1	-14.4	-	55	50	52
SVE-17	12/18/13	0.0	20.0	-6.4	-	57	50	43
SVE-17	05/13/14 [13,14]	-	-	-	-	-	50	-
SVE-17	05/28/14 [13]	0.0	19.4	-21.4	-	0 [4]	50	100
SVE-17	06/26/14	0.0	20.0	0.0	-	0 [4]	50	4 [11]
SVE-17	07/31/14	0.0	20.7	1.3	-	0 [4]	50	64
SVE-17	08/28/14	0.0	20.6	-0.3	-	50	50	60
SVE-17	09/26/14	0.0	20.2	0.6	-	45	50	6
SVE-17	10/24/14	0.0	20.1	0.0	-	42	50	16
SVE-17	11/19/14	0.0	20.5	-0.3	-	65	50	20
SVE-17	12/17/14	0.0	20.9	-0.5	-	54	50	38
SVE-17	01/21/15	0.0	20.3	-0.6	-	51	50	22
SVE-17	02/26/15	0.0	20.6	-1.1	-	57	50	60
SVE-17	03/17/15	0.0	21.0	-46.7	-	47	50	17
SVE-17	04/17/15	0.0	18.7	-43.5	-	57	50	22

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-17	05/12/15	0.0	19.7	-42.0	-	47	50	12
SVE-17	06/25/15	0.0	18.2	-36.9	-	54	50	21
SVE-17	07/31/15	0.0	20.2	-36.6	-	0 [4]	50	31
SVE-17	08/19/15	0.0	20.3	-39.5	-	48	50	32
SVE-17	09/24/15	0.0	20.2	-46.0	-	50	50	51
SVE-17	10/22/15	0.0	20.5	-43.3	-	65	50	18
SVE-17	04/22/16	0.0	18.9	-0.2	50	0	-	25
SVE-17	10/26/16	0.0	15.8	-0.8	51	0	-	NA [6]
SVE-17	04/05/17	0.0	15.0	-0.1	50	0	-	NA [6]
SVE-17	10/30/17	0.0	15.2	0.0	54	0	-	NA [6]
SVE-17	05/17/18	0.0	19.3	-11.6	56	0	-	-
SVE-17	11/16/18	0.0	20.4	-12.8	50	0	-	123
SVE-17	04/26/19	0.0	20.1	-12.3	46	0	-	74
SVE-17	10/31/19	0.0	21.3	-14.1	54	0	-	115
SVE-17	06/23/20	0.0	20.0	-13.0	70	0	-	369
SVE-17	11/05/20	0.0	19.8	-12.0	52	0	-	1,277
SVE-17	04/22/21	0.0	20.5	-14.0	48	0	-	13
SVE-17	10/21/21	0.0	20.9	-10.8	61	0	-	832
SVE-17	04/28/22	0.0	20.2	-11.6	46	0	-	9
SVE-17	10/27/22	0.0	20.2	-8.7	58	0	-	374
SVE-17	12/21/23	0.0	-	-11.9	46	131	-	0
SVE-18	08/27/08 [1]	0.2	5.2	0.6	-	-	-	-
SVE-18	09/23/08	2.8	1.6	-25.8	-	86	90 - 100	-
SVE-18	09/25/08	0.7	4.9	-27.4	-	80	90 - 100	-
SVE-18	10/01/08	0.0	12.1	-28.0	-	90	90 - 100	-
SVE-18	10/07/08	0.0	14.7	-27.7	-	93	90 - 100	-
SVE-18	10/15/08	0.0	16.1	-27.9	-	96	90 - 100	-
SVE-18	10/30/08	0.0	17.3	-26.8	-	88	90 - 100	0
SVE-18	11/13/08	0.0	17.9	-25.9	-	102	90 - 100	-
SVE-18	11/26/08	0.0	18.9	-26.9	-	99	90 - 100	-
SVE-18	01/22/09 [3]	0.0	18.0	-11.6	-	101	90 - 100	52
SVE-18	02/05/09	0.0	18.1	-11.0	-	96	90 - 100	0
SVE-18	02/16/09	0.0	18.7	-11.2	-	104	90 - 100	135
SVE-18	03/16/09	0.0	18.7	-10.0	-	100	90 - 100	32
SVE-18	04/24/09	0.0	19.0	-11.0	-	99	90 - 100	212
SVE-18	05/20/09	0.0	18.8	-9.6	-	100	90 - 100	61
SVE-18	06/23/09	0.0	17.8	-9.5	-	97	90 - 100	136
SVE-18	07/23/09	0.0	17.5	-8.8	-	101	90 - 100	232
SVE-18	08/20/09	0.0	18.1	-5.0	-	46	50	140
SVE-18	09/23/09	0.0	17.9	-4.4	-	46	50	216
SVE-18	10/20/09	0.0	18.3	-4.6	-	45	50	0
SVE-18	11/24/09	0.0	18.1	-4.3	-	48	50	45
SVE-18	12/29/09	0.0	17.1	-4.7	-	36	50	138

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-18	01/29/10	0.0	19.5	-4.8	-	30	50	1
SVE-18	02/22/10	0.0	18.6	-4.4	-	38	50	162
SVE-18	03/26/10	0.0	17.3	-3.8	-	46	50	135
SVE-18	04/22/10	0.0	18.1	-5.4	-	45	50	4
SVE-18	05/18/10	0.0	17.5	-5.4	-	55	50	671
SVE-18	06/29/10	0.0	17.4	-6.1	-	54	50	105
SVE-18	07/23/10	0.0	17.3	-5.4	-	46	50	133
SVE-18	08/27/10	0.0	11.9	-4.1	-	53	50	280
SVE-18	10/01/10	0.0	15.0	-5.5	-	51	50	113
SVE-18	10/22/10	0.0	16.5	-4.6	-	51	50	287
SVE-18	11/29/10	0.0	17.4	-5.2	-	48	50	133
SVE-18	12/22/10	0.1	18.0	-5.8	-	56	50	80
SVE-18	01/24/11	0.1	3.1	5.0	-	47	50	290
SVE-18	02/28/11	0.0	16.6	-5.0	-	46	50	86
SVE-18	04/13/11	0.0	17.6	-5.1	-	0 [4]	50	83
SVE-18	04/29/11	0.0	18.3	-7.0	-	49	50	725
SVE-18	05/27/11	0.0	18.1	-5.0	-	49	50	560
SVE-18	06/24/11	0.0	17.8	-7.6	-	47	50	40
SVE-18	07/22/11	0.0	16.3	-6.4	-	57	50	45
SVE-18	08/25/11	0.0	17.1	-6.8	-	56	50	610
SVE-18	09/30/11	0.0	20.6	-2.9	-	51	50	0
SVE-18	10/26/11	0.0	16.9	-4.7	-	48	50	3
SVE-18	11/22/11	0.0	18.1	-4.4	-	45	50	29
SVE-18	12/29/11	0.0	18.4	-6.1	-	47	50	310
SVE-18	01/26/12	0.0	18.6	-4.1	-	46	50	70
SVE-18	02/21/12	0.0	18.4	-7.5	-	53	50	33
SVE-18	03/30/12	0.0	18.4	-3.7	-	50	50	76
SVE-18	04/27/12	0.0	17.5	-9.7	-	55	50	160
SVE-18	05/25/12	0.0	17.8	-10.7	-	58	50	180
SVE-18	06/26/12	0.0	17.2	-5.2	-	45	50	140
SVE-18	07/25/12	0.0	17.8	-9.3	-	47	50	170
SVE-18	08/22/12	0.0	17.1	-4.2	-	51	50	150
SVE-18	09/25/12	0.0	17.3	-8.9	-	47	50	9
SVE-18	10/30/12	0.0	18.0	-4.4	-	52	50	NA [11]
SVE-18	11/21/12	0.0	18.2	-4.6	-	54	50	0
SVE-18	12/21/12 [12]	0.1	16.5	-5.1	-	57	50	386
SVE-18	01/03/13 [12]	0.0	18.2	-5.4	-	0 [4]	50	80
SVE-18	01/28/13	0.0	18.4	-5.8	-	0 [4]	50	457
SVE-18	02/27/13	0.0	18.7	-2.0	-	0 [4]	50	41
SVE-18	03/25/13	0.0	18.5	-2.3	-	50	50	524
SVE-18	04/26/13	0.0	17.5	-0.4	-	51	50	75
SVE-18	05/30/13	0.0	18.4	-11.0	-	54	50	17
SVE-18	06/27/13	0.0	20.4	2.9	-	93	50	38
SVE-18	07/25/13	0.0	17.6	-4.9	-	46	50	73
SVE-18	08/30/13	0.0	18.1	0.4	-	0 [4]	50	7
SVE-18	09/25/13	0.0	18.3	-3.7	-	52	50	37

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-18	10/23/13	0.0	18.4	-3.9	-	51	50	11
SVE-18	11/20/13	0.0	17.9	-3.4	-	56	50	41
SVE-18	12/18/13	0.0	18.9	-3.3	-	57	50	4
SVE-18	05/13/14 [13]	0.0	14.1	-6.7	-	45	50	910
SVE-18	05/28/14 [13, 14]	-	-	-	-	-	50	-
SVE-18	06/26/14	0.0	17.2	-11.0	-	0 [4]	50	3 [11]
SVE-18	07/31/14	0.0	19.1	-12.3	-	54	50	82
SVE-18	08/28/14	0.0	15.2	-14.4	-	63	50	330
SVE-18	09/26/14	0.0	16.7	-2.2	-	62	50	29
SVE-18	10/24/14	0.0	17.6	-2.7	-	55	50	150
SVE-18	11/19/14	0.0	17.9	-2.8	-	55	50	8
SVE-18	12/17/14	0.0	19.3	-3.0	-	57	50	33
SVE-18	01/21/15	0.0	18.3	-3.2	-	60	50	61
SVE-18	02/26/15	0.0	18.6	-3.2	-	46	50	110
SVE-18	03/17/15	0.0	19.3	-3.3	-	0 [4]	50	71
SVE-18	04/17/15	0.0	18.6	-17.0	-	47	50	37
SVE-18	05/12/15	0.0	18.9	-20.2	-	43	50	94
SVE-18	06/25/15	0.0	17.5	-17.1	-	43	50	28
SVE-18	07/31/15	0.0	18.5	-17.4	-	48	50	42
SVE-18	08/19/15	0.0	18.9	-5.8	-	53	50	26
SVE-18	09/24/15	0.0	18.1	-4.6	-	54	50	47
SVE-18	10/22/15	0.0	18.8	-4.2	-	0 [4]	50	12
SVE-18	04/22/16	0.0	16.8	-2.4	50	0	-	12
SVE-18	10/26/16	0.0	19.4	-1.0	51	0	-	100
SVE-18	04/05/17	0.0	19.2	-0.3	50	0	-	394
SVE-18	10/30/17	0.0	20.1	0.0	54	0	-	890
SVE-18	05/17/18	0.0	14.8	-8.4	56	0	-	-
SVE-18	11/16/18	0.0	15.4	-8.9	50	0	-	0
SVE-18	04/26/19	0.0	15.3	-8.4	46	0	-	56
SVE-18	10/31/19	0.0	15.6	-9.0	54	0	-	139
SVE-18	06/23/20	0.0	19.9	-0.1	70	0	-	0
SVE-18	11/05/20	0.0	13.7	-8.3	52	0	-	0
SVE-18	04/22/21	0.0	15.6	-13.3	48	0	-	7
SVE-18	10/21/21	0.0	20.8	-7.6	61	0	-	25
SVE-18	04/28/22	0.0	15.7	-7.7	46	0	-	0
SVE-18	10/27/22	0.0	14.5	-6.6	58	0	-	47
SVE-18	12/21/23	0.0	-	-7.4	46	944	-	0
SVE-19	08/27/08 [1]	8.8	2.1	0.2	-	-	-	-
SVE-19	09/23/08 [2]	-	-	-	-	-	90 - 100	-
SVE-19	09/25/08 [2]	-	-	-	-	-	90 - 100	-
SVE-19	10/01/08	0.0	9.0	-49.3	-	40	90 - 100	-
SVE-19	10/07/08	0.0	13.3	-46.8	-	33	90 - 100	-
SVE-19	10/15/08	0.0	15.3	-46.9	-	54	90 - 100	-
SVE-19	10/30/08	0.0	16.1	-46.2	-	52	90 - 100	80
SVE-19	11/13/08	0.0	16.5	-46.2	-	55	90 - 100	-

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-19	11/26/08	0.0	17.2	-47.2	-	53	90 - 100	-
SVE-19	01/22/09 [3]	0.0	17.1	-49.2	-	31	90 - 100	569
SVE-19	02/05/09	0.0	18.0	-49.4	-	24	90 - 100	35
SVE-19	02/16/09	0.0	18.5	-47.7	-	42	90 - 100	135
SVE-19	03/16/09	0.0	17.7	-48.7	-	40	90 - 100	418
SVE-19	04/24/09	0.0	17.4	-46.4	-	50	90 - 100	312
SVE-19	05/20/09	0.0	17.8	-45.8	-	37	90 - 100	83
SVE-19	06/23/09	0.0	17.3	-44.0	-	30	90 - 100	169
SVE-19	07/23/09	0.0	17.2	-43.6	-	55	90 - 100	345
SVE-19	08/20/09	0.0	18.2	-27.7	-	51	50	215
SVE-19	09/23/09	0.0	18.5	-10.4	-	46	50	295
SVE-19	10/20/09	0.0	18.2	-14.2	-	47	50	10
SVE-19	11/24/09	0.0	18.0	-9.9	-	58	50	0
SVE-19	01/29/10	0.0	19.5	-10.5	-	55	50	13
SVE-19	02/22/10	0.0	18.9	-8.7	-	52	50	184
SVE-19	03/26/10	0.0	17.4	-16.5	-	48	50	162
SVE-19	04/22/10	0.0	18.1	-11.9	-	55	50	12
SVE-19	05/18/10	0.0	17.6	-15.0	-	50	50	697
SVE-19	06/29/10	0.0	17.2	-18.3	-	53	50	164
SVE-19	07/23/10	0.0	18.1	-16.0	-	56	50	148
SVE-19	08/27/10	0.0	14.9	-15.6	-	52	50	312
SVE-19	10/01/10	0.0	14.4	-11.2	-	54	50	2,100
SVE-19	10/22/10	0.0	16.5	-8.8	-	40	50	4,280
SVE-19	11/29/10	0.0	17.8	-8.3	-	52	50	157
SVE-19	12/22/10	0.1	17.1	-8.4	-	47	50	145
SVE-19	01/24/11	0.1	17.3	-7.1	-	15	50	128
SVE-19	02/28/11	0.0	16.4	-18.2	-	48	50	113
SVE-19	04/13/11	0.0	16.7	-12.9	-	0 [4]	50	120
SVE-19	04/29/11	0.0	16.4	-3.8	-	50	50	915
SVE-19	05/29/11	0.0	18.3	-46.9	-	56	50	630
SVE-19	06/24/11	0.0	17.3	-8.1	-	51	50	166
SVE-19	07/22/11	0.0	18.0	-35.4	-	56	50	150
SVE-19	08/25/11	0.0	15.4	-9.7	-	54	50	4,210
SVE-19	09/30/11	0.0	17.7	-7.6	-	54	50	300
SVE-19	10/26/11	0.0	16.4	-3.7	-	45	50	8
SVE-19	11/22/11	0.0	17.7	-6.0	-	52	50	170
SVE-19	12/29/11	0.0	17.9	-3.2	-	52	50	370
SVE-19	01/26/12	0.0	18.6	-1.4	-	46	50	114
SVE-19	02/21/12	0.0	18.8	-2.6	-	50	50	135
SVE-19	03/30/12	0.0	19.5	-15.0	-	55	50	59
SVE-19	04/27/12	0.0	17.8	-6.9	-	0 [4]	50	50
SVE-19	05/25/12	0.0	19.1	-1.8	-	0 [4]	50	46
SVE-19	06/26/12	0.0	18.6	-45.2	-	0 [4]	50	100
SVE-19	07/25/12	0.0	18.3	-45.1	-	0 [4]	50	110
SVE-19	08/22/12	0.0	16.9	-33.0	-	50	50	100
SVE-19	09/25/12	0.0	20.0	-6.6	-	51	50	8

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-19	10/30/12	0.0	18.2	-9.2	-	0 [4]	50	NA [11]
SVE-19	11/21/12	0.0	18.4	-20.8	-	49	50	120
SVE-19	12/21/12 [12]	0.0	15.9	-12.2	-	56	50	169
SVE-19	01/03/13 [12]	0.0	18.0	-11.6	-	0 [4]	50	68
SVE-19	01/28/13	0.0	19.2	-42.8	-	60	50	112
SVE-19	02/27/13	0.0	19.1	-27.4	-	70	50	58
SVE-19	03/25/13	0.0	19.2	-27.6	-	69	50	320
SVE-19	04/26/13	0.0	16.0	-0.6	-	0 [4]	50	177
SVE-19	05/30/13	0.0	19.6	-33.2	-	55	50	23
SVE-19	06/27/13	0.0	18.0	-32.0	-	51	50	42
SVE-19	07/25/13	0.0	18.3	-40.8	-	47	50	120
SVE-19	08/30/13	0.0	18.6	-37.5	-	0 [4]	50	20
SVE-19	09/25/13	0.0	20.4	-38.7	-	45	50	87
SVE-19	10/23/13	0.0	18.3	-43.5	-	0 [4]	50	11
SVE-19	11/20/13	0.0	18.3	0.0	-	42	50	53
SVE-19	12/18/13	0.0	19.0	-43.2	-	0 [4]	50	15
SVE-19	05/13/14 [13]	0.4	15.6	72.0	-	50	50	440
SVE-19	05/28/14 [13]	0.0	15.6	-21.4	-	33	50	130
SVE-19	06/26/14	0.0	17.0	-7.2	-	0 [4]	50	6 [11]
SVE-19	07/31/14	0.0	19.1	-14.2	-	58	50	890
SVE-19	08/28/14	0.7	15.5	-22.3	-	65	50	9,190
SVE-19	09/26/14	0.0	17.7	-5.0	-	68	50	14
SVE-19	10/24/14	0.0	18.2	-6.2	-	55	50	130
SVE-19	11/19/14	0.0	18.2	0.0	-	60	50	NA [6]
SVE-19	12/17/14	0.0	19.1	0.0	-	50	50	57
SVE-19	01/21/15	0.0	19.6	-10.3	-	56	50	14
SVE-19	02/26/15	0.0	19.1	-10.8	-	49	50	1,210
SVE-19	03/17/15	0.0	17.5	-9.4	-	0 [4]	50	740
SVE-19	04/17/15	0.0	19.2	-41.4	-	0 [4]	50	300
SVE-19	05/12/15	0.0	19.8	-39.8	-	55	50	280
SVE-19	06/25/15	0.0	19.0	-35.9	-	0 [15]	50	20
SVE-19	07/31/15	0.0	19.6	-35.1	-	0 [15]	50	4
SVE-19	08/19/15	0.0	19.5	-41.0	-	0 [15]	50	21
SVE-19	09/24/15	0.0	18.4	-44.3	-	0 [15]	50	44
SVE-19	10/22/15	0.0	19.9	-42.1	-	0 [15]	50	30
SVE-19	04/22/16	0.0	19.2	-13.2	50	0	-	19
SVE-19	10/26/16	0.0	19.9	-10.0	51	0	-	260
SVE-19	04/05/17	0.0	18.7	-0.9	50	0	-	681
SVE-19	10/30/17	0.0	20.4	0.0	54	0	-	1,046
SVE-19	05/17/18	0.0	19.7	-10.9	56	0	-	-
SVE-19	11/16/18	0.0	20.3	-13.2	50	0	-	226
SVE-19	04/26/19	0.0	20.2	-12.2	46	0	-	42
SVE-19	10/31/19	0.0	21.1	-14.6	54	0	-	7
SVE-19	06/23/20	0.0	19.3	-12.2	70	0	-	0

Historical SVE Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	Target Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
SVE-19	11/05/20	0.0	19.4	-11.7	52	0	-	135
SVE-19	04/22/21	0.0	20.9	-14.4	48	0	-	2,946
SVE-19	10/21/21	0.0	20.3	-10.9	61	0	-	97
SVE-19	04/28/22	0.0	20.9	-11.2	46	0	-	2
SVE-19	10/27/22	0.0	20.0	-8.8	58	0	-	26
SVE-19	12/21/23	0.0	-	-12.0	46	130	-	0

Notes:

*Readings for the first three quarters in 2023 were recorded using a FID. The fourth quarter in 2023 readings were recorded using a PID.

[1] Pre-startup readings

[2] No Air Flow due to obstructed well screen; therefore, field data was not collected

[3] System was restarted on 1/19/09 after being down for a month for SVE well cleaning and condensate collection system installation.

[4] Air flow is heard through the pipe, but no flow measurement could be determined.

[5] Valve was frozen shut

[6] No reading could be obtained; FID flamed out because of low oxygen level.

[7] Air flow could not be determined because ice formed in pitot tube lines during well cleaning.

[8] Air flow was higher due to vacuum in annular space around well.

[9] Air flow is heard through the pipe, but no flow measurement could be determined because valve on Pitot Tube was closed.

[10] Valve is stuck in place due to a bent valve stem and debris in valve.

[11] FID taken with Thermo Scientific TVA 1000 Vapor Analyzer.

[12] System was shutdown on 11/21/12 following monthly monitoring for 1 month shutdown period. Post 1 month shutdown monitoring was conducted at startup (12/21/12) and two weeks after startup (1/3/13).

[13] System was shutdown on 1/10/14 for a 4 month shutdown period. Post 4 month shutdown monitoring was conducted at startup (5/13/14) and two weeks after startup (5/28/14).

[14] No reading could be obtained due to blockage/water in the pipe.

[15] Well turned off due to vacuum in annular space around the well.

[16] Well is not under vaccum; unable to obtain flow reading.

[17] Valve is fully open.

[18] Values could not be determined due to equipment error.

With approval from the WDNR on 10/21/15, System modifications occurred on 10/29/15. Modifications included operating the system on a part time schedule (16 hrs/day) and operating only SVE wells SVE-4, SVE-6, SVE-7, SVE-12, SVE-13, and SVE-14. These wells are monitoried on a monthly basis. All other SVE wells will be monitored on a semi-annual basis (April and October) and will be "turned on" on an as needed basis.

With approval from the WDNR on 9/29/23, select SVE (4, 6, 7, 12, 13, and 14) wells monitoring frequency was changed to quarterly. Additionally, the VOC monitoring method was modified to use a PID rather than a FID. All other SVE wells will be monitored on a semi-annual basis (April and October) and will be "turned on" on an as needed basis.

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-1	08/27/08 [1]	52.1	0.0	0.1	70	-	-
LFG-1	09/23/08	53.4	0.0	-2.6	62	10	-
LFG-1	09/25/08	15.1	0.0	-3.2	58	10	-
LFG-1	10/01/08	2.9	0.0	-2.7	59	10	-
LFG-1	10/07/08	1.9	1.8	-2.9	62	11	-
LFG-1	10/15/08	1.2	3.5	-3.6	60	10	-
LFG-1	10/30/08	1.0	6.1	-2.8	64	9	-
LFG-1	11/13/08	1.1	5.3	-4.2	52	10	-
LFG-1	11/26/08	0.8	6.5	-3.7	54	10	-
LFG-1	01/22/09 [2]	2.3	7.0	-4.8	45	10	NA [3]
LFG-1	02/05/09	0.0	15.5	-3.3	44	10	19,500
LFG-1	02/16/09	0.0	9.9	-6.8	40	10	25,200
LFG-1	03/16/09	0.0	12.6	-5.0	50	10	13,800
LFG-1	04/24/09	0.0	15.7	-4.3	54	10	12,100
LFG-1	05/20/09	0.0	14.0	-4.3	60	10	5,840
LFG-1	06/23/09	0.0	11.2	-4.1	70	10	6,150
LFG-1	07/23/09	0.1	10.4	-3.0	74	10	16,000
LFG-1	08/20/09	0.0	10.8	-5.4	73	20	21,500
LFG-1	09/23/09	0.3	12.0	-4.2	80	20	31,800
LFG-1	10/20/09	0.5	11.6	-6.0	72	20	38,400
LFG-1	11/24/09	0.3	13.8	-5.6	66	20	4,230
LFG-1	12/29/09	0.3	14.2	-5.1	54	20	16,600
LFG-1	01/29/10	0.5	16.6	-5.1	47	20	13,380
LFG-1	02/22/10	0.8	13.2	-5.1	46	20	42,500
LFG-1	03/26/10	0.1	15.0	-4.7	49	20	19,360
LFG-1	04/22/10	0.0	14.8	-4.5	60	20	9,540
LFG-1	05/18/10	0.1	14.0	-4.2	62	20	36,800
LFG-1	06/29/10	0.3	10.2	-6.0	68	20	-
LFG-1	07/23/10	0.2	10.3	-4.7	74	20	NA [3]
LFG-1	08/27/10	15.0	0.0	-5.1	80	20	NA [3]
LFG-1	10/01/10	9.8	0.4	-6.8	72	20	NA [3]
LFG-1	10/22/10	6.7	3.0	-4.8	74	20	NA [3]
LFG-1	11/29/10	1.1	9.4	-6.8	62	20	NA [3]
LFG-1	12/22/10	3.0	7.3	-5.5	67	20	NA [3]
LFG-1	01/24/11	0.8	15.1	-5.2	63	20	26,030
LFG-1	02/28/11	0.6	15.6	-5.9	52	20	18,170
LFG-1	04/13/11	0.4	15.5	-7.0	55	20	16,300
LFG-1	04/29/11	0.6	13.4	-10.0	58	20	467
LFG-1	05/27/11	0.3	15.3	-6.6	52	20	39,400
LFG-1	06/24/11	0.6	12.2	-5.8	76	20	2,540
LFG-1	07/22/11	0.5	10.2	-4.8	66	20	NA [3]
LFG-1	08/25/11	7.8	1.1	-5.5	88	20	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-1	09/30/11	0.8	13.6	-6.2	88	20	32,100
LFG-1	10/26/11	0.6	13.9	-4.0	88	20	49,030
LFG-1	11/22/11	0.7	13.9	-3.9	82	25	45,100
LFG-1	12/29/11	0.6	14.1	-4.1	74	25	42,300
LFG-1	01/26/12	1.3	9.2	-4.0	72	25	NA [3]
LFG-1	02/21/12	0.4	16.8	-3.9	68	25	22,690
LFG-1	03/30/12	0.2	15.1	-5.0	70	25	10,054
LFG-1	04/27/12	0.1	14.3	-5.6	72	25	14,630
LFG-1	05/25/12	0.4	11.2	-8.8	80	25	NA [3]
LFG-1	06/26/12	1.0	7.6	-6.5	84	25	NA [3]
LFG-1	07/25/12	1.2	8.0	-8.3	92	25	NA [3]
LFG-1	08/22/12	0.4	11.9	-5.0	84	25	34,850
LFG-1	09/25/12	1.2	10.2	-4.3	80	25	NA [3]
LFG-1	10/30/12	0.6	14.2	-4.6	75	25	NA [6]
LFG-1	11/21/12	0.3	15.0	-4.2	68	25	40,670
LFG-1	12/21/12 [7]	13.0	3.5	-4.0	52	25	NA [3]
LFG-1	01/03/13 [7]	0.9	15.7	-4.3	75	25	39,470
LFG-1	01/28/13	0.4	16.7	-4.8	72	24	19,280
LFG-1	02/27/13	0.1	17.7	-4.6	51	25	9,290
LFG-1	03/25/13	0.5	16.2	-3.7	44	24	34,890
LFG-1	04/26/13	1.6	13.8	-8.5	80	25	12,620
LFG-1	05/30/13	0.1	17.7	-46.8	68	25	2,530
LFG-1	06/27/13	0.2	18.0	-13.6	75	26	15,490
LFG-1	07/25/13	0.1	15.3	-7.8	82	25	9,070
LFG-1	08/30/13	0.5	13.7	-5.0	85	25	9,040
LFG-1	09/25/13	0.6	14.6	-2.2	88	25	17,160
LFG-1	10/23/13	0.2	15.6	-4.4	82	25	10,390
LFG-1	11/20/13	0.6	16.0	-4.3	75	25	9,720
LFG-1	12/18/13	0.3	18.2	-4.5	67	25	NA[9]
LFG-1	05/13/14 [10]	10.4	7.9	-25.3	56	25	NA [3]
LFG-1	05/28/14 [10]	0.3	13.1	-13.0	61	25	27,900
LFG-1	06/26/14	0.0	16.2	-13.2	68	25	1,910 [6]
LFG-1	07/31/14	13.8	11.4	-6.8	74	25	7,750
LFG-1	08/28/14	24.8	2.1	-6.2	73	25	NA [3]
LFG-1	09/26/14	0.3	13.8	-4.4	82	25	2,330
LFG-1	10/24/14	0.3	15.8	-4.4	75	25	2,170
LFG-1	11/19/14	0.6	11.0	-5.4	71	25	6,240
LFG-1	12/17/14	0.0	19.3	-3.5	60	25	1,170
LFG-1	01/21/15	0.0	17.6	-4.0	62	25	940
LFG-1	02/26/15	0.3	11.8	-4.4	58	25	NA [3]
LFG-1	03/17/15	0.2	14.0	-4.1	48	25	NA [3]
LFG-1	04/17/15	0.1	11.3	-3.2	67	10	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-1	05/12/15	0.0	17.3	-3.9	60	25	490
LFG-1	06/25/15	0.0	15.5	-5.1	72	25	1,010
LFG-1	07/31/15	0.0	15.4	-5.4	77	25	22
LFG-1	08/19/15	0.1	15.4	-2.7	77	24	2,510
LFG-1	09/24/15	0.7	13.0	-4.5	80	25	2,790
LFG-1	10/22/15	0.2	16.8	-3.8	77	26	810
LFG-1	11/12/15	9.3	0.4	-0.9	73	6	NA [3]
LFG-1	12/17/15	37.3	0.7	-8.3	51	7	NA [3]
LFG-1	01/21/16	2.7	5.5	-2.6	63	7	NA [3]
LFG-1	02/24/16	2.4	3.7	0.8	51	8	NA [3]
LFG-1	03/22/16	1.1	4.5	-0.4	58	7	NA [3]
LFG-1	04/22/16	1.1	9.3	-2.0	56	9	NA [3]
LFG-1	05/19/16	0.1	14.2	-2.7	59	9	NA [3]
LFG-1	06/14/16	0.3	12.3	-2.1	66	10	NA [3]
LFG-1	07/27/16	0.9	9.5	-1.1	70	0 [8]	NA [3]
LFG-1	08/10/16	0.7	10.9	-0.8	75	9	NA [3]
LFG-1	09/15/16	1.5	8.8	-2.0	74	5	NA [3]
LFG-1	10/26/16	5.7	2.4	-1.9	44	10	NA [3]
LFG-1	11/23/16	7.2	0.7	-1.5	52	5	NA [3]
LFG-1	12/13/16	1.0	12.9	-1.3	33	7	870
LFG-1	01/10/17	5.7	3.3	-0.9	35	9	NA [3]
LFG-1	02/14/17	0.2	11.2	-1.7	46	6	NA [3]
LFG-1	03/07/17	4.4	2.1	-0.9	46	6	NA [3]
LFG-1	04/05/17	4.3	3.4	-14.0	51	10	NA [3]
LFG-1	05/25/17	5.8	2.1	-2.4	66	0 [8]	NA [3]
LFG-1	06/28/17	1.0	10.0	-1.0	68	0 [8]	NA [3]
LFG-1	07/24/17	1.5	9.6	-0.7	68	0 [8]	NA [3]
LFG-1	08/14/17	1.6	10.1	-1.1	68	0 [8]	NA [3]
LFG-1	09/13/17	1.9	8.6	-1.0	77	10	NA [3]
LFG-1	10/30/17	6.0	0.8	0.1	44	0 [8]	NA [3]
LFG-1	11/17/17	1.6	10.0	-1.0	41	0 [8]	NA [3]
LFG-1	12/07/17	1.4	12.4	-1.0	37	10	NA [3]
LFG-1	01/24/18	3.1	9.7	-12.0	62	0 [8]	NA [3]
LFG-1	02/13/18	0.2	18.0	-16.5	64	9	744
LFG-1	03/05/18	0.0	17.6	-16.2	49	8	811
LFG-1	04/04/18	0.0	19.0	-12.0	43	9	1,139
LFG-1	05/17/18	2.4	1.9	-9.1	56	0 [8]	-
LFG-1	07/03/18	0.8	8.4	-8.2	60	0 [8]	-
LFG-1	07/31/18	0.6	5.9	-10.2	70	0 [8]	-
LFG-1	08/30/18	12.0	0.1	-9.6	64	0 [8]	-
LFG-1	09/28/18	3.8	2.3	-12.4	54	0 [8]	NA [3]
LFG-1	11/16/18	4.1	6.0	-12.6	50	6	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-1	12/13/18	1.6	2.8	-12.7	48	5	NA [3]
LFG-1	01/23/19	3.4	1.6	-12.4	46	7	NA [3]
LFG-1	02/22/19	1.7	5.7	-12.2	42	7	NA [3]
LFG-1	04/02/19	0.6	8.9	-12.1	48	6	2,076
LFG-1	04/26/19	1.4	11.2	-12.3	52	5	NA [3]
LFG-1	05/29/19	0.3	9.2	-13.0	65	5	113
LFG-1	06/18/19	0.0	13.4	-12.2	66	5	NA [3]
LFG-1	07/23/19	0.6	10.9	-12.2	76	7	4,112
LFG-1	08/29/19	1.2	6.7	-12.3	78	6	NA [3]
LFG-1	09/12/19	1.7	8.9	-12.2	68	6	8,070
LFG-1	10/31/19	0.6	15.1	-14.3	58	6	9,757
LFG-1	11/25/19	1.7	16.1	-3.2	61	- [9]	-
LFG-1	02/18/20	0.8	17.3	-15.6	46	8	NA [3]
LFG-1	06/23/20	0.4	13.3	-14.0	67	5	2,832
LFG-1	08/17/20	1.0	10.7	-13.6	73	11	NA [3]
LFG-1	11/05/20	1.1	10.5	-12.9	69	15	NA [3]
LFG-1	01/20/21	1.3	5.2	-10.5	48	12	NA 1
LFG-1	02/19/21	0.0	20.4	-4.9	34	0 [8]	NA [9]
LFG-1	03/25/21	2.1	6.2	-13.8	44	13	NA [9]
LFG-1	04/22/21	0.0	17.8	-7.4	56	NA [9]	2,133
LFG-1	05/21/21	0.0	16.5	-12.3	60	5	0
LFG-1	06/17/21	0.0	15.7	-12.6	75	0 [8]	674
LFG-1	07/15/21	0.0	14.4	-4.6	59	16	NA [9]
LFG-1	08/12/21	2.7	2.5	-2.7	61	0 [8]	NA [3]
LFG-1	09/23/21	7.4	1.1	-5.4	74	54	NA [3]
LFG-1	10/21/21	0.7	15.4	-11.8	71	6	15,090
LFG-1	11/30/21	4.8	2.0	-10.6	54	12	NA [3]
LFG-1	12/21/21	2.1	4.2	-5.4	45	11	NA [3]
LFG-1	01/31/22	1.7	4.7	-11.5	50	4	1,056
LFG-1	02/28/22	0.6	17.6	-5.1	50	10	4,591
LFG-1	03/28/22	0.7	6.9	-5.5	46	11	NA [1]
LFG-1	04/28/22	0.6	15.3	-8.2	47	8	12,376
LFG-1	05/26/22	0.0	11.7	-7.4	53	6	2,920
LFG-1	06/23/22	0.0	15.1	-3.0	74	5	858
LFG-1	07/26/22	0.4	14.1	-11.4	76	3	4,572
LFG-1	08/23/22	0.4	13.4	-4.0	81	0	12,279
LFG-1	09/29/22	0.8	14.5	-3.9	69	8	1,023
LFG-1	10/27/22	0.5	15.4	-3.4	59	12	13,271
LFG-1	12/06/22	2.8	3.3	-6.4	44	15	NA [1]
LFG-1	1/12/2023	0.9	6.7	-6.8	50	18	5
LFG-1	2/16/2023	0.0	11.9	-10.0	46	12	NA [3]
LFG-1	3/20/2023	0.0	16.3	-10.0	45	29-31	3,390

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-1	4/13/2023	0.5	5.9	-16.4	63	3-6	NA [3]
LFG-1	5/2/2023	0.1	5.8	-11.4	54	1-5	NA [3]
LFG-1	6/22/2023	0.0	16.5	-13.6	74	13	2,835
LFG-1	7/31/2023	0.2	14.1	-11.4	75	10.00	8,161
LFG-1	8/31/2023	0.3	14.7	-10.2	75	10.00	10,473
LFG-1	9/28/2023	0.3	4.6	-8.0	73	17.00	1,023
LFG-1	12/21/2023	0.5	-	-6.8	54	26.00	0
LFG-2	08/27/08 [1]	47.8	0.0	0.3	70	-	-
LFG-2	09/23/08	50.2	0.0	-6.7	59	10	-
LFG-2	09/25/08	11.1	0.6	-7.3	56	8	-
LFG-2	10/01/08	0.7	5.8	-7.2	58	10	-
LFG-2	10/07/08	1.1	6.0	-8.4	60	10	-
LFG-2	10/15/08	1.0	5.3	-10.5	60	10	-
LFG-2	10/30/08	0.4	8.4	-15.6	64	10	-
LFG-2	11/13/08	0.4	6.5	-15.3	60	10	-
LFG-2	11/26/08	0.0	8.8	-15.2	60	10	-
LFG-2	01/22/09 [2]	1.2	7.9	-13.6	52	10	NA [3]
LFG-2	02/05/09	0.0	12.6	-13.3	50	10	3,200
LFG-2	02/16/09	0.0	10.1	-13.6	47	10	5,090
LFG-2	03/16/09	0.0	13.0	-13.8	54	10	1,750
LFG-2	04/24/09	0.0	15.8	-13.3	62	10	975
LFG-2	05/20/09	0.0	15.3	-13.2	62	10	466
LFG-2	06/23/09	0.0	13.1	-13.3	70	10	1,240
LFG-2	07/23/09	0.0	12.0	-12.6	74	10	5,620
LFG-2	08/20/09	0.0	11.2	-11.8	78	10	14,000
LFG-2	09/23/09	0.0	12.1	-10.7	84	10	8,730
LFG-2	10/20/09	0.0	11.1	-11.6	82	10	10,100
LFG-2	11/24/09	0.0	13.1	-12.2	76	10	1,740
LFG-2	12/29/09	0.0	14.0	-11.3	65	10	2,580
LFG-2	01/29/10	0.0	16.8	-11.3	50	10	1,133
LFG-2	02/22/10	0.3	12.8	-11.3	53	10	19,700
LFG-2	03/26/10	0.0	15.0	-11.0	55	10	2,340
LFG-2	04/22/10	0.0	15.9	-9.9	62	10	1,130
LFG-2	05/18/10	0.0	15.0	-9.2	68	10	5,710
LFG-2	06/29/10	0.0	12.7	-10.7	68	10	-
LFG-2	07/23/10	0.0	13.0	-9.1	80	10	6,930
LFG-2	08/27/10	12.7	0.0	-9.5	80	10	NA [3]
LFG-2	10/01/10	7.0	0.9	-11.4	77	10	NA [3]
LFG-2	10/22/10	3.5	4.8	-9.4	78	10	NA [3]
LFG-2	11/29/10	0.1	9.8	-9.8	62	10	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-2	12/22/10	1.9	9.9	-9.4	60	10	NA [3]
LFG-2	01/24/11	0.3	16.1	-10.9	55	10	4,260
LFG-2	02/28/11	0.1	16.3	-12.9	54	10	2,240
LFG-2	04/13/11	0.0	16.9	-15.9	56	10	2,140
LFG-2	04/29/11	0.0	16.5	-15.0	55	10	4,914
LFG-2	05/27/11	0.0	16.9	-13.9	52	10	5,510
LFG-2	06/24/11	0.0	16.2	-13.8	71	10	36,680
LFG-2	07/22/11	0.0	14.2	-12.2	66	10	1,590
LFG-2	08/25/11	3.3	9.6	-12.8	86	10	NA [3]
LFG-2	09/30/11	0.1	17.3	-12.8	94	10	3,400
LFG-2	10/26/11	0.0	16.0	-9.0	82	10	6,540
LFG-2	11/22/11	0.0	16.5	-8.4	82	10	5,170
LFG-2	12/29/11	0.0	16.6	-8.6	76	10	4,310
LFG-2	01/26/12	1.1	10.2	-8.1	72	10	NA [3]
LFG-2	02/21/12	0.0	17.6	-6.4	66	10	2,780
LFG-2	03/30/12	0.0	17.0	-6.2	65	10	1,565
LFG-2	04/27/12	0.0	16.4	-7.4	67	10	2,620
LFG-2	05/25/12	0.1	15.6	-10.7	80	10	2,350
LFG-2	06/26/12	0.4	9.1	-7.8	77	10	NA [3]
LFG-2	07/25/12	0.3	12.7	-11.1	86	10	6,240
LFG-2	08/22/12	0.0	15.8	-8.8	84	10	5,100
LFG-2	09/25/12	0.1	15.7	-6.9	70	10	2,580
LFG-2	10/30/12	0.0	16.7	-1.2	70	0 [5]	250 [6]
LFG-2	11/21/12	0.0	17.7	-6.3	64	10	200
LFG-2	12/21/12 [7]	6.7	7.4	-4.8	51	10	NA [3]
LFG-2	01/03/13 [7]	0.1	18.2	-4.9	68	10	4,940
LFG-2	01/28/13	0.0	19.0	-5.4	65	15	823
LFG-2	02/27/13	0.0	15.2	-1.7	63	11	17,530
LFG-2	03/25/13	0.1	17.2	-4.5	55	10	9,280
LFG-2	04/26/13	0.3	17.2	-11.6	80	10	12,140
LFG-2	05/30/13	0.0	18.9	-44.8	66	10	190
LFG-2	06/27/13	0.0	18.8	-12.4	75	11	1,590
LFG-2	07/25/13	0.0	17.2	-5.8	80	10	650
LFG-2	08/30/13	0.0	16.9	-4.9	81	10	120
LFG-2	09/25/13	0.1	17.3	-2.6	81	10	2,550
LFG-2	10/23/13	0.0	17.3	-3.2	76	10	1,680
LFG-2	11/20/13	0.2	17.6	-1.9	65	11	2,520
LFG-2	12/18/13 [4]	-	-	-	-	-	-
LFG-2	05/13/14 [10]	10.2	10.1	-12.3	56	10	NA [3]
LFG-2	05/28/14 [10]	0.0	16.4	-9.3	63	10	2,600
LFG-2	06/26/14	0.0	18.0	-11.7	68	11	320 [6]
LFG-2	07/31/14	3.9	12.0	-1.3	74	10	4,410

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-2	08/28/14	15.7	1.6	-2.0	76	10	NA [3]
LFG-2	09/26/14	0.0	17.4	-1.6	77	13	920
LFG-2	10/24/14	0.0	17.9	-2.4	68	10	1,300
LFG-2	11/19/14	0.0	15.1	-9.5	63	0 [8]	3,300
LFG-2	12/17/14	0.0	19.8	-3.5	58	10	270
LFG-2	01/21/15	0.0	18.9	-5.0	53	10	200
LFG-2	02/26/15	0.0	15.9	-8.0	52	10	700
LFG-2	03/17/15	0.0	15.9	-6.8	55	10	NA [3]
LFG-2	04/17/15	0.0	14.8	-4.4	67	10	NA [3]
LFG-2	05/12/15	0.0	18.7	-5.4	56	10	100
LFG-2	06/25/15	0.0	17.0	-1.6	67	10	230
LFG-2	07/31/15	0.0	17.7	-4.6	77	10	67
LFG-2	08/19/15	0.0	18.2	-3.2	72	10	180
LFG-2	09/24/15	0.0	17.6	-3.6	74	10	310
LFG-2	10/22/15	0.0	19.8	-2.8	73	10	330
LFG-2	11/12/15	2.0	1.6	-0.4	64	0 [11]	780
LFG-2	12/17/15	15.1	6.0	-0.1	51	0 [11]	NA [3]
LFG-2	01/21/16	1.1	0.7	-18.1	36	0 [8]	NA [3]
LFG-2	02/24/16	1.4	7.0	-14.9	47	10	NA [3]
LFG-2	03/22/16	0.6	7.0	-12.2	56	5	NA [3]
LFG-2	04/22/16	0.0	17.0	-10.5	61	0 [8]	270
LFG-2	05/19/16	0.0	16.2	-7.0	60	9	1,180
LFG-2	06/14/16	0.0	15.5	-4.8	66	7	NA [3]
LFG-2	07/27/16	0.0	13.1	-4.0	70	0 [8]	NA [3]
LFG-2	08/10/16	0.0	14.5	-2.2	76	10	NA [3]
LFG-2	09/15/16	0.1	9.7	-1.2	71	8	NA [3]
LFG-2	10/26/16	3.1	1.3	-0.7	43	7	NA [3]
LFG-2	11/23/16	3.2	0.2	-1.2	47	8	NA [3]
LFG-2	12/13/16	0.0	16.9	-0.1	35	7	1,000
LFG-2	01/10/17	2.7	2.4	-0.7	37	10	NA [3]
LFG-2	02/14/17	0.0	12.1	-1.2	41	10	NA [3]
LFG-2	03/07/17	0.8	1.8	-0.8	44	8	NA [3]
LFG-2	04/05/17	0.5	1.9	-14.1	50	8	NA [3]
LFG-2	05/25/17	1.1	2.2	-2.0	71	0 [8]	NA [3]
LFG-2	06/28/17	0.0	14.5	-0.8	70	0 [8]	NA [3]
LFG-2	07/24/17	0.0	14.7	-0.8	69	0 [8]	NA [3]
LFG-2	08/14/17	0.0	13.9	-0.6	68	8	NA [3]
LFG-2	09/13/17	0.1	13.6	-1.1	71	10	NA [3]
LFG-2	10/30/17	0.5	2.8	-0.6	41	0 [8]	NA [3]
LFG-2	11/17/17	0.0	20.7	-1.1	38	0 [8]	629
LFG-2	12/07/17	0.0	20.1	-1.1	36	0 [8]	590
LFG-2	01/24/18	0.4	17.8	-12.1	49	0 [8]	1,314

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-2	02/13/18	0.0	20.4	-16.4	55	0 [8]	471
LFG-2	03/05/18	0.0	19.8	-16.1	52	0 [8]	505
LFG-2	04/04/18	0.0	19.2	-11.9	48	0 [8]	870
LFG-2	05/17/18	0.0	8.1	-9.2	56	0 [8]	-
LFG-2	07/03/18	0.0	15.4	-8.2	58	0 [8]	-
LFG-2	07/31/18	0.0	14.4	-10.2	68	0 [8]	-
LFG-2	08/30/18	3.4	0.1	-9.2	61	0 [8]	-
LFG-2	09/28/18	0.4	6.7	-11.7	54	0 [8]	NA [3]
LFG-2	11/16/18	0.0	16.7	-12.5	50	7	1,485
LFG-2	12/13/18	11.4	1.2	-13.0	52	6	NA [3]
LFG-2	01/23/19	0.2	3.4	-11.9	39	8	NA [3]
LFG-2	02/22/19	0.1	8.7	-12.1	42	5	119
LFG-2	04/02/19	0.0	9.2	-11.7	50	6	1,630
LFG-2	04/26/19	0.0	15.8	-12.3	50	5	40
LFG-2	05/29/19	0.0	9.8	-13.2	66	5	32
LFG-2	06/18/19	0.0	16.4	-12.3	64	7	24
LFG-2	07/23/19	0.0	15.5	-11.9	76	8	147
LFG-2	08/29/19	0.0	13.0	-12.0	70	15	2,738
LFG-2	09/12/19	0.0	13.4	-12.2	62	12	3,137
LFG-2	10/31/19	0.0	16.9	-15.4	50	8	161
LFG-2	11/25/19	0.3	18.7	-6.4	56	- [9]	-
LFG-2	02/18/20	0.0	18.2	-15.4	45	10	647
LFG-2	06/23/20	0.0	10.3	-13.9	66	7	87
LFG-2	08/17/20	0.0	14.9	-13.7	72	3	198
LFG-2	11/05/20	0.1	13.6	-12.4	65	7	NA [3]
LFG-2	01/20/21	0.1	5.8	-10.3	40	8	NA [3]
LFG-2	02/19/21	0.0	20.7	-3.4	31	0 [8]	507
LFG-2	03/25/21	0.0	10.5	-13.6	44	4	NA [9]
LFG-2	04/22/21	0.0	18.8	-6.1	61	NA [9]	16
LFG-2	05/21/21	0.0	18.2	-12.4	64	0	0
LFG-2	06/17/21	0.0	17.8	-4.1	72	14	357
LFG-2	07/15/21	0.0	16.9	-8.1	62	14	NA [9]
LFG-2	08/12/21	0.4	6.6	-4.9	60	43	NA [3]
LFG-2	09/23/21	1.2	3.6	-7.0	74	6	NA [3]
LFG-2	10/21/21	0.0	18.7	-4.6	61	10	1,353
LFG-2	11/30/21	0.5	5.2	-10.5	52	9	NA [3]
LFG-2	12/21/21	0.1	5.3	-3.6	36	11	NA [3]
LFG-2	01/31/22	0.0	12.8	-3.6	31	0	155
LFG-2	02/28/22	0.1	17.6	-3.2	48	5	2,615
LFG-2	03/28/22	0.0	11.1	-3.0	44	10	2,920
LFG-2	04/28/22	0.0	17.4	-4.1	46	0	2,367
LFG-2	05/26/22	0.0	12.0	-11.6	53	5	35

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-2	06/23/22	0.0	18.2	-5.0	70	0	44
LFG-2	07/26/22	0.0	17.6	-11.3	72	5	919
LFG-2	08/23/22	0.0	16.1	-4.0	80	13	1,718
LFG-2	09/29/22	0.0	17.2	-10.0	70	11	1,902
LFG-2	10/27/22	0.0	17.8	-2.8	59	7	1,679
LFG-2	12/06/22	0.2	5.8	-3.0	42	6	NA [1]
LFG-2	1/12/2023	0.0	10.9	-3.2	44	5	1,008
LFG-2	2/16/2023	0.0	14.3	-4.4	40	9	3,342
LFG-2	3/20/2023	0.0	15.5	-14.1	44	29-32	310
LFG-2	4/13/2023	0.0	5.3	-17.4	67	7	-
LFG-2	5/2/2023	0.0	5.9	-16.0	53	9	68
LFG-2	6/22/2023	0.0	17.3	-13.6	80	10	793
LFG-2	7/31/2023	0.0	15.9	-10.7	73	3-6	1,329
LFG-2	8/31/2023	0.0	17.0	-10.2	71	14	1,930
LFG-2	9/28/2023	0.0	5.1	-7.8	70	9	2,103
LFG-2	12/21/2023	0.0	-	6.1	49	27	0
LFG-3	08/27/08 [1]	52.0	0.0	0.0	70	-	-
LFG-3	09/23/08	33.7	4.3	-14.3	64	10	-
LFG-3	09/25/08	5.2	7.9	-14.0	56	16	-
LFG-3	09/25/08	5.2	7.9	-12.2	56	10	-
LFG-3	10/01/08	0.8	9.8	-9.5	60	10	-
LFG-3	10/07/08	0.7	11.9	-9.4	60	11	-
LFG-3	10/15/08	0.5	13.0	-11.9	59	10	-
LFG-3	10/30/08	0.1	16.2	-9.2	60	10	-
LFG-3	11/13/08	0.0	18.0	-6.8	50	10	-
LFG-3	11/26/08	0.0	19.3	-3.7	40	10	-
LFG-3	01/22/09 [2]	1.2	13.5	-12.1	42	10	50,000
LFG-3	02/05/09	0.0	16.0	-8.6	40	10	3,640
LFG-3	02/16/09	0.4	11.5	-17.7	36	10	38,100
LFG-3	03/16/09	0.1	14.7	-15.8	44	10	8,520
LFG-3	04/24/09	0.0	17.4	-13.6	52	10	2,040
LFG-3	05/20/09	0.0	16.6	-13.8	60	10	624
LFG-3	06/23/09	0.0	16.7	-8.5	70	10	513
LFG-3	07/23/09	0.0	18.3	-3.2	70	10	550
LFG-3	08/20/09	0.0	13.9	-16.6	70	10	8,230
LFG-3	09/23/09	0.0	16.3	-9.1	73	10	2,600
LFG-3	10/20/09	0.0	18.1	-6.3	56	10	1,880
LFG-3	11/24/09	0.0	18.7	-5.0	52	10	202
LFG-3	12/29/09 [4]	-	-	-	-	-	-
LFG-3	01/29/10 [4]	-	-	-	-	-	-

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-3	02/22/10	0.0	18.0	-12.1	42	10	2,520
LFG-3	03/26/10	0.0	16.6	-12.1	46	10	924
LFG-3	04/22/10	0.0	17.4	-9.8	52	10	407
LFG-3	05/18/10	0.0	18.3	-3.9	64	10	1,140
LFG-3	06/29/10	0.0	15.4	-12.3	64	10	-
LFG-3	07/23/10	0.0	17.5	-4.8	68	10	750
LFG-3	08/27/10	10.7	7.8	-17.6	74	10	NA [3]
LFG-3	10/01/10	1.8	14.8	-9.0	60	10	NA [3]
LFG-3	10/22/10	0.2	18.6	-2.4	60	10	21,700
LFG-3	11/29/10	0.0	21.3	-2.3	54	10	12,100
LFG-3	12/22/10 [4]	-	-	-	-	-	-
LFG-3	01/24/11 [4]	-	-	-	-	-	-
LFG-3	02/28/11	0.0	18.9	-0.1	52	0 [5]	67
LFG-3	04/13/11	0.0	19.1	-7.1	40	10	1,100
LFG-3	04/29/11	0.1	18.7	-11.7	42	10	14,048
LFG-3	05/27/11	0.1	18.9	-2.7	52	10	9,230
LFG-3	06/24/11	0.5	16.1	-11.0	73	10	17,650
LFG-3	07/22/11	0.3	14.0	-15.0	66	10	3,849
LFG-3	08/25/11	5.0	11.7	-15.6	77	10	NA [3]
LFG-3	09/30/11	0.1	20.1	-1.1	59	10	4,210
LFG-3	10/26/11	0.0	18.9	-0.6	55	10	740
LFG-3	11/22/11	0.0	19.8	-0.6	48	10	130
LFG-3	12/29/11	0.0	19.6	-0.8	50	10	344
LFG-3	01/26/12	0.0	19.2	-0.9	65	10	503
LFG-3	02/21/12	0.0	19.8	-1.0	40	10	70
LFG-3	03/30/12	0.0	19.6	-2.5	40	10	261
LFG-3	04/27/12	0.0	18.9	-2.9	50	10	100
LFG-3	05/25/12	0.1	14.6	-24.0	64	10	2,030
LFG-3	06/26/12	0.8	9.9	-22.2	66	10	NA [3]
LFG-3	07/25/12	1.4	11.3	-33.7	82	10	5,290
LFG-3	08/22/12	0.5	14.5	-16.9	70	10	20,840
LFG-3	09/25/12	1.0	15.8	-8.3	60	10	18,710
LFG-3	10/30/12	0.0	19.1	-1.4	45	10	46 [6]
LFG-3	11/21/12	0.0	19.9	-1.1	46	10	120
LFG-3	12/21/12 [7]	1.0	18.3	-1.2	50	10	12,370
LFG-3	01/03/13 [7]	0.0	19.5	0.0	65	5 [5]	302
LFG-3	01/28/13	0.0	21.3	-0.1	42	13	689
LFG-3	02/27/13	0.0	15.2	-1.9	51	10	1,210
LFG-3	03/25/13	0.0	20.0	-2.6	44	10	510
LFG-3	04/26/13	0.3	17.3	-31.7	60	10	7,500
LFG-3	05/30/13	0.0	18.1	-47.0	60	10	430
LFG-3	06/27/13	0.1	15.6	-28.6	72	0 [8]	3,430

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-3	07/25/13	0.0	16.8	-9.3	76	10	5,650
LFG-3	08/30/13	0.1	19.2	-1.0	77	0 [8]	1,560
LFG-3	09/25/13	0.1	19.8	-0.6	70	10	900
LFG-3	10/23/13	0.0	19.3	-1.0	50	10	248
LFG-3	11/20/13	0.0	20.0	-1.1	47	10	79
LFG-3	12/18/13	0.0	20.0	-0.3	55	10	NA [9]
LFG-3	05/13/14 [10]	19.0	11.1	-47.3	52	6 [5]	NA [3]
LFG-3	05/28/14 [10]	0.7	13.2	-46.6	68	6 [5]	31,100
LFG-3	06/26/14	0.0	16.6	-45.8	68	10	1,050 [6]
LFG-3	07/31/14	11.2	16.5	-22.1	72	10	11,070
LFG-3	08/28/14	20.4	10.1	-22.0	70	9	NA [3]
LFG-3	09/26/14	0.0	15.8	-14.2	72	10	630
LFG-3	10/24/14	0.0	17.3	-14.7	63	10	NA [3]
LFG-3	11/19/14	0.3	14.2	-22.5	59	9	4,070
LFG-3	12/17/14	0.0	20.0	-5.9	41	10	81
LFG-3	01/21/15	0.0	19.4	-7.9	44	10	130
LFG-3	02/26/15	0.0	19.9	0.0	47	0 [4]	1,080
LFG-3	03/17/15	0.0	17.5	-5.6	48	10	330
LFG-3	04/17/15	0.0	16.0	-6.2	61	10	110
LFG-3	05/12/15	0.0	19.1	-15.6	54	11	88
LFG-3	06/25/15	0.0	16.7	-8.6	69	10	45
LFG-3	07/31/15	0.0	16.4	-26.4	75	10	424
LFG-3	08/19/15	0.0	17.1	0.0	76	10	1,533
LFG-3	09/24/15	0.4	15.8	-20.0	73	9	1,411
LFG-3	10/22/15	0.2	18.1	-14.6	67	10	4,144
LFG-3	11/12/15	0.0	20.4	-0.1	66	0 [11]	798
LFG-3	12/17/15	59.8	1.4	0.0	51	0 [11]	NA [3]
LFG-3	01/21/16	1.0	8.6	-17.7	56	8	NA [3]
LFG-3	02/24/16	2.8	9.3	-16.7	51	6	NA [3]
LFG-3	03/22/16	0.8	11.5	-13.2	50	10	NA [3]
LFG-3	04/22/16	0.5	15.9	-12.4	57	0 [8]	NA [3]
LFG-3	05/19/16	0.0	16.3	-10.2	61	14	6,150
LFG-3	06/14/16	0.2	15.3	-10.3	72	8	NA [3]
LFG-3	07/27/16	0.9	12.9	-10.0	72	0 [8]	NA [3]
LFG-3	08/10/16	0.7	13.9	-3.0	78	10	NA [3]
LFG-3	09/15/16	1.8	11.7	-10.6	77	10	NA [3]
LFG-3	10/26/16	6.3	9.5	-11.3	53	10	NA [3]
LFG-3	11/23/16	4.0	6.6	-11.3	51	10	NA [3]
LFG-3	12/13/16	0.5	15.1	-1.5	37	8	NA [3]
LFG-3	01/10/17	3.0	9.5	-11.7	40	6	NA [3]
LFG-3	02/14/17	0.7	12.4	-14.8	49	8	NA [3]
LFG-3	03/07/17	2.9	10.1	-14.8	45	6	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-3	04/05/17	3.4	10.3	-13.9	53	9	NA [3]
LFG-3	05/25/17	1.2	7.0	-16.8	66	0 [8]	NA [3]
LFG-3	06/28/17	0.7	15.0	-13.6	65	0 [8]	NA [3]
LFG-3	07/24/17	0.9	15.0	-13.4	70	0 [8]	NA [3]
LFG-3	08/14/17	1.1	15.0	-13.0	70	0 [8]	NA [3]
LFG-3	09/13/17	1.0	14.7	-7.8	78	8	NA [3]
LFG-3	10/30/17	1.9	12.1	-7.3	42	0 [8]	NA [3]
LFG-3	11/17/17	0.4	16.7	-7.8	40	0 [8]	1,177
LFG-3	12/07/17	0.3	16.9	-7.8	39	8	1,081
LFG-3	01/24/18	7.9	11.9	-12.0	60	0 [8]	NA [3]
LFG-3	02/13/18	0.8	17.1	-16.6	59	5	1,480
LFG-3	03/05/18	0.1	19.2	-16.1	50	0 [8]	1,277
LFG-3	04/04/18	0.5	18.7	-12.0	47	0 [8]	1,413
LFG-3	05/17/18	0.6	11.8	-9.2	56	0 [8]	-
LFG-3	07/03/18	0.0	14.5	-8.2	60	0 [8]	-
LFG-3	07/31/18	0.0	13.8	-10.3	66	0 [8]	-
LFG-3	08/30/18	2.4	5.5	-9.7	62	0 [8]	-
LFG-3	09/28/18	1.2	12.1	-12.6	54	0 [8]	> 4,293
LFG-3	11/16/18	3.3	15.0	-12.6	50	0 [8]	NA [3]
LFG-3	12/13/18	3.1	11.6	-12.6	46	5	NA [3]
LFG-3	01/23/19	2.9	5.9	-11.9	42	6	NA [3]
LFG-3	02/22/19	1.6	8.3	-12.0	38	5	NA [3]
LFG-3	04/02/19	1.6	10.7	-11.8	45	5	NA [3]
LFG-3	04/26/19	0.1	14.6	-13.0	52	1	5,961
LFG-3	05/29/19	0.0	12.3	-13.3	68	5	3,291
LFG-3	06/18/19	0.0	15.3	-12.2	66	2	1,668
LFG-3	07/23/19	0.4	14.3	-11.9	76	1	6,814
LFG-3	08/29/19	0.8	13.2	-12.6	72	0 [8]	21,918
LFG-3	09/12/19	2.0	9.5	-12.0	61	8	3,113
LFG-3	10/31/19	0.9	16.2	-14.7	50	4	13,438
LFG-3	11/25/19	1.5	19.0	-13.9	51	- [9]	-
LFG-3	02/18/20	0.8	17.3	-15.3	40	5	12,026
LFG-3	06/23/20	0.2	16.1	-13.7	67	3	3,433
LFG-3	08/17/20	0.8	14.2	-13.7	76	0 [8]	12,948
LFG-3	11/05/20	1.0	13.8	-12.8	62	7	15,478
LFG-3	01/20/21	0.5	14.5	-10.4	38	4	NA [9]
LFG-3	02/19/21	0.0	20.8	-11.2	32	0	NA [9]
LFG-3	03/25/21	0.6	11.8	-15.1	52	18	NA [9]
LFG-3	04/22/21	0.0	18.6	-12.6	56	NA [9]	47
LFG-3	05/21/21	0.0	16.6	-12.4	61	33	1,860
LFG-3	06/17/21	0.0	16.8	-12.0	78	40	1,977
LFG-3	07/15/21	0.0	15.8	-9.6	70	0 [8]	NA [9]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-3	08/12/21	0.9	9.8	-9.5	63	0 [8]	3,006
LFG-3	09/23/21	1.6	9.8	-10.0	74	0 [8]	13,000
LFG-3	10/21/21	0.8	17.4	-11.7	61	26	15,234
LFG-3	11/30/21	2.3	11.1	-10.4	53	12	NA [3]
LFG-3	12/21/21	1.3	4.0	-10.5	35	0 [8]	NA [3]
LFG-3	01/31/22	0.9	10.7	-6.3	35	3	2,009
LFG-3	02/28/22	0.2	18.2	-10.1	43	18	2,970
LFG-3	03/28/22	0.5	11.9	-11.2	44	5	NA [1]
LFG-3	04/28/22	0.0	17.2	-12.7	46	5	1,820
LFG-3	05/26/22	0.0	15.1	-11.8	52	24	86
LFG-3	06/23/22	0.0	17.7	-10.1	73	2	352
LFG-3	07/26/22	0.1	17.2	-11.2	73	0	3,782
LFG-3	08/23/22	0.0	16.7	-10.4	78	6	4,693
LFG-3	09/29/22	0.2	18.1	-9.9	64	2	950
LFG-3	10/27/22	0.0	18.0	-8.8	58	2	3,608
LFG-3	12/06/22	0.9	11.9	-9.6	45	24	NA [1]
LFG-3	1/12/2023	0.4	14.4	10.5	41	6	8,135
LFG-3	2/16/2023	0.3	14.9	-13.4	38	0	10,322
LFG-3	3/20/2023	0.0	18.7	-13.6	42	13	823
LFG-3	4/13/2023	0.0	15.5	-16.3	66	0	171
LFG-3	5/2/2023	0.0	15.9	-16.0	53	0	82
LFG-3	6/22/2023	0.0	17.8	-13.2	76	2	1,833
LFG-3	7/31/2023	0.0	16.4	-11.4	73	0	4,658
LFG-3	8/31/2023	0.0	17.3	-10.3	74	0	5,790
LFG-3	9/28/2023	0.0	5.7	-10.4	69	6	6,444
LFG-3	12/21/2023	0.0	-	-12.6	44	19	0
LFG-4	08/27/08 [1]	52.1	0.0	0.1	70	-	-
LFG-4	09/23/08	51.4	0.0	-12.0	58	10	-
LFG-4	09/25/08	7.2	0.7	-11.2	56	9	-
LFG-4	10/01/08	1.2	3.9	-10.8	60	11	-
LFG-4	10/01/08	1.2	3.9	-10.7	60	10	-
LFG-4	10/07/08	1.0	6.4	-11.3	60	10	-
LFG-4	10/15/08	1.1	6.0	-13.7	59	10	-
LFG-4	10/30/08	0.7	9.8	-13.6	64	10	-
LFG-4	11/13/08	1.1	6.7	-16.2	58	10	-
LFG-4	11/26/08	0.6	9.1	-14.9	57	10	-
LFG-4	01/22/09 [2]	1.2	9.4	-16.8	50	10	NA [3]
LFG-4	02/05/09	0.0	12.9	-15.7	46	10	12,400
LFG-4	02/16/09	0.0	12.2	-16.4	44	10	11,200
LFG-4	03/16/09	0.0	13.5	-18.2	50	10	11,600

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID [*] (ppm)
LFG-4	04/24/09	0.0	14.6	-18.1	60	10	3,000
LFG-4	05/20/09	0.0	14.0	-18.6	60	10	1,550
LFG-4	06/23/09	0.0	12.1	-17.9	70	10	2,610
LFG-4	07/23/09	0.0	11.2	-16.0	78	10	6,300
LFG-4	08/20/09	0.0	11.1	-13.6	80	10	9,310
LFG-4	09/23/09	0.0	11.9	-11.7	86	10	11,500
LFG-4	10/20/09	0.0	12.2	-14.1	80	10	22,300
LFG-4	11/24/09	0.0	13.6	-16.0	74	10	3,620
LFG-4	12/29/09	0.0	13.7	-14.3	62	10	7,490
LFG-4	01/29/10	0.1	17.7	-14.3	51	10	14
LFG-4	02/22/10	0.7	12.5	-14.3	52	10	27,300
LFG-4	03/26/10	0.0	15.1	-18.5	54	10	11,200
LFG-4	04/22/10	0.0	16.2	-13.9	62	10	3,370
LFG-4	05/18/10	0.0	15.2	-10.7	64	10	15,200
LFG-4	06/29/10	0.0	12.6	-11.8	74	10	-
LFG-4	07/23/10	0.0	13.0	-10.8	80	10	14,400
LFG-4	08/27/10	21.6	1.7	-12.7	82	10	NA [3]
LFG-4	10/01/10	14.3	2.4	-16.8	72	10	NA [3]
LFG-4	10/22/10	7.9	6.3	-11.0	76	10	NA [3]
LFG-4	11/29/10	0.6	11.1	-11.1	61	10	NA [3]
LFG-4	12/22/10	2.6	9.5	-10.0	65	10	NA [3]
LFG-4	01/24/11	0.6	16.2	-10.0	52	10	13,820
LFG-4	02/28/11	0.5	16.7	-13.2	52	10	12,340
LFG-4	04/13/11	0.3	17.2	-15.5	51	10	10,370
LFG-4	04/29/11	0.5	16.4	-15.9	58	10	42,973
LFG-4	05/27/11	0.2	16.9	-12.0	52	10	24,450
LFG-4	06/24/11	0.2	15.3	-8.5	73	10	15,430
LFG-4	07/22/11	0.1	12.9	-7.1	66	10	270
LFG-4	08/25/11	9.6	3.9	-10.5	85	10	NA [3]
LFG-4	09/30/11	0.3	16.3	-7.8	85	10	6,780
LFG-4	10/26/11	0.2	15.0	-6.7	83	10	16,450
LFG-4	11/22/11	0.2	15.8	-6.8	79	15	10,490
LFG-4	12/29/11	0.1	16.0	-7.5	70	15	9,820
LFG-4	01/26/12	1.7	9.4	-6.7	70	15	NA [3]
LFG-4	02/21/12	0.1	17.2	-5.6	64	15	6,340
LFG-4	03/30/12	0.0	16.0	-10.2	62	15	4,373
LFG-4	04/27/12	0.0	16.8	-11.8	72	15	5,560
LFG-4	05/25/12	0.2	14.5	-13.6	73	15	6,250
LFG-4	06/26/12	1.2	6.8	-14.8	75	15	NA [3]
LFG-4	07/25/12	0.8	11.6	-16.1	88	15	7,780
LFG-4	08/22/12	0.2	14.7	-10.8	80	15	19,970
LFG-4	09/25/12	0.4	15.9	-7.8	75	15	7,860

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-4	10/30/12	0.2	16.0	-7.4	62	15	NA [6]
LFG-4	11/21/12	0.0	16.7	-7.0	60	15	2,560
LFG-4	12/21/12 [7]	17.3	6.9	-8.5	53	15	NA [3]
LFG-4	01/03/13 [7]	0.2	18.0	-6.4	65	15	8,350
LFG-4	01/28/13	0.1	18.4	-5.9	60	16	4,430
LFG-4	02/27/13	0.0	17.9	-1.2	61	16	10,540
LFG-4	03/25/13	0.3	17.5	-2.8	58	15	21,610
LFG-4	04/26/13	0.7	16.1	-19.8	60	15	12,330
LFG-4	05/30/13	0.0	18.6	-46.8	64	15	940
LFG-4	06/27/13	0.0	19.9	-22.8	74	15	5,030
LFG-4	07/25/13	0.0	16.4	-9.3	80	15	4,070
LFG-4	08/30/13	0.2	16.0	-7.4	83	15	1,020
LFG-4	09/25/13	0.4	16.5	-3.6	82	15	6,860
LFG-4	10/23/13	0.0	17.6	-6.8	75	15	4,750
LFG-4	11/20/13	0.2	17.4	-5.0	71	15	3,580
LFG-4	12/18/13	0.0	18.3	-2.0	55	15	NA[9]
LFG-4	05/13/14 [10]	14.5	8.6	-18.1	55	15	NA [3]
LFG-4	05/28/14 [10]	0.0	14.8	-12.6	62	15	NA [3]
LFG-4	06/26/14	0.0	17.0	-13.4	72	15	2,690 [6]
LFG-4	07/31/14	16.5	6.5	-9.9	72	15	NA [3]
LFG-4	08/28/14	25.2	4.9	-10.1	75	14	NA [3]
LFG-4	09/26/14	0.0	16.4	-6.3	76	15	1,750
LFG-4	10/24/14	0.0	17.6	-6.1	70	15	2,770
LFG-4	11/19/14	0.3	12.4	-8.0	63	15	10,750
LFG-4	12/17/14	0.0	19.8	-5.1	53	15	380
LFG-4	01/21/15	0.0	18.5	-7.8	52	15	350
LFG-4	02/26/15	0.0	13.4	-5.5	48	15	470
LFG-4	03/17/15	0.0	15.4	-8.2	52	15	NA [3]
LFG-4	04/17/15	0.0	13.0	-6.2	61	15	NA [3]
LFG-4	05/12/15	0.0	18.2	-13.0	65	15	180
LFG-4	06/25/15	0.0	16.7	-3.0	67	14	280
LFG-4	07/31/15	0.0	16.2	-10.4	75	15	510
LFG-4	08/19/15	0.0	17.8	-10.8	75	17	1,350
LFG-4	09/24/15	0.2	17.7	-7.4	75	16	1,390
LFG-4	10/22/15	0.1	19.0	-5.7	71	15	1,600
LFG-4	11/12/15	0.0	6.6	-12.3	69	12	1,240
LFG-4	12/17/15	24.0	9.6	-22.0	51	20	NA [3]
LFG-4	01/21/16	2.8	11.8	-17.4	56	20	NA [3]
LFG-4	02/24/16	3.4	6.3	-16.5	59	16	NA [3]
LFG-4	03/22/16	2.2	6.8	-12.5	55	20	NA [3]
LFG-4	04/22/16	0.2	17.3	-11.7	70	20	500
LFG-4	05/19/16	0.0	16.6	-9.3	66	15	20,220

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-4	06/14/16	0.0	15.9	-9.8	70	0 [5, 8]	3,710
LFG-4	07/27/16	0.2	14.0	-9.3	72	0 [8]	NA [3]
LFG-4	08/10/16	0.1	15.4	-7.9	78	20	6,890
LFG-4	09/15/16	0.4	12.7	-8.7	68	15	NA [3]
LFG-4	10/26/16	6.9	5.5	-9.5	45	15	NA [3]
LFG-4	11/23/16	6.5	3.8	-10.7	56	10	NA [3]
LFG-4	12/13/16	0.2	16.1	-11.8	34	23	3,400
LFG-4	01/10/17	9.0	4.7	-12.1	34	11	NA [3]
LFG-4	02/14/17	0.1	12.0	-14.5	44	20	NA [3]
LFG-4	03/07/17	6.6	5.4	-13.5	52	15	NA [3]
LFG-4	04/05/17	6.0	5.4	-13.9	54	20	NA [3]
LFG-4	05/25/17	4.3	3.8	-16.6	68	0 [8]	NA [3]
LFG-4	06/28/17	0.1	15.9	-13.3	66	0 [8]	NA [3]
LFG-4	07/24/17	0.2	16.1	-13.0	72	0 [8]	NA [3]
LFG-4	08/14/17	0.2	14.4	-12.9	49	0 [8]	NA [3]
LFG-4	09/13/17	0.1	15.9	-12.9	73	17	NA [3]
LFG-4	10/30/17	1.4	8.5	-6.4	47	13	NA [3]
LFG-4	11/17/17	0.0	16.7	-12.9	42	0 [8]	989
LFG-4	12/07/17	0.0	17.2	-12.9	37	14	907
LFG-4	01/24/18	11.2	12.0	-12.0	56	0 [8]	NA [3]
LFG-4	02/13/18	5.1	13.3	-16.5	60	0 [8]	NA [3]
LFG-4	03/05/18	2.1	14.8	-16.1	52	0 [8]	NA [3]
LFG-4	04/04/18	2.4	15.3	-11.9	41	0 [8]	NA [3]
LFG-4	05/17/18	0.7	9.3	-9.4	56	0 [8]	-
LFG-4	07/03/18	0.0	16.6	-7.8	58	10	-
LFG-4	07/31/18	0.0	15.9	-10.1	62	0 [8]	-
LFG-4	08/30/18	3.6	1.7	-9.3	60	0 [8]	-
LFG-4	09/28/18	0.4	10.3	-12.1	58	0 [8]	> 4,293
LFG-4	11/16/18	0.3	16.7	-12.6	56	14	3,838
LFG-4	12/13/18	8.8	8.1	-12.8	52	18	NA [3]
LFG-4	01/23/19	1.8	5.4	-12.0	46	19	NA [3]
LFG-4	02/22/19	1.2	4.7	-12.2	40	18	NA [3]
LFG-4	04/02/19	1.0	8.5	-11.8	48	12	NA [3]
LFG-4	04/26/19	0.1	14.7	-12.8	53	15	6,793
LFG-4	05/29/19	0.0	11.0	-13.3	66	9	4,436
LFG-4	06/18/19	0.0	16.9	-12.2	67	13	2,019
LFG-4	07/23/19	0.0	16.4	-11.9	74	19	1,486
LFG-4	08/29/19	0.1	15.2	-11.9	74	29	3,509
LFG-4	09/12/19	0.0	16.2	-11.0	61	20	5,336
LFG-4	10/31/19	0.0	18.7	-15.0	54	15	1,690
LFG-4	11/25/19	0.5	20.0	-13.2	53	- [9]	-
LFG-4	02/18/20	0.0	18.6	-15.3	45	20	1,886

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-4	06/23/20	0.0	17.3	-12.9	66	14	1,085
LFG-4	08/17/20	0.0	16.4	-12.9	76	16	2,023
LFG-4	11/05/20	0.1	15.6	-12.1	62	21	2,564
LFG-4	01/20/21	0.0	13.5	-9.8	44	24	6,369
LFG-4	02/19/21	0.0	20.8	-10.9	40	0 [8]	6,434
LFG-4	03/25/21	1.0	11.6	-13.3	44	13	NA [9]
LFG-4	04/22/21	0.0	19.4	-12.7	59	NA [9]	304
LFG-4	05/21/21	0.0	18.5	-11.6	64	48	8
LFG-4	06/17/21	0.0	18.4	-8.8	70	17	832
LFG-4	07/15/21	0.0	17.5	-8.4	70	39	NA [9]
LFG-4	08/12/21	0.7	10.0	-9.5	60	0 [8]	6,520
LFG-4	09/23/21	4.9	6.6	-10.2	72	30	12,400
LFG-4	10/21/21	0.0	19.4	-11.4	62	22	1,762
LFG-4	11/30/21	2.8	9.5	-10.2	55	32	NA [3]
LFG-4	12/21/21	0.5	10.0	-9.1	42	32	NA [3]
LFG-4	01/31/22	0.5	9.9	-10.8	42	39	4,508
LFG-4	02/28/22	0.0	19.2	-8.4	45	27	1,494
LFG-4	03/28/22	0.2	11.2	-10.1	44	16	NA [1]
LFG-4	04/28/22	0.0	18.6	-7.8	45	20	2,840
LFG-4	05/26/22	0.0	14.4	-11.4	52	19	98
LFG-4	06/23/22	0.0	18.7	-5.4	70	18	132
LFG-4	07/26/22	0.0	18.5	-11.2	72	18	1,490
LFG-4	08/23/22	0.0	17.5	-4.8	79	15	1,597
LFG-4	09/29/22	0.0	18.7	-4.9	69	18	334
LFG-4	10/27/22	0.0	19.0	-3.7	60	19	1,464
LFG-4	12/06/22	0.6	9.9	-3.8	51	18	NA [1]
LFG-4	1/12/2023	0.0	13.7	-4.2	47	20	519
LFG-4	2/16/2023	0.0	14.9	-6.9	42	18	4,931
LFG-4	3/20/2023	0.0	17.6	-13.8	44	15	1,006
LFG-4	4/13/2023	0.3	14.1	-17.2	66	21	4,589
LFG-4	5/2/2023	0.0	14.7	-15.6	50	18	2,347
LFG-4	6/22/2023	0.0	18.5	-13.6	75	4-15	928
LFG-4	7/31/2023	0.0	17.3	-11.6	73	11-17	630
LFG-4	8/31/2023	0.0	18.4	-10.2	71	15	1,337
LFG-4	9/28/2023	0.0	5.9	-10.4	70	16	1,616
LFG-4	12/21/2023	0.0	-	-7.3	49	33	0
LFG-5	08/27/08 [1]	53.1	0.0	0.3	70	-	-
LFG-5	09/23/08	40.0	0.7	-9.4	64	10	-
LFG-5	09/25/08	7.1	4.5	-9.1	56	7	-
LFG-5	10/01/08	1.2	6.9	-8.6	59	10	-

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-5	10/07/08	1.0	9.0	-8.5	58	9	-
LFG-5	10/15/08	0.9	9.5	-8.7	60	10	-
LFG-5	10/30/08	0.5	10.7	-8.0	64	10	-
LFG-5	11/13/08	1.1	9.2	-9.5	60	10	-
LFG-5	11/26/08	0.7	10.1	-9.1	60	10	-
LFG-5	01/22/09 [2]	1.8	6.7	-8.8	52	10	NA [3]
LFG-5	02/05/09	0.0	11.0	-6.9	54	10	19,300
LFG-5	02/16/09	0.0	7.9	-10.9	54	10	NA [3]
LFG-5	03/16/09	0.1	9.9	-8.5	60	10	NA [3]
LFG-5	04/24/09	0.0	11.7	-7.9	68	10	6,730
LFG-5	05/20/09	0.0	11.0	-8.1	70	10	NA [3]
LFG-5	06/23/09	0.0	9.1	-7.6	80	10	NA [3]
LFG-5	07/23/09	0.1	8.5	-7.4	80	10	NA [3]
LFG-5	08/20/09	0.3	8.9	-11.5	80	20	NA [3]
LFG-5	09/23/09	0.6	9.8	-11.1	86	20	47,500
LFG-5	10/20/09	0.9	9.8	-14.1	80	20	NA [3]
LFG-5	11/24/09	0.0	16.0	-23.2	70	20	17,300
LFG-5	12/29/09	0.2	14.0	-21.2	60	20	10,200
LFG-5	01/29/10	0.7	13.3	-21.2	51	20	14,430
LFG-5	02/22/10	2.7	10.1	-21.2	52	20	NA [3]
LFG-5	03/26/10	0.5	12.7	-18.4	54	20	38,200
LFG-5	04/22/10	0.1	14.4	-16.4	62	20	14,700
LFG-5	05/18/10	0.2	14.2	-15.2	64	20	891
LFG-5	06/29/10	0.3	13.0	-19.4	70	20	-
LFG-5	07/23/10	0.0	15.2	-19.6	73	20	12,100
LFG-5	08/27/10	20.0	4.6	-19.1	78	20	NA [3]
LFG-5	10/01/10	7.4	8.1	-31.7	70	20	NA [3]
LFG-5	10/22/10	2.4	12.4	-27.6	73	20	NA [3]
LFG-5	11/29/10	5.2	5.1	-11.9	61	20	NA [3]
LFG-5	12/22/10	3.1	12.7	-20.8	56	20	NA [3]
LFG-5	01/24/11	0.6	17.4	-28.2	54	20	17,860
LFG-5	02/28/11	0.5	17.3	-33.3	40	20	12,720
LFG-5	04/13/11	0.5	18.2	-45.6	45	18	12,640
LFG-5	04/29/11	0.9	16.9	-47.6	56	10 [5]	>50,000
LFG-5	05/27/11	0.2	18.7	-43.1	52	20	20,100
LFG-5	06/24/11	0.4	17.5	-44.5	66	20	15,360
LFG-5	07/22/11	0.0	16.4	-35.6	66	21	1,480
LFG-5	08/25/11	3.3	11.8	-37.4	80	20	NA [3]
LFG-5	09/30/11	0.2	17.9	-26.1	75	29	2,310
LFG-5	10/26/11	0.0	16.7	-23.6	73	20	7,740
LFG-5	11/22/11	0.3	15.9	-18.2	70	20	10,570
LFG-5	12/29/11	0.9	15.7	-18.1	68	20	39,010

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-5	01/26/12	7.8	6.8	-17.8	72	20	NA [3]
LFG-5	02/21/12	0.7	12.0	-5.8	76	20	NA [3]
LFG-5	03/30/12	1.1	7.7	-8.6	78	20	NA [3]
LFG-5	04/27/12	0.0	17.7	-24.6	69	20	80
LFG-5	05/25/12	0.7	13.2	-37.8	70	20	41,170
LFG-5	06/26/12	0.8	12.8	-36.8	68	20	>50,000
LFG-5	07/25/12	0.9	12.0	-40.3	84	20	>50,000
LFG-5	08/22/12	0.1	16.9	-30.5	74	20	12,910
LFG-5	09/25/12	0.4	16.5	-24.4	67	20	6,810
LFG-5	10/30/12	0.5	15.1	-15.0	64	20	NA [6]
LFG-5	11/21/12	0.5	13.5	-10.3	60	20	11,380
LFG-5	12/21/12 [7]	30.1	3.2	-8.5	57	20	NA [3]
LFG-5	01/03/13 [7]	0.8	11.7	-6.9	74	20	36,220
LFG-5	01/28/13	0.4	11.7	-6.4	74	20	12,310
LFG-5	02/27/13	0.3	10.2	-4.5	63	20	28,360
LFG-5	03/25/13	0.1	14.1	-7.9	66	20	17,500
LFG-5	04/26/13	3.0	15.8	-48.1	66	20	>50,000
LFG-5	05/30/13	0.2	18.8	-45.5	65	20	5,930
LFG-5	06/27/13	0.2	17.5	-43.6	75	18	5,020
LFG-5	07/25/13	0.0	17.6	-26.8	80	20	1,860
LFG-5	08/30/13	0.0	17.8	-14.3	81	20	2,130
LFG-5	09/25/13	0.1	18.7	-0.4	74	20	1,490
LFG-5	10/23/13	0.2	18.0	-5.3	65	20	10,500
LFG-5	11/20/13	0.7	16.9	-4.7	62	20	11,970
LFG-5	12/18/13	0.2	17.8	-4.3	52	20	NA[9]
LFG-5	05/13/14 [10]	15.5	8.4	-47.4	54	19	NA [3]
LFG-5	05/28/14 [10]	0.4	13.8	-46.8	62	20	>50,000
LFG-5	06/26/14	0.0	17.4	-46.4	67	20	8,530 [6]
LFG-5	07/31/14	4.9	11.9	-31.5	73	20	4,960
LFG-5	08/28/14	13.8	6.5	-21.0	75	20	NA [3]
LFG-5	09/26/14	0.0	16.9	-18.0	76	20	1,680
LFG-5	10/24/14	0.0	18.2	-18.6	69	20	2,490
LFG-5	11/19/14	0.0	15.0	-8.3	58	20	9,100
LFG-5	12/17/14	0.0	17.4	-7.4	54	20	1,240
LFG-5	01/21/15	0.0	15.2	-12.0	58	20	880
LFG-5	02/26/15	3.6	9.8	-9.6	55	20	NA [3]
LFG-5	03/17/15	2.4	10.4	-9.0	59	20	NA [3]
LFG-5	04/17/15	2.8	6.8	-9.7	67	20	NA [3]
LFG-5	05/12/15	0.0	15.2	-9.6	66	20	NA [3]
LFG-5	06/25/15	0.0	16.5	-16.2	73	20	300
LFG-5	07/31/15	0.0	17.9	-22.6	78	20	540
LFG-5	08/19/15	0.0	18.2	-19.5	77	20	830

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-5	09/24/15	0.1	17.3	-16.8	77	20	800
LFG-5	10/22/15	0.0	19.2	-9.7	73	20	830
LFG-5	11/12/15	2.0	15.4	-16.2	69	10	1,090
LFG-5	12/17/15	3.6	18.2	-15.8	50	6	4,840
LFG-5	01/21/16	0.5	5.4	-3.5	26	0 [4, 8]	NA [3]
LFG-5	02/24/16	0.7	9.2	-12.2	34	11	NA [3]
LFG-5	03/22/16	0.9	6.3	-8.1	52	0 [8]	NA [3]
LFG-5	04/22/16	0.1	17.9	-8.0	58	8	310
LFG-5	05/19/16	0.0	17.6	-7.1	64	9	3,600
LFG-5	06/14/16	0.0	16.7	-8.5	68	8	1,940
LFG-5	07/27/16	0.1	14.9	-7.4	74	0 [8]	2,640
LFG-5	08/10/16	0.0	16.4	-6.0	80	10	2,590
LFG-5	09/15/16	0.1	13.5	-8.3	73	5	NA [3]
LFG-5	10/26/16	1.5	5.1	-9.1	47	12	NA [3]
LFG-5	11/23/16	2.5	2.4	-9.1	50	7	NA [3]
LFG-5	12/13/16	0.0	17.6	-9.0	36	7	1,720
LFG-5	01/10/17	0.2	15.5	0.0	39	6	NA [3]
LFG-5	02/14/17	0.0	14.2	-10.8	45	7	NA [3]
LFG-5	03/07/17	1.2	5.3	-11.8	49	5	NA [3]
LFG-5	04/05/17	1.0	5.1	-14.0	51	8	NA [3]
LFG-5	05/25/17	0.5	5.3	-15.9	60	0 [8]	NA [3]
LFG-5	06/28/17	0.0	17.5	-11.8	66	0 [8]	NA [3]
LFG-5	07/24/17	0.0	17.5	-10.9	72	0 [8]	NA [3]
LFG-5	08/14/17	0.0	17.9	-14.2	70	0 [8]	2,004
LFG-5	09/13/17	0.0	18.0	-7.8	76	5	2,111
LFG-5	10/30/17	0.7	8.9	-2.9	44	9	NA [3]
LFG-5	11/17/17	0.0	17.7	-7.8	40	8	2,004
LFG-5	12/07/17	0.0	18.2	-7.8	33	9	1,633
LFG-5	01/24/18	10.3	15.6	-11.9	60	0 [8]	NA [3]
LFG-5	02/13/18	3.0	15.6	-16.4	62	0 [8]	NA [3]
LFG-5	03/05/18	0.8	18.4	-16.1	52	0 [8]	1,340
LFG-5	04/04/18	0.7	17.7	-11.9	43	0 [8]	986
LFG-5	05/17/18	3.3	4.7	-9.1	56	0 [8]	-
LFG-5	07/03/18	0.5	12.3	-8.2	56	0 [8]	-
LFG-5	07/31/18	0.6	11.0	-10.1	66	0 [8]	-
LFG-5	08/30/18	11.1	1.0	-9.5	64	0 [8]	-
LFG-5	09/28/18	2.1	6.2	-12.6	58	0 [8]	1,123
LFG-5	11/16/18	0.0	17.3	-12.6	52	6	1,609
LFG-5	12/13/18	2.5	4.1	-12.6	48	8	NA [3]
LFG-5	01/23/19	0.3	6.7	-11.9	42	7	6,010
LFG-5	02/22/19	1.6	15.2	-11.4	40	6	19,026
LFG-5	04/02/19	3.4	11.0	-11.8	42	9	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-5	04/26/19	0.0	16.4	-12.0	51	6	3,755
LFG-5	05/29/19	0.0	12.8	-13.0	64	3	1,697
LFG-5	06/18/19	0.0	17.6	-12.0	64	8	4,574
LFG-5	07/23/19	0.0	17.2	-11.7	72	7	888
LFG-5	08/29/19	0.1	15.7	-12.0	72	6	3,127
LFG-5	09/12/19	0.1	15.4	0.0	62	0 [11]	4,706
LFG-5	10/31/19	0.0	19.3	-14.8	54	6	1,811
LFG-5	11/25/19	0.4	21.2	-12.7	53	- [9]	-
LFG-5	02/18/20	0.0	19.4	-15.0	38	10	1,464
LFG-5	06/23/20	0.0	17.9	-12.1	64	6	330
LFG-5	08/17/20	0.0	17.0	-13.6	74	7	677
LFG-5	11/05/20	0.2	15.6	-12.8	64	12	3,126
LFG-5	01/20/21	0.8	12.7	-10.2	43	9	24,448
LFG-5	02/19/21	0.0	20.6	-10.9	34	0	NA [9]
LFG-5	03/25/21	3.2	11.4	-12.9	50	11	NA [9]
LFG-5	04/22/21	0.0	19.8	-11.6	56	NA [9]	469
LFG-5	05/21/21	0.0	18.7	-11.6	65	0	167
LFG-5	06/17/21	0.0	18.5	-8.8	72	20	309
LFG-5	07/15/21	0.0	17.5	-8.8	60	14	NA [9]
LFG-5	08/12/21	0.2	10.0	-10.3	62	0 [8]	4,355
LFG-5	09/23/21	1.7	9.7	-8.9	75	42	15,000
LFG-5	10/21/21	0.0	19.3	-10.9	62	24	1,968
LFG-5	11/30/21	1.2	9.2	-9.8	50	22	NA [3]
LFG-5	12/21/21	0.4	9.8	-9.6	40	19	NA [3]
LFG-5	01/31/22	0.3	6.0	-0.3	52	0	175
LFG-5	02/28/22	0.3	18.0	-8.9	47	10	4,203
LFG-5	03/28/22	1.1	12.2	-10.1	44	8	NA [1]
LFG-5	04/28/22	0.0	19.2	-12.5	42	6	2,262
LFG-5	05/26/22	0.0	14.5	-11.1	52	0	185
LFG-5	06/23/22	0.0	19.1	-10.4	70	6	57
LFG-5	07/26/22	0.0	18.9	-11.1	71	9	689
LFG-5	08/23/22	0.0	13.1	-9.7	74	6	1,382
LFG-5	09/29/22	0.0	19.5	-9.0	70	8	347
LFG-5	10/27/22	0.0	19.0	-8.4	60	7	2,080
LFG-5	12/06/22	0.7	8.8	-8.7	48	10	NA [1]
LFG-5	1/12/2023	0.4	13.8	-9.4	42	13	6,919
LFG-5	2/16/2023	0.0	17.9	-12.5	38	0	4,714
LFG-5	3/20/2023	0.0	20.2	-11.9	43	4	958
LFG-5	4/13/2023	0.0	16.2	-16.3	61	4	469
LFG-5	5/2/2023	0.0	15.2	-13.5	50	6	274
LFG-5	6/22/2023	0.0	19.1	-13.4	70	12-19	356

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-5	7/31/2023	0.0	18.2	-11.9	72	12	786
LFG-5	8/31/2023	0.0	18.5	-10.2	72	9	1,657
LFG-5	9/28/2023	0.0	6.0	-10.3	70	13	2,170
LFG-5	12/21/2023	0.0	-	-10.0	46	22	0
LFG-6	08/27/08 [1]	47.7	0.0	0.2	70	-	-
LFG-6	09/23/08	42.0	1.9	-6.3	60	10	-
LFG-6	09/25/08	10.2	3.2	-6.7	56	18	-
LFG-6	09/25/08	10.2	3.2	-6.2	56	10	-
LFG-6	10/01/08	1.0	6.6	-6.4	58	10	-
LFG-6	10/07/08	0.9	9.0	-6.7	60	10	-
LFG-6	10/15/08	0.7	9.9	-7.4	60	10	-
LFG-6	10/30/08	0.6	10.0	-7.8	64	10	-
LFG-6	11/13/08	0.6	9.4	-9.0	60	10	-
LFG-6	11/26/08	0.6	9.2	-8.8	57	10	-
LFG-6	01/22/09 [2]	1.0	7.8	-9.2	48	10	NA [3]
LFG-6	02/05/09	0.0	8.0	-7.3	54	11	16,700
LFG-6	02/16/09	0.0	9.1	-9.6	48	10	NA [3]
LFG-6	03/16/09	0.2	9.1	-10.2	55	10	NA [3]
LFG-6	04/24/09	0.0	10.5	-9.5	60	10	NA [3]
LFG-6	05/20/09	0.0	10.3	-10.1	64	10	NA [3]
LFG-6	06/23/09	0.0	9.8	-8.3	78	10	NA [3]
LFG-6	07/23/09	0.3	9.4	-8.3	80	10	NA [3]
LFG-6	08/20/09	0.3	9.6	-8.6	80	10	NA [3]
LFG-6	09/23/09	0.5	10.4	-8.1	84	10	40,400
LFG-6	10/20/09	0.5	9.8	-9.6	80	10	NA [3]
LFG-6	11/24/09	0.4	11.0	-9.3	75	10	26,800
LFG-6	12/29/09	0.3	10.5	-9.5	66	10	14,600
LFG-6	01/29/10	0.6	12.3	-9.5	54	10	1,565
LFG-6	02/22/10	1.4	10.9	-9.5	64	10	NA [3]
LFG-6	03/26/10	0.3	11.2	-12.9	58	10	18,000
LFG-6	04/22/10	0.1	13.2	-10.1	72	10	15,600
LFG-6	05/18/10	0.3	12.6	-8.8	77	10	>50,000
LFG-6	06/29/10	0.4	11.3	-9.7	80	10	-
LFG-6	07/23/10	0.3	12.1	-8.3	80	10	38,950
LFG-6	08/27/10	17.2	6.2	-7.8	87	10	NA [3]
LFG-6	10/01/10	12.4	5.8	-11.4	79	10	NA [3]
LFG-6	10/22/10	9.2	8.9	-9.3	81	10	NA [3]
LFG-6	11/29/10	1.2	8.3	-10.8	69	10	NA [3]
LFG-6	12/22/10	5.9	6.1	-11.8	76	10	NA [3]
LFG-6	01/24/11	1.1	13.7	-14.1	67	10	19,590
LFG-6	02/28/11	0.9	13.8	-21.4	60	10	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-6	04/13/11	0.8	14.1	-22.4	60	11	NA [3]
LFG-6	04/29/11	1.7	11.6	-27.7	62	10	NA [3]
LFG-6	05/27/11	0.8	15.3	-16.4	52	10	>50,000
LFG-6	06/24/11	1.1	12.6	-16.1	66	10	38,540
LFG-6	07/22/11	1.0	12.4	-12.7	66	10	28,550
LFG-6	08/25/11	15.3	6.2	-12.6	96	10	NA [3]
LFG-6	09/30/11	1.1	15.1	-9.2	91	10	>50,000
LFG-6	10/26/11	0.8	14.0	-8.2	87	10	>50,000
LFG-6	11/22/11	0.6	15.5	-9.7	83	20	8,080
LFG-6	12/29/11	0.7	15.4	-8.6	77	20	16,100
LFG-6	01/26/12	3.7	12.6	-8.2	84	20	NA [3]
LFG-6	02/21/12	0.4	16.0	-7.3	72	20	16,730
LFG-6	03/30/12	0.4	14.0	-10.7	70	20	213
LFG-6	04/27/12	0.1	15.6	-13.3	83	20	10,840
LFG-6	05/25/12	1.2	10.5	-27.8	70	20	2,790
LFG-6	06/26/12	4.0	9.9	-24.6	81	20	NA [3]
LFG-6	07/25/12	2.8	11.1	-30.1	96	20	>50,000
LFG-6	08/22/12	0.6	14.9	-20.7	80	20	3,850
LFG-6	09/25/12	0.7	16.1	-12.0	76	20	10,610
LFG-6	10/30/12	0.4	16.7	-9.7	62	20	NA [6]
LFG-6	11/21/12	0.1	17.3	-9.2	60	20	7,120
LFG-6	12/21/12 [7]	17.3	9.5	-11.0	55	20	NA [3]
LFG-6	01/03/13 [7]	0.3	16.6	-11.2	70	20	13,640
LFG-6	01/28/13	0.3	16.8	-11.1	70	20	5,360
LFG-6	02/27/13	0.0	13.7	-3.5	70	20	11,170
LFG-6	03/25/13	0.3	15.1	-5.4	69	20	8,460
LFG-6	04/26/13	2.6	11.0	-26.8	73	20	38,550
LFG-6	05/30/13	0.4	17.4	-43.4	73	20	13,200
LFG-6	06/27/13	1.1	15.3	-39.2	75	18	30,300
LFG-6	07/25/13	0.2	16.7	-14.3	84	20	9,180
LFG-6	08/30/13	0.6	17.2	-8.8	85	20	6,460
LFG-6	09/25/13	0.6	17.7	-3.7	81	20	11,530
LFG-6	10/23/13	0.2	17.6	-8.4	75	20	8,670
LFG-6	11/20/13	0.7	17.0	-7.9	71	20	5,040
LFG-6	12/18/13	0.4	17.7	-5.7	60	20	NA[9]
LFG-6	05/13/14 [10]	20.5	10.0	-44.6	56	20	NA [3]
LFG-6	05/28/14 [10]	0.6	12.2	-32.2	66	18	NA [3]
LFG-6	06/26/14	0.4	16.5	-29.0	70	21	12,670 [6]
LFG-6	07/31/14	11.4	14.1	-14.9	76	20	10,980
LFG-6	08/28/14	17.5	11.3	-14.0	75	20	NA [3]
LFG-6	09/26/14	0.1	16.3	-13.2	76	20	NM [9]
LFG-6	10/24/14	0.2	17.4	-10.4	68	20	11,530

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-6	11/19/14	1.2	15.8	-7.1	58	20	28,540
LFG-6	12/17/14	0.0	18.3	-2.1	56	21	2,890
LFG-6	01/21/15	0.0	17.4	-11.6	58	20	2,190
LFG-6	02/26/15	0.9	14.2	-8.8	63	20	8,310
LFG-6	03/17/15	0.9	13.1	-13.2	65	21	NA [3]
LFG-6	04/17/15	0.6	11.1	-12.5	70	20	NA [3]
LFG-6	05/12/15	0.0	17.2	-12.3	65	20	69
LFG-6	06/25/15	0.0	15.4	-11.0	77	20	1,350
LFG-6	07/31/15	0.0	16.9	-13.8	81	20	21,670
LFG-6	08/19/15	0.2	17.2	-28.7	76	20	3,170
LFG-6	09/24/15	0.7	16.3	-8.2	78	19	3,340
LFG-6	10/22/15	0.2	19.0	-6.1	75	20	2,900
LFG-6	11/12/15	0.7	5.6	-26.3	72	19	2,310
LFG-6	12/17/15	14.6	9.3	-20.9	53	14	NA [3]
LFG-6	01/21/16	2.5	11.4	-16.5	65	20	NA [3]
LFG-6	02/24/16	5.2	4.9	-16.3	34	19	NA [3]
LFG-6	03/22/16	3.2	6.5	-12.2	52	0 [8]	NA [3]
LFG-6	04/22/16	0.5	16.8	-12.0	58	19	1,140
LFG-6	05/19/16	0.1	16.3	-9.8	64	18	8,190
LFG-6	06/14/16	0.1	16.1	-9.6	68	5 [5]	6,860
LFG-6	07/27/16	0.5	14.6	-8.8	70	0 [8]	NA [3]
LFG-6	08/10/16	0.3	15.7	-4.2	75	18	7,010
LFG-6	09/15/16	1.3	11.3	-6.9	68	15	NA [3]
LFG-6	10/26/16	5.5	9.3	-9.0	51	15	NA [3]
LFG-6	11/23/16	4.3	6.8	-9.2	49	18	NA [3]
LFG-6	12/13/16	0.6	16.1	-10.8	33	16	5,910
LFG-6	01/10/17	4.7	9.7	-9.4	38	15	NA [3]
LFG-6	02/14/17	0.4	12.2	-12.7	48	19	NA [3]
LFG-6	03/07/17	3.3	8.8	-12.7	52	19	NA [3]
LFG-6	04/05/17	3.2	8.0	-14.0	55	15	NA [3]
LFG-6	05/25/17	2.8	9.9	-15.9	67	0 [8]	NA [3]
LFG-6	06/28/17	0.1	17.1	-12.2	66	0 [8]	NA [3]
LFG-6	07/24/17	0.3	17.0	-11.9	72	0 [8]	4,991
LFG-6	08/14/17	0.2	16.8	-11.4	70	0 [8]	5,714
LFG-6	09/13/17	0.3	17.0	-9.5	72	15	4,923
LFG-6	10/30/17	1.5	9.9	-3.4	44	19	NA [3]
LFG-6	11/17/17	0.4	15.6	-9.5	44	17	NA [3]
LFG-6	12/07/17	0.3	15.1	-9.5	34	0 [8]	NA [3]
LFG-6	01/24/18	18.9	6.8	-11.9	67	0 [8]	NA [3]
LFG-6	02/13/18	3.1	15.2	-16.4	64	17	NA [3]
LFG-6	03/05/18	1.2	15.0	-16.0	55	15	NA [3]
LFG-6	04/04/18	1.0	14.6	-11.9	46	0 [8]	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-6	05/17/18	0.7	9.9	-11.7	56	14	-
LFG-6	07/03/18	0.1	16.4	-8.6	60	0 [8]	-
LFG-6	07/31/18	0.0	15.9	-9.8	64	0 [8]	-
LFG-6	08/30/18	4.2	5.5	-9.0	62	0 [8]	-
LFG-6	09/28/18	1.0	9.7	-12.4	60	0 [8]	NA [3]
LFG-6	11/16/18	0.6	14.6	-11.7	58	14	> 4,193
LFG-6	12/13/18	2.1	8.5	-11.8	56	19	NA [3]
LFG-6	01/23/19	1.5	6.0	-11.8	48	15	NA [3]
LFG-6	02/22/19	1.6	2.2	-11.8	48	15	NA [3]
LFG-6	04/02/19	0.0	15.2	-10.9	50	16	1,814
LFG-6	04/26/19	0.1	14.3	-11.9	52	15	5,238
LFG-6	05/29/19	0.1	13.8	-13.6	64	15	7,127
LFG-6	06/18/19	0.0	17.5	-10.7	66	16	3,823
LFG-6	07/23/19	0.1	16.3	-11.0	74	18	2,579
LFG-6	08/29/19	0.3	14.8	-11.6	76	19	6,086
LFG-6	09/12/19	0.4	14.2	-8.4	61	18	8,070
LFG-6	10/31/19	0.0	18.1	-14.0	60	19	2,927
LFG-6	11/25/19	0.6	19.6	-8.6	58	16	-
LFG-6	02/18/20	0.0	18.1	-7.6	48	20	2,171
LFG-6	06/23/20	0.0	17.9	-12.8	64	17	1,150
LFG-6	08/17/20	0.1	15.6	-13.3	74	18	2,863
LFG-6	11/05/20	0.3	13.8	-11.6	69	21	5,557
LFG-6	01/20/21	0.2	11.6	-9.6	48	19	12,108
LFG-6	02/19/21	0.0	20.9	-4.7	32	0	NA [9]
LFG-6	03/25/21	0.3	9.8	-14.6	50	19	NA [9]
LFG-6	04/22/21	0.0	18.9	-8.2	58	NA [9]	871
LFG-6	05/21/21	0.0	18.0	-6.4	61	12	0
LFG-6	06/17/21	0.0	17.5	-4.5	40	5	813
LFG-6	07/15/21	0.0	17.0	-4.2	55	18	NA [9]
LFG-6	08/12/21	0.2	6.7	-10.3	64	0 [8]	7,982
LFG-6	09/23/21	0.7	6.6	-4.4	72	0 [8]	10,900
LFG-6	10/21/21	0.0	18.3	-5.2	68	27	2,990
LFG-6	11/30/21	0.8	8.4	-10.5	58	18	NA [3]
LFG-6	12/21/21	0.5	9.1	-4.7	46	20	NA [3]
LFG-6	01/31/22	0.3	8.6	-11.1	50	20	1,811
LFG-6	02/28/22	0.0	18.2	-3.9	52	15	1,903
LFG-6	03/28/22	0.0	10.0	-5.8	50	19	NA [1]
LFG-6	04/28/22	0.0	17.8	-6.8	48	20	3,699
LFG-6	05/26/22	0.0	15.2	-6.1	53	15	1,082
LFG-6	06/23/22	0.0	18.4	-5.2	68	18	110
LFG-6	07/26/22	0.0	18.0	-9.1	70	33	1,066
LFG-6	08/23/22	0.0	15.8	-1.3	82	19	2,172

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-6	09/29/22	0.0	17.5	-3.8	70	21	516
LFG-6	10/27/22	0.0	18.0	-8.5	64	18	2,203
LFG-6	12/06/22	0.3	9.5	-3.5	57	20	NA [1]
LFG-6	1/12/2023	0.0	12.8	-4.0	52	20	3,641
LFG-6	2/16/2023	0.0	14.7	-6.3	44	18	4,430
LFG-6	3/20/2023	0.0	18.3	-13.3	43	20	1,304
LFG-6	4/13/2023	0.0	13.8	-14.7	67	19	3,615
LFG-6	5/2/2023	0.0	14.8	-7.7	50	22	752
LFG-6	6/22/2023	0.0	18.5	-12.8	70	15	486
LFG-6	7/31/2023	0.0	17.3	-11.0	72	11-18	1,280
LFG-6	8/31/2023	0.0	18.0	-9.8	73	17	2,462
LFG-6	9/28/2023	0.0	5.9	-9.8	71	21	3,168
LFG-6	12/21/2023	0.0	-	-5.7	50	34	0
LFG-7	08/27/08 [1]	54.4	0.0	0.1	70	-	-
LFG-7	09/23/08	39.7	0.4	-4.9	60	9	-
LFG-7	09/25/08	10.6	2.9	-5.4	56	9	-
LFG-7	10/01/08	1.3	5.7	-5.8	64	10	-
LFG-7	10/07/08	1.0	8.6	-6.4	60	9	-
LFG-7	10/15/08	0.7	10.2	-6.7	64	11	-
LFG-7	10/30/08	0.5	10.9	-6.0	64	10	-
LFG-7	11/13/08	0.2	12.5	-6.2	60	9	-
LFG-7	11/26/08	0.0	12.5	-5.8	56	10	-
LFG-7	01/22/09 [2]	0.1	13.8	-6.6	48	10	13,200
LFG-7	02/05/09	0.0	14.8	-5.4	48	10	1,280
LFG-7	02/16/09	0.0	16.0	-6.3	44	10	1,080
LFG-7	03/16/09	0.0	15.8	-6.3	50	10	1,410
LFG-7	04/24/09	0.0	15.2	-6.4	54	10	2,430
LFG-7	05/20/09	0.0	14.7	-5.7	60	10	1,220
LFG-7	06/23/09	0.0	13.2	-5.3	68	10	1,820
LFG-7	07/23/09	0.0	11.3	-5.2	72	10	9,940
LFG-7	08/20/09	0.0	10.2	-5.4	72	10	12,900
LFG-7	09/23/09	0.0	11.4	-4.8	77	10	9,780
LFG-7	10/20/09	0.3	9.4	-6.6	70	10	NA [3]
LFG-7	11/24/09	0.0	11.4	-7.4	64	10	25,400
LFG-7	12/29/09	0.1	11.5	-8.8	56	10	11,300
LFG-7	01/29/10	0.0	21.0	-8.8	48	10	21
LFG-7	02/22/10	0.5	9.6	-8.8	46	10	NA [3]
LFG-7	03/26/10	0.0	13.5	-10.7	50	10	NA [3]
LFG-7	04/22/10	0.0	14.3	-9.7	57	10	3,260
LFG-7	05/18/10	0.0	13.5	-7.6	70	10	19,700

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID [*] (ppm)
LFG-7	06/29/10	0.1	9.7	-9.6	67	10	-
LFG-7	07/23/10	0.0	10.6	-9.7	70	10	NA [3]
LFG-7	08/27/10	15.3	2.5	-9.2	77	10	NA [3]
LFG-7	10/01/10	9.7	1.5	-10.0	72	10	NA [3]
LFG-7	10/22/10	7.4	3.6	-8.9	75	10	NA [3]
LFG-7	11/29/10	0.4	7.8	-10.0	64	10	NA [3]
LFG-7	12/22/10	2.0	4.0	-11.9	52	10	NA [3]
LFG-7	01/24/11	0.5	13.1	-12.1	50	10	13,730
LFG-7	02/28/11	0.1	14.9	-17.4	40	10	3,178
LFG-7	04/13/11	0.0	15.2	-21.7	48	10	2,860
LFG-7	04/29/11	0.2	12.3	-22.4	51	10	33,140
LFG-7	05/27/11	0.0	15.7	-22.8	52	10	4,270
LFG-7	06/24/11	0.3	15.0	-16.3	73	10	18,020
LFG-7	07/22/11	0.0	11.7	-12.3	66	9	1,620
LFG-7	08/25/11	4.5	3.4	-17.6	80	10	NA [3]
LFG-7	09/30/11	0.1	14.1	-9.4	86	10	4,600
LFG-7	10/26/11	0.0	13.0	-11.5	72	10	7,250
LFG-7	11/22/11	0.1	16.4	-12.1	70	10	980
LFG-7	12/29/11	0.0	15.1	-10.8	64	10	1,720
LFG-7	01/26/12	1.1	9.9	-9.1	68	10	NA [3]
LFG-7	02/21/12	0.3	16.1	-3.4	62	10	7,900
LFG-7	03/30/12	0.2	14.7	-9.2	60	10	216
LFG-7	04/27/12	0.0	15.9	-15.2	68	10	3,040
LFG-7	05/25/12	0.3	12.2	-25.7	70	10	NA [3]
LFG-7	06/26/12	0.7	5.9	-20.4	71	10	NA [3]
LFG-7	07/25/12	1.4	9.6	-28.1	84	10	NA [3]
LFG-7	08/22/12	0.0	13.2	-19.0	74	10	930
LFG-7	09/25/12	0.1	14.4	-16.7	75	10	1,860
LFG-7	10/30/12	0.0	15.3	-10.4	60	11	492 [6]
LFG-7	11/21/12	0.0	15.2	-10.3	60	10	3,170
LFG-7	12/21/12 [7]	13.8	6.4	-12.9	53	10	NA [3]
LFG-7	01/03/13 [7]	0.3	16.2	-10.0	62	10	9,130
LFG-7	01/28/13	0.2	17.4	-14.3	60	10	5,110
LFG-7	02/27/13	0.0	14.4	-5.6	63	11	4,000
LFG-7	03/25/13	0.2	17.8	-7.2	56	10	7,940
LFG-7	04/26/13	2.8	8.5	-50.1	60	0 [8]	7,440
LFG-7	05/30/13	0.0	16.9	-45.1	64	9	280
LFG-7	06/27/13	0.6	12.3	-43.9	75	10	NA [3]
LFG-7	07/25/13	0.0	16.6	-22.8	76	10	100
LFG-7	08/30/13	0.0	16.4	-25.0	78	0 [8]	210
LFG-7	09/25/13	0.1	17.3	-14.2	74	10	1,050
LFG-7	10/23/13	0.0	17.0	-15.7	68	10	381

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-7	11/20/13	0.1	16.4	-12.1	64	10	1,800
LFG-7	12/18/13	0.0	17.2	-12.6	58	10	NM [9]
LFG-7	05/13/14 [10]	19.9	8.4	-43.4	54	0 [8]	NA [3]
LFG-7	05/28/14 [10]	0.0	12.5	-47.6	68	0 [8]	NA [3]
LFG-7	06/26/14	0.0	12.1	-46.6	70	0 [8]	3,210 [6]
LFG-7	07/31/14	4.6	18.4	-44.3	70	10	2,090
LFG-7	08/28/14	13.5	8.8	-46.3	71	17	NA [3]
LFG-7	09/26/14	0.0	11.9	-6.5	75	12	2,430
LFG-7	10/24/14	0.0	14.2	-20.4	66	10	390
LFG-7	11/19/14	0.2	12.3	-14.8	60	10	4,990
LFG-7	12/17/14	0.0	16.9	-17.8	51	10	200
LFG-7	01/21/15	0.0	16.7	-6.9	53	11	290
LFG-7	02/26/15	0.0	20.3	-0.3	44	0 [4]	1,970
LFG-7	03/17/15	0.2	12.2	-17.2	55	10	NA [3]
LFG-7	04/17/15	0.2	10.7	-22.6	60	10	NA [3]
LFG-7	05/12/15	0.0	17.7	-21.9	56	10	260
LFG-7	06/25/15	0.0	14.7	-23.4	68	10	630
LFG-7	07/31/15	0.0	15.1	-33.9	72	10	47
LFG-7	08/19/15	0.0	14.2	-30.4	70	10	1,160
LFG-7	09/24/15	0.1	11.8	-17.9	72	10	1,020
LFG-7	10/22/15	0.0	15.3	-10.9	70	10	740
LFG-7	11/12/15	1.9	2.7	-28.6	70	12	880
LFG-7	12/17/15	0.9	11.2	-23.4	50	0 [11]	NA [3]
LFG-7	01/21/16	0.3	11.7	-18.6	21	0 [4, 8]	NA [3]
LFG-7	02/24/16	2.5	4.8	-17.4	34	6	NA [3]
LFG-7	03/22/16	2.3	5.2	-12.9	54	5	NA [3]
LFG-7	04/22/16	0.1	13.7	-12.0	58	8	NA [3]
LFG-7	05/19/16	0.0	13.5	-10.0	55	5	NA [3]
LFG-7	06/14/16	0.0	14.0	-10.6	59	8	NA [3]
LFG-7	07/27/16	0.0	12.4	-9.7	69	0 [8]	NA [3]
LFG-7	08/10/16	0.0	13.4	-8.7	73	7	NA [3]
LFG-7	09/15/16	0.7	9.1	-11.9	70	6	NA [3]
LFG-7	10/26/16	2.5	5.3	-12.1	43	10	NA [3]
LFG-7	11/23/16	1.6	4.9	-11.9	50	0 [8]	NA [3]
LFG-7	12/13/16	0.0	14.0	-6.5	30	0 [8]	NA [3]
LFG-7	01/10/17	1.4	3.1	-12.9	31	0 [8]	NA [3]
LFG-7	02/14/17	0.1	5.9	-15.3	46	5	NA [3]
LFG-7	03/07/17	1.5	9.0	-14.8	45	7	NA [3]
LFG-7	04/05/17	2.1	8.7	-14.0	51	6	NA [3]
LFG-7	05/25/17	0.5	1.4	-17.0	65	0 [8]	NA [3]
LFG-7	06/28/17	0.0	13.6	-14.2	66	0 [8]	NA [3]
LFG-7	07/24/17	0.0	13.7	-14.2	69	0 [8]	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID [*] (ppm)
LFG-7	08/14/17	0.0	13.6	-14.2	68	0 [8]	NA [3]
LFG-7	09/13/17	0.0	14.1	-11.6	71	5	NA [3]
LFG-7	10/30/17	1.0	10.1	-15.3	49	9	NA [3]
LFG-7	11/17/17	0.3	12.8	-11.6	41	5	NA [3]
LFG-7	12/07/17	0.6	13.3	-11.6	36	8	NA [3]
LFG-7	01/24/18	12.9	8.0	-1.4	42	0 [8]	NA [3]
LFG-7	02/13/18	4.9	14.7	-16.5	48	0 [8]	NA [3]
LFG-7	03/05/18	3.2	15.7	-16.1	47	0 [8]	NA [3]
LFG-7	04/04/18	3.6	15.1	-2.3	42	0 [8]	NA [3]
LFG-7	05/17/18	0.3	10.7	-8.9	56	0 [8]	-
LFG-7	07/03/18	0.0	15.2	-8.0	58	0 [8]	-
LFG-7	07/31/18	0.0	13.8	-10.0	66	0 [8]	-
LFG-7	08/30/18	1.6	6.1	-9.6	60	0 [8]	-
LFG-7	09/28/18	1.5	11.0	-12.6	54	0 [8]	NA [3]
LFG-7	11/16/18	0.6	14.5	-12.7	44	0 [8]	> 4,193
LFG-7	12/13/18	0.9	9.8	-12.4	44	5	3,178
LFG-7	01/23/19	1.2	3.4	-12.0	42	3	NA [3]
LFG-7	02/22/19	1.0	3.0	-12.5	40	3	NA [3]
LFG-7	04/02/19	0.8	9.9	-11.7	44	5	NA [3]
LFG-7	04/26/19	0.0	12.3	-12.0	54	1	NA [3]
LFG-7	05/29/19	0.0	5.0	-14.0	84	0 [8]	NA [3]
LFG-7	06/18/19	0.0	14.0	-12.1	68	0 [8]	NA [3]
LFG-7	07/23/19	0.0	13.1	-11.8	78	0 [8]	NA [3]
LFG-7	08/29/19	0.0	10.9	-12.2	72	0 [8]	86
LFG-7	09/12/19	0.0	6.0	-11.8	62	0 [8]	248
LFG-7	10/31/19	0.1	14.9	-15.3	42	2	578
LFG-7	11/25/19	0.3	16.5	-13.9	50	- [9]	-
LFG-7	02/18/20	0.0	15.6	-15.5	38	4	NA [3]
LFG-7	06/23/20	0.0	14.7	-13.7	63	0 [8]	NA [3]
LFG-7	08/17/20	0.0	12.3	-13.6	74	0 [8]	NA [3]
LFG-7	11/05/20	0.2	12.0	-12.8	63	0 [8]	NA [3]
LFG-7	01/20/21	0.9	11.4	-10.1	34	4	NA [3]
LFG-7	02/19/21	0.0	12.8	-0.1	38	5	NA [9]
LFG-7	03/25/21	1.1	11.9	-13.7	54	4	NA [9]
LFG-7	04/22/21	0.0	15.3	-14.6	56	NA [9]	13
LFG-7	05/21/21	0.0	18.7	-12.3	65	35	1
LFG-7	06/17/21	0.0	14.6	-10.1	86	36	72
LFG-7	07/15/21	0.0	15.3	-9.5	62	0 [8]	NA [9]
LFG-7	08/12/21	0.3	8.1	-11.7	61	0 [8]	NA [3]
LFG-7	09/23/21	0.2	8.7	-11.2	75	0 [8]	7,985
LFG-7	10/21/21	0.0	15.3	-10.8	60	16	849
LFG-7	11/30/21	0.9	9.9	-10.7	50	12	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-7	12/21/21	0.8	7.0	-10.6	34	0 [8]	NA [3]
LFG-7	01/31/22	1.1	8.4	-5.4	37	24	272
LFG-7	02/28/22	0.4	15.5	-4.2	48	20	4,630
LFG-7	03/28/22	1.1	11.9	-10.8	44	37	NA [3]
LFG-7	04/28/22	0.0	15.0	-12.8	42	0	2,163
LFG-7	05/26/22	0.0	11.8	-11.7	53	0	NA [3]
LFG-7	06/23/22	0.0	16.3	-11.3	75	0	12
LFG-7	07/26/22	0.0	16.0	-10.6	69	0	1,192
LFG-7	08/23/22	0.0	15.1	-10.6	72	0	2,162
LFG-7	09/29/22	0.0	15.2	-10.0	64	0	171
LFG-7	10/27/22	0.0	16.5	-8.8	58	10	350
LFG-7	12/06/22	0.9	10.2	-9.7	42	2	NA [3]
LFG-7	1/12/2023	0.0	19.7	-0.5	28	0	35
LFG-7	2/16/2023	0.0	16.9	-5.4	33	0	9,028
LFG-7	3/20/2023	0.0	19.4	-1.6	48	0	43
LFG-7	4/13/2023	0.0	5.1	-17.7	80	0	NA [3]
LFG-7	5/2/2023	0.0	6.6	-15.8	52	12	973
LFG-7	6/22/2023	0.0	17.0	-13.5	73	13	698
LFG-7	7/31/2023	0.0	15.4	-11.9	74	14-18	1,509
LFG-7	8/31/2023	0.0	15.8	-10.2	74	1	563
LFG-7	9/28/2023	0.0	4.8	-9.2	72	0	3,123
LFG-7	12/21/2023	0.0	-	-12.4	45	12	0
LFG-8	08/27/08 [1]	50.7	0.0	0.0	70	-	-
LFG-8	09/23/08	46.3	0.1	-8.5	56	10	-
LFG-8	09/25/08	19.1	2.5	-9.5	56	9	-
LFG-8	10/01/08	3.2	3.6	-10.5	58	10	-
LFG-8	10/07/08	2.0	6.6	-10.6	60	9	-
LFG-8	10/15/08	1.4	8.4	-9.5	60	12	-
LFG-8	10/15/08	1.4	8.4	-9.4	60	10	-
LFG-8	10/30/08	1.7	9.1	-10.7	64	10	-
LFG-8	11/13/08	1.4	9.1	-12.3	54	10	-
LFG-8	11/26/08	1.5	9.7	-9.7	54	10	-
LFG-8	01/22/09 [2]	2.4	9.8	-9.0	53	10	NA [3]
LFG-8	02/05/09	1.9	10.4	-12.6	53	10	41,000
LFG-8	02/16/09	0.7	12.9	-8.9	48	10	50,000
LFG-8	03/16/09	0.7	12.9	-11.0	54	10	50,000
LFG-8	04/24/09	0.9	11.0	-10.4	60	10	NA [3]
LFG-8	05/20/09	0.9	10.6	-10.3	60	10	NA [3]
LFG-8	06/23/09	1.3	9.5	-10.9	70	10	NA [3]
LFG-8	07/23/09	2.1	8.7	-12.3	70	10	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-8	08/20/09	1.6	8.2	-20.9	70	20	NA [3]
LFG-8	09/23/09	1.9	9.2	-20.5	78	20	NA [3]
LFG-8	10/20/09	2.1	8.3	-26.3	70	20	NA [3]
LFG-8	11/24/09	2.5	9.9	-32.2	62	20	NA [3]
LFG-8	12/29/09	1.3	9.9	-31.1	56	20	>50,000
LFG-8	01/29/10	2.0	13.0	-31.1	49	20	>50,000
LFG-8	02/22/10	5.1	8.8	-31.1	50	20	NA [3]
LFG-8	03/26/10	1.2	10.2	-33.1	52	20	NA [3]
LFG-8	04/22/10	1.0	11.7	-34.6	62	20	NA [3]
LFG-8	05/18/10	1.0	12.0	-37.6	64	20	>50,000
LFG-8	06/29/10	1.6	9.2	-41.6	74	20	-
LFG-8	07/23/10	1.9	10.1	-42.0	78	20	NA [3]
LFG-8	08/27/10	26.3	1.4	-39.0	82	20	NA [3]
LFG-8	10/01/10	22.4	0.7	-39.0	70	20	NA [3]
LFG-8	10/22/10	16.3	4.3	-39.5	77	20	NA [3]
LFG-8	11/29/10	2.6	11.2	-44.6	62	20	NA [3]
LFG-8	12/22/10	10.0	4.6	-47.4	66	20	NA [3]
LFG-8	01/24/11	2.5	12.9	-48.5	63	20	NA [3]
LFG-8	02/28/11	1.6	13.1	-49.6	52	20	NA [3]
LFG-8	04/13/11	1.1	13.0	-48.8	52	10 [5]	NA [3]
LFG-8	04/29/11	2.0	11.1	-48.0	56	7 [5]	NA [3]
LFG-8	05/27/11	1.0	13.7	-47.4	52	10 [5]	>50,000
LFG-8	06/24/11	1.2	12.2	-45.8	73	10 [5]	NA [3]
LFG-8	07/22/11	1.0	11.0	-43.6	66	13 [5]	NA [3]
LFG-8	08/25/11	15.0	7.6	-45.0	86	14 [5]	NA [3]
LFG-8	09/30/11	1.4	14.2	-43.4	86	10 [5]	>50,000
LFG-8	10/26/11	1.1	13.2	-44.9	80	20	>50,000
LFG-8	11/22/11	1.1	14.2	-44.9	80	23	>50,000
LFG-8	12/29/11	1.0	14.4	-44.6	70	22	49,900
LFG-8	01/26/12	4.7	9.8	-46.8	80	25	NA [3]
LFG-8	02/21/12	1.0	15.5	-35.7	70	25	>50,000
LFG-8	03/30/12	0.6	14.2	-28.6	62	25	27,840
LFG-8	04/27/12	0.0	19.3	-44.4	72	18 [5]	80
LFG-8	05/25/12	1.7	10.9	-44.3	81	0 [5]	NA [3]
LFG-8	06/26/12	5.6	3.4	-44.7	83	12 [5]	NA [3]
LFG-8	07/25/12	3.5	6.6	-46.1	90	19 [5]	NA [3]
LFG-8	08/22/12	1.2	12.4	-39.0	80	7 [5]	NA [3]
LFG-8	09/25/12	2.0	12.1	-40.0	78	18 [5]	NA [3]
LFG-8	10/30/12	1.1	14.3	-41.6	70	21 [5]	NA [6]
LFG-8	11/21/12	0.8	14.9	-42.6	64	25	33,810
LFG-8	12/21/12 [7]	22.2	3.2	-44.5	57	25	NA [3]
LFG-8	01/03/13 [7]	1.2	15.1	-47.6	64	25	41,890

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-8	01/28/13	0.7	15.9	-48.2	70	26	45,520
LFG-8	02/27/13	0.5	16.2	-35.0	70	25	41,430
LFG-8	03/25/13	0.9	15.5	-44.0	68	24	>50,000
LFG-8	04/26/13	7.0	6.1	-49.2	70	0 [8]	NA [3]
LFG-8	05/30/13	0.6	14.0	-44.8	70	0 [8]	NA [3]
LFG-8	06/27/13	2.6	10.0	-44.4	80	24	NA [3]
LFG-8	07/25/13	0.4	14.1	-43.7	85	9	27,340
LFG-8	08/30/13	0.7	14.7	-40.3	83	16	21,770
LFG-8	09/25/13	0.8	15.4	-34.1	84	17	24,470
LFG-8	10/23/13	0.4	16.1	-45.5	78	20	21,580
LFG-8	11/20/13	0.8	15.7	-46.7	65	25	16,890
LFG-8	12/18/13	0.5	16.2	-46.7	68	25	4,290
LFG-8	05/13/14 [10]	37.6	1.3	-43.2	54	4 [5]	NA [3]
LFG-8	05/28/14 [10]	1.3	9.1	-46.1	70	0 [8]	NA [3]
LFG-8	06/26/14	1.0	10.2	-46.4	72	2 [5]	NA [6]
LFG-8	07/31/14	13.9	3.7	-44.6	75	1 [5]	NA [3]
LFG-8	08/28/14	25.5	2.9	-46.7	72	0 [8]	NA [3]
LFG-8	09/26/14	0.3	13.5	-46.6	76	24	380
LFG-8	10/24/14	0.4	15.3	-47.6	66	20	170
LFG-8	11/19/14	1.5	10.7	-42.3	70	25	NA [3]
LFG-8	12/17/14	0.4	17.0	-41.7	60	25	6,190
LFG-8	01/21/15	1.7	13.1	-37.0	63	25	6,010
LFG-8	02/26/15	1.6	10.9	-39.2	62	25	NA [3]
LFG-8	03/17/15	1.6	11.4	-43.0	65	20	NA [3]
LFG-8	04/17/15	1.2	8.5	-39.9	69	21	NA [3]
LFG-8	05/12/15	0.3	16.1	-42.5	53	25	NA [3]
LFG-8	06/25/15	0.1	13.9	-37.9	72	20	7,440
LFG-8	07/31/15	0.3	14.3	-37.7	76	16	10,130
LFG-8	08/19/15	0.6	14.3	-41.8	76	22	10,230
LFG-8	09/24/15	0.8	12.3	-42.2	78	22	12,310
LFG-8	10/22/15	0.6	16.3	-42.9	75	25	8,930
LFG-8	11/12/15	3.7	4.0	-29.6	71	19	8,790
LFG-8	12/17/15	0.0	4.4	-23.6	60	0 [11]	NA [3]
LFG-8	01/21/16	0.0	20.6	-18.6	25	0 [8]	290
LFG-8	02/24/16	8.7	5.9	-17.3	33	0 [5, 8]	NA [3]
LFG-8	03/22/16	11.0	1.4	-12.9	54	0 [5, 8]	NA [3]
LFG-8	04/22/16	3.1	10.7	-12.7	58	13	NA [3]
LFG-8	05/19/16	1.7	11.4	-10.5	55	20	NA [3]
LFG-8	06/14/16	1.9	11.1	-10.6	62	0 [5, 8]	NA [3]
LFG-8	07/27/16	3.1	8.8	-9.8	71	0 [8]	NA [3]
LFG-8	08/10/16	2.3	9.7	-9.2	77	19	NA [3]
LFG-8	09/15/16	5.6	5.1	-11.6	74	15	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID [*] (ppm)
LFG-8	10/26/16	12.4	1.4	-12.5	45	12	NA [3]
LFG-8	11/23/16	14.0	0.8	-12.6	51	0 [8]	NA [3]
LFG-8	12/13/16	0.0	11.9	-15.8	34	0 [8]	NA [3]
LFG-8	01/10/17	27.3	0.3	-12.8	38	20	NA [3]
LFG-8	02/14/17	5.5	5.3	-15.4	44	20	NA [3]
LFG-8	03/07/17	19.0	1.1	-14.7	47	15	NA [3]
LFG-8	04/05/17	19.6	2.0	-14.1	53	15	NA [3]
LFG-8	05/25/17	13.2	0.0	-17.1	65	0 [8]	NA [3]
LFG-8	06/28/17	2.9	6.7	-14.3	67	0 [8]	NA [3]
LFG-8	07/24/17	3.6	6.9	-14.3	68	0 [8]	NA [3]
LFG-8	08/14/17	3.9	6.9	-14.1	66	0 [8]	NA [3]
LFG-8	09/13/17	3.1	9.8	-13.0	74	16	NA [3]
LFG-8	10/30/17	7.9	3.6	-16.0	49	0 [8]	NA [3]
LFG-8	11/17/17	3.6	8.8	-13.0	41	19	NA [3]
LFG-8	12/07/17	4.4	9.0	-13.0	37	0 [8]	NA [3]
LFG-8	01/24/18	36.0	1.4	-12.0	52	0 [8]	NA [3]
LFG-8	02/13/18	12.3	11.0	-16.5	52	0 [8]	NA [3]
LFG-8	03/05/18	10.3	14.1	-16.0	48	14	NA [3]
LFG-8	04/04/18	11.8	13.5	-12.0	39	16	NA [3]
LFG-8	05/17/18	9.2	1.8	-11.7	56	0 [8]	-
LFG-8	07/03/18	2.4	9.4	-8.5	63	0 [8]	-
LFG-8	07/31/18	2.4	8.5	-10.0	68	0 [8]	-
LFG-8	08/30/18	11.0	0.1	-9.2	60	0 [8]	-
LFG-8	09/28/18	8.6	0.8	-12.6	50	0 [8]	726
LFG-8	11/16/18	7.7	2.5	-12.2	38	0 [8]	NA [3]
LFG-8	12/13/18	26.5	0.0	-12.3	44	11	NA [3]
LFG-8	01/23/19	10.7	1.9	-12.0	39	3	NA [3]
LFG-8	02/22/19	12.8	1.8	-12.5	40	0 [8]	NA [3]
LFG-8	04/02/19	5.4	3.7	-11.0	46	2	NA [3]
LFG-8	04/26/19	13.1	1.4	-12.0	54	0 [8]	NA [3]
LFG-8	05/29/19	9.6	0.0	-13.9	81	0 [8]	NA [3]
LFG-8	06/18/19	0.9	6.6	-11.9	76	0 [8]	NA [3]
LFG-8	07/23/19	2.0	5.8	-11.8	80	0 [8]	NA [3]
LFG-8	08/29/19	3.9	3.6	-13.0	74	5	NA [3]
LFG-8	09/12/19	5.3	4.9	-12.2	62	7	2,051
LFG-8	10/31/19	2.2	6.3	-14.3	30	0 [8]	11,247
LFG-8	11/25/19	4.4	10.8	-13.7	44	- [9]	-
LFG-8	02/18/20	4.4	10.6	-15.6	40	4	NA [3]
LFG-8	06/23/20	1.0	6.9	-13.3	68	0 [8]	NA [3]
LFG-8	08/17/20	4.5	2.5	-13.7	78	0 [8]	NA [3]
LFG-8	11/05/20	7.7	2.9	-12.2	66	0 [8]	NA [3]
LFG-8	01/20/21	8.6	2.1	-7.7	34	2	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-8	02/19/21	5.0	9.1	0.0	32	10	NA [3]
LFG-8	03/25/21	12.5	0.2	-13.5	52	1	NA [9]
LFG-8	04/22/21	3.6	10.1	-13.6	55	NA [9]	NA [3]
LFG-8	05/21/21	0.6	11.2	-11.3	60	0	NA [3]
LFG-8	06/17/21	0.7	9.5	-10.0	100	55	NA [3]
LFG-8	07/15/21	1.1	9.6	-9.3	64	32	NA [3]
LFG-8	08/12/21	8.8	0.4	-11.7	62	0 [8]	NA [3]
LFG-8	09/23/21	24.0	0.0	-10.6	80	0 [8]	NA [3]
LFG-8	10/21/21	4.8	9.7	-11.0	55	7	NA [3]
LFG-8	11/30/21	12.9	0.8	-10.8	50	4	NA [3]
LFG-8	12/21/21	10.3	1.4	-10.7	30	0 [8]	NA [3]
LFG-8	01/31/22	9.0	2.0	-11.7	38	19	882
LFG-8	02/28/22	3.3	9.4	-10.3	50	0	1,250
LFG-8	03/28/22	5.3	2.7	-10.6	46	5	NA [3]
LFG-8	04/28/22	7.8	2.4	-11.4	44	26	NA [3]
LFG-8	05/26/22	10.2	0.7	-10.2	55	16	NA [3]
LFG-8	06/23/22	0.5	12.4	-11.4	82	7	NA [3]
LFG-8	07/26/22	1.2	11.6	-10.9	70	0	NA [3]
LFG-8	08/23/22	1.5	11.1	-10.9	80	0	NA [3]
LFG-8	09/29/22	3.8	10.1	-10.2	64	0	5
LFG-8	10/27/22	3.1	11.7	-8.7	58	13	NA [3]
LFG-8	12/06/22	11.3	1.4	-10.1	42	34	NA [3]
LFG-8	1/12/2023	6.6	4.0	-10.7	40	19	NA [3]
LFG-8	2/16/2023	13.4	2.0	-12.2	36	0	NA [3]
LFG-8	3/20/2023	4.0	5.6	-12.8	42	9	NA [3]
LFG-8	4/13/2023	0.5	2.2	-17.0	80	9	NA [3]
LFG-8	5/2/2023	1.1	2.7	-14.8	54	0	NA [3]
LFG-8	6/22/2023	0.5	14.3	-13.4	82	0	11,948
LFG-8	7/31/2023	1.1	6.1	-11.2	80	1	NA [3]
LFG-8	8/31/2023	1.7	12.4	-10.5	70	0	NA [3]
LFG-8	9/28/2023	1.5	4.1	-10.4	72	1	NA [3]
LFG-8	12/21/2023	3.7	-	-12.9	42	0	0
LFG-9	08/27/08 [1]	20.9	0.0	0.0	70	-	-
LFG-9	09/23/08	28.1	0.0	-1.0	62	10	-
LFG-9	09/25/08	4.0	3.0	-1.2	56	11	-
LFG-9	10/01/08	0.0	9.5	-1.4	60	10	-
LFG-9	10/07/08	0.0	11.8	-1.2	60	10	-
LFG-9	10/15/08	0.0	12.8	-1.4	60	10	-
LFG-9	10/30/08	0.0	13.5	-1.0	64	10	-
LFG-9	11/13/08	0.0	13.6	-1.5	58	11	-

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-9	11/26/08	0.0	13.5	-1.3	58	11	-
LFG-9	01/22/09 [2]	0.0	13.3	-1.6	50	10	1,160
LFG-9	02/05/09	0.0	11.5	-1.6	48	10	345
LFG-9	02/16/09	0.0	16.3	-1.8	46	10	247
LFG-9	03/16/09	0.0	15.7	-2.0	52	10	269
LFG-9	04/24/09	0.0	16.3	-1.4	60	10	520
LFG-9	05/20/09	0.0	16.0	-1.2	60	10	219
LFG-9	06/23/09	0.0	14.2	-0.9	70	10	243
LFG-9	07/23/09	0.0	13.3	-0.8	72	10	500
LFG-9	08/20/09	0.0	13.6	-0.9	74	10	563
LFG-9	09/23/09	0.0	13.8	-0.5	80	10	537
LFG-9	10/20/09	0.0	14.6	-1.0	74	10	681
LFG-9	11/24/09	0.0	15.6	-0.6	70	10	801
LFG-9	12/29/09	0.0	15.4	-0.8	60	10	434
LFG-9	01/29/10	0.0	18.5	-0.8	50	10	383
LFG-9	02/22/10	0.0	13.8	-0.8	45	10	1,870
LFG-9	03/26/10	0.0	16.3	-0.6	48	10	955
LFG-9	04/22/10	0.0	17.0	-0.7	60	10	305
LFG-9	05/18/10	0.0	16.4	-0.6	60	10	1,990
LFG-9	06/29/10	0.0	15.4	-1.0	64	10	-
LFG-9	07/23/10	0.0	14.8	-0.7	70	10	730
LFG-9	08/27/10	1.2	0.0	-0.6	76	10	NA [3]
LFG-9	10/01/10	0.0	2.5	-0.8	70	10	NA [3]
LFG-9	10/22/10	0.0	4.3	-0.4	72	10	NA [3]
LFG-9	11/29/10	0.0	15.6	-0.6	60	10	1,490
LFG-9	12/22/10	0.1	11.9	-0.8	58	10	1,265
LFG-9	01/24/11	0.1	16.2	-0.6	56	10	1,040
LFG-9	02/28/11	0.1	16.6	-0.8	50	10	707
LFG-9	04/13/11	0.0	17.2	-0.8	50	10	860
LFG-9	04/29/11	0.0	16.3	-0.9	52	10	2,810
LFG-9	05/27/11	0.0	17.6	-0.6	52	10	1,880
LFG-9	06/24/11	0.0	17.3	-1.1	68	10	1,560
LFG-9	07/22/11	0.0	14.5	-0.7	66	10	237
LFG-9	08/25/11	0.0	10.6	-0.7	77	10	NA [3]
LFG-9	09/30/11	0.0	16.8	-0.4	76	10	320
LFG-9	10/26/11	0.0	15.7	-0.4	73	10	530
LFG-9	11/22/11	0.0	16.7	-0.3	71	10	660
LFG-9	12/29/11	1.0	14.4	-0.5	70	10	49,900
LFG-9	01/26/12	0.0	13.3	-0.4	62	10	4,650
LFG-9	02/21/12	0.0	16.5	-0.3	46	10	1,010
LFG-9	03/30/12	0.0	17.6	-0.4	62	10	335
LFG-9	04/27/12	0.0	16.6	-0.6	60	10	500

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-9	05/25/12	0.0	16.1	-1.2	58	10	400
LFG-9	06/26/12	0.0	10.2	-0.6	69	10	NA [3]
LFG-9	07/25/12	0.0	11.8	-0.5	78	10	3,810
LFG-9	08/22/12	0.0	15.9	-0.4	70	10	560
LFG-9	09/25/12	0.0	15.4	-0.4	68	10	170
LFG-9	10/30/12	0.0	16.9	-0.3	60	10	88 [6]
LFG-9	11/21/12	0.0	17.3	-0.3	60	10	210
LFG-9	12/21/12 [7]	0.0	4.4	-0.3	50	10	NA [3]
LFG-9	01/03/13 [7]	0.0	17.8	-0.2	63	10	701
LFG-9	01/28/13	0.0	17.7	-0.2	55	10	746
LFG-9	02/27/13	0.0	18.7	-0.3	57	10	598
LFG-9	03/25/13	0.0	18.2	-0.4	58	10	1,470
LFG-9	04/26/13	0.1	10.9	-0.6	63	10	2,130
LFG-9	05/30/13	0.0	17.7	-44.3	62	10	180
LFG-9	06/27/13	0.0	15.6	-1.0	69	10	260
LFG-9	07/25/13	0.0	17.4	-0.4	74	10	240
LFG-9	08/30/13	0.0	17.0	-0.2	75	10	180
LFG-9	09/25/13	0.0	17.1	-0.3	78	10	130
LFG-9	10/23/13	0.0	17.8	-0.3	71	10	70
LFG-9	12/18/13	0.0	18.6	-0.3	60	10	102
LFG-9	05/13/14 [10]	0.4	9.8	-2.2	50	10	NA [3]
LFG-9	05/28/14 [10]	0.0	15.6	-0.6	60	10	3,580
LFG-9	06/26/14	0.0	15.2	-0.5	60	10	380 [6]
LFG-9	07/31/14	0.0	3.5	-0.3	64	10	NA [3]
LFG-9	08/28/14	0.2	3.1	-0.4	71	11	NA [3]
LFG-9	09/26/14	0.0	14.9	-0.3	72	10	39
LFG-9	10/24/14	0.0	17.1	-0.3	68	10	170
LFG-9	11/19/14	0.0	14.1	-0.3	61	10	100
LFG-9	12/17/14	0.0	18.4	-0.6	55	10	41
LFG-9	01/21/15	0.0	18.8	-0.4	54	10	88
LFG-9	02/26/15	0.0	19.6	-0.1	37	0 [4]	810
LFG-9	03/17/15	0.0	16.7	-0.6	50	10	300
LFG-9	04/17/15	0.0	16.0	-1.8	56	10	49
LFG-9	05/12/15	0.0	19.4	-1.0	53	10	220
LFG-9	06/25/15	0.0	17.8	-0.9	63	10	18
LFG-9	07/31/15	0.0	18.4	-0.7	70	10	50
LFG-9	08/19/15	0.0	18.5	-0.8	68	10	380
LFG-9	09/24/15	0.0	16.4	-0.8	70	10	430
LFG-9	10/22/15	0.0	17.8	-0.4	67	9	360
LFG-9	11/12/15	0.0	12.3	-0.5	65	15	200
LFG-9	12/17/15	0.0	12.4	-0.4	58	5	NA [3]

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)
LFG-9	01/21/16	0.0	11.3	-3.5	30	0 [4, 8]	NA [3]
LFG-9	02/24/16	0.0	14.0	-0.8	36	7	NA [3]
LFG-9	03/22/16	0.0	13.7	-0.3	50	9	NA [3]
LFG-9	04/22/16	0.0	16.2	-0.6	63	10	NA [3]
LFG-9	05/19/16	0.0	16.9	-0.7	58	10	810
LFG-9	06/14/16	0.0	16.9	-0.7	60	10	590
LFG-9	07/27/16	0.0	16.1	1.0	70	0 [8]	930
LFG-9	08/10/16	0.0	14.9	-0.8	74	0 [8]	NA [3]
LFG-9	09/15/16	0.0	16.7	-0.7	72	10	1,200
LFG-9	10/26/16	0.0	11.2	-0.2	47	5	NA [3]
LFG-9	11/23/16	0.0	10.5	-0.2	48	10	NA [3]
LFG-9	12/13/16	0.0	11.9	0.2	31	0 [8]	NA [3]
LFG-9	01/10/17	0.0	13.5	0.2	34	7	NA [3]
LFG-9	02/14/17	0.0	15.5	-0.1	50	11	NA [3]
LFG-9	03/07/17	0.0	10.3	-0.2	44	10	NA [3]
LFG-9	04/05/17	0.0	11.1	-13.5	51	10	NA [3]
LFG-9	05/25/17	0.0	13.4	-0.1	65	5	NA [3]
LFG-9	06/28/17	0.0	14.3	0.0	66	0 [8]	NA [3]
LFG-9	07/24/17	0.0	13.6	-14.0	70	0 [8]	NA [3]
LFG-9	08/14/17	0.0	13.4	-14.2	68	7	NA [3]
LFG-9	09/13/17	0.0	12.4	-0.2	72	10	NA [3]
LFG-9	10/30/17	0.0	11.4	0.0	46	0 [8]	NA [3]
LFG-9	11/17/17	0.0	13.5	-0.2	45	8	NA [3]
LFG-9	12/07/17	0.0	14.2	-0.2	38	0 [8]	NA [3]
LFG-9	01/24/18	6.4	13.7	-12.0	50	0 [8]	NA [3]
LFG-9	02/13/18	1.8	17.4	-16.3	48	6	6,201
LFG-9	03/05/18	2.1	17.2	-16.0	44	7	2,056
LFG-9	04/04/18	2.2	16.7	-11.9	38	5	1,883
LFG-9	05/17/18	0.0	10.2	-11.8	56	0 [8]	-
LFG-9	07/03/18	0.0	16.2	-8.1	60	0 [8]	-
LFG-9	07/31/18	0.0	15.2	-0.1	62	0 [8]	-
LFG-9	08/30/18	0.0	7.9	-9.2	59	0 [8]	-
LFG-9	09/28/18	0.0	9.8	-12.5	52	0 [8]	NA [3]
LFG-9	11/16/18	0.0	10.6	-12.8	52	0 [8]	0
LFG-9	12/13/18	0.0	14.7	-12.3	48	6	> 5,745
LFG-9	01/23/19	0.0	11.9	-11.9	44	6	3,199
LFG-9	02/22/19	0.0	20.9	0.0	38	0 [11]	2,229
LFG-9	04/02/19	0.0	16.2	-11.0	42	8	1,901
LFG-9	04/26/19	0.0	13.3	-12.1	49	7	3,298
LFG-9	05/29/19	0.0	15.1	-13.6	62	6	139
LFG-9	06/18/19	0.0	14.9	-12.0	62	8	791
LFG-9	07/23/19	0.0	14.6	-11.8	70	9	458

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID [*] (ppm)
LFG-9	08/29/19	0.0	12.1	-13.0	68	14	1,099
LFG-9	09/12/19	0.0	14.3	-12.5	61	8	9
LFG-9	10/31/19	0.0	15.8	-14.0	55	10	15
LFG-9	11/25/19	0.2	16.4	-0.3	57	- [9]	-
LFG-9	02/18/20	0.0	16.0	-15.4	42	10	908
LFG-9	06/23/20	0.0	15.5	-13.1	60	10	3
LFG-9	08/17/20	0.0	13.4	-13.6	72	7	52
LFG-9	11/05/20	0.0	12.1	-12.1	64	9	14
LFG-9	01/20/21	0.0	15.3	-9.8	40	9	368
LFG-9	02/19/21	0.0	14.8	0.0	31	0	2,832
LFG-9	03/25/21	0.0	13.7	-	58	7	NA [9]
LFG-9	04/22/21	0.0	16.9	-0.4	56	NA [9]	101
LFG-9	05/21/21	0.0	16.6	-12.5	62	0	18
LFG-9	06/17/21	0.0	16.0	-0.2	68	0 [8]	446
LFG-9	07/15/21	0.0	15.5	-0.2	70	0 [8]	NA [9]
LFG-9	08/12/21	0.0	10.9	-0.1	60	0 [8]	8,920
LFG-9	09/23/21	0.0	6.7	-0.2	68	8	4,950
LFG-9	10/21/21	0.0	15.4	-10.8	62	19	28
LFG-9	11/30/21	0.0	12.3	-10.4	54	7	11
LFG-9	12/21/21	0.0	15.1	-0.3	38	0 [8]	8
LFG-9	01/31/22	0.0	11.9	0.0	40	0	0
LFG-9	02/28/22	0.0	16.1	-9.7	48	0	48
LFG-9	03/28/22	0.0	13.3	-0.2	43	11	11
LFG-9	04/28/22	0.0	14.6	-0.2	44	13	37
LFG-9	05/26/22	0.0	16.4	-11.7	50	5	6
LFG-9	06/23/22	0.0	17.0	-0.2	64	10	7
LFG-9	07/26/22	0.0	16.0	-0.2	68	3	0
LFG-9	08/23/22	0.0	15.1	-0.2	70	7	3
LFG-9	09/29/22	0.0	15.6	-0.4	62	6	7
LFG-9	10/27/22	0.0	16.7	-8.8	57	6	7
LFG-9	12/06/22	0.0	17.3	-0.4	45	13	0
LFG-9	1/12/2023	0.0	17.2	-0.7	41	5	6
LFG-9	2/16/2023	0.0	13.8	-0.2	42	9	61
LFG-9	3/20/2023	0.0	17.1	-13.9	42	9	1,316
LFG-9	4/13/2023	0.0	15.1	-18.1	52	10	58
LFG-9	5/2/2023	0.0	15.2	-15.6	48	5	119
LFG-9	6/22/2023	0.0	17.5	-13.6	65	10	1
LFG-9	7/31/2023	0.0	15.7	-12.0	69	0	97
LFG-9	8/31/2023	0.0	15.5	-10.6	69	9	421
LFG-9	9/28/2023	0.0	5.2	-10.4	66	7	0
LFG-9	12/21/2023	0.0	-	-0.2	45	15	0

Appendix E.3

Historical LFG Well Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)	Temperature (°F)	Flow Rate (CFM)	VOC Concentration by FID / PID * (ppm)

Notes:
*Readings for the first three quarters in 2023 were recorded using a FID. The fourth quarter in 2023 readings were recor
[1] Pre-startup readings
[2] System was restarted on 1-19-2009 after being down for a month for SVE well cleaning and condensate collection system installation.
[3] No reading could be obtained; FID flamed out because of low oxygen level.
[4] Values could not be determined because well was frozen.
[5] Valve is fully open
[6] FID taken with Thermo Scientific TVA 1000 Vapor Analyzer.
[7] System was shutdown on 11/21/12 following monthly monitoring for 1 month shutdown period. Post 1 month shutdown monitoring was conducted at startup (12/21/12) and two weeks after startup (1/3/13).
[8] Air flow is heard through the pipe, but no flow measurement could be determined.
[9] Value could not be determined because of an equipment malfunction.
[10] System was shutdown on 1/10/14 for a 4 month shutdown period. Post 4 month shutdown monitoring was conducted at startup (5/13/14) and two weeks after startup (5/28/14).
[11] Well is not under vaccum; unable to obtain flow reading.
With approval from the WDNR on 10/21/15, System modifications occurred on 10/29/15. Modifications included operating the system on a part time schedule (16 hrs/day) and adjusting the LFG wells to focus extraction in the vicinity of the GP-2 nest.
With approval from the WDNR on 9/29/23, landfill gas extraction wells monitoring frequency was changed to quarterly. Additionally, the VOC monitoring method was modified to use a PID rather than a FID.

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-01	08/27/08 [1]	34.0	0.0	0.0
GP-01	09/23/08	30.9	0.0	0.0
GP-01	09/25/08	1.5	11.1	-0.4
GP-01	10/02/08	0.0	17.8	-0.6
GP-01	10/07/08	0.0	18.3	-0.6
GP-01	10/15/08	0.0	19.0	-0.6
GP-01	10/30/08	0.0	19.4	-0.5
GP-01	11/13/08	0.0	20.0	-0.7
GP-01	11/26/08	0.0	20.5	-0.6
GP-01	01/22/09 [2]	0.0	19.6	-0.9
GP-01	02/05/09	0.0	20.2	-0.8
GP-01	02/17/09	0.0	20.6	-1.2
GP-01	03/16/09	0.0	19.7	-1.2
GP-01	04/24/09	0.0	19.9	-1.3
GP-01	05/20/09	0.0	20.4	-1.2
GP-01	06/23/09	0.0	18.8	-1.2
GP-01	07/23/09	0.0	19.5	-1.0
GP-01	10/20/09	0.0	20.5	-1.6
GP-01	02/01/10	0.0	19.4	-1.2
GP-01	04/22/10	0.0	20.1	-1.4
GP-01	07/23/10	0.0	19.8	-1.2
GP-01	10/22/10	0.0	20.8	-0.9
GP-01	01/24/11	0.1	19.1	-1.4
GP-01	04/29/11	0.0	20.5	-2.3
GP-01	07/22/11	0.0	18.0	-1.1
GP-01	10/26/11	0.0	19.7	-1.0
GP-01	01/26/12	0.0	20.9	-1.2
GP-01	04/27/12	0.0	19.5	-1.3
GP-01	07/25/12	0.0	19.7	-1.3
GP-01	11/21/12	0.0	20.6	-0.8
GP-01	12/21/12 [3]	0.0	20.5	-1.0
GP-01	01/03/13 [3]	0.0	20.5	0.0
GP-01	04/26/13	0.0	20.1	-2.3
GP-01	07/25/13	0.0	19.7	-0.8
GP-01	10/23/13	0.0	20.9	-0.8
GP-01	01/10/14	0.0	21.0	-0.3
GP-01	02/07/14	0.0	20.2	0.0
GP-01	03/12/14	0.0	19.5	0.0

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-01	04/14/14	0.0	19.4	0.0
GP-01	05/13/14 [4]	0.0	20.6	-0.9
GP-01	08/28/14	0.1	15.0	-0.9
GP-01	10/24/14	0.0	20.4	-0.8
GP-01	01/21/15	0.0	20.7	-0.8
GP-01	04/17/15	0.0	20.2	-0.7
GP-01	07/31/15	0.0	19.5	-0.9
GP-01	10/22/15	0.0	20.9	-0.8
GP-01	11/12/15	0.0	20.0	-0.1
GP-01	12/17/15	0.0	20.3	-0.6
GP-01	01/21/16	0.0	20.3	-0.3
GP-01	04/22/16	0.0	19.7	-0.1
GP-01	07/27/16	0.0	17.2	0.0
GP-01	10/26/16	0.0	19.9	-0.1
GP-01	01/10/17	0.0	20.1	0.0
GP-01	04/05/17	0.0	20.0	0.0
GP-01	07/24/17	0.0	20.1	0.0
GP-01	10/30/17	0.0	19.8	0.9
GP-01	01/24/18	0.0	20.1	0.0
GP-01	05/17/18	0.0	18.5	-0.1
GP-01	07/31/18	0.0	17.5	0.0
GP-01	11/16/18	0.0	20.8	0.0
GP-01	01/23/19	0.0	21.1	0.0
GP-01	04/26/19	0.0	19.4	-0.1
GP-01	07/23/19	0.0	18.4	0.0
GP-01	10/31/19	0.0	20.5	0.0
GP-01	02/18/20	0.0	20.3	-0.1
GP-01	06/23/20	0.0	15.6	0.0
GP-01	08/17/20	0.0	17.6	0.0
GP-01	11/05/20	0.0	20.9	0.0
GP-01	01/20/21	0.0	20.5	0.0
GP-01	04/22/21	0.0	20.2	0.0
GP-01	10/21/21	0.0	21.0	0.1
GP-01	03/28/22	0.0	20.1	-0.1
GP-01	05/26/22	0.0	19.6	0.0
GP-01	08/23/22	0.0	19.2	0.0
GP-01	12/06/22	0.0	19.5	-0.2
GP-01	4/13/2023	0.0	18.4	-0.1

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-01	8/31/2023	0.0	19.9	0.0
GP-01	12/21/2023	0.0	-	0.0
GP-1A	08/27/08 [1]	23.8	3.2	0.0
GP-1A	09/23/08	18.2	4.9	0.0
GP-1A	09/25/08	0.0	19.5	-0.4
GP-1A	10/02/08	0.0	21.0	-0.6
GP-1A	10/07/08	0.0	20.1	-0.6
GP-1A	10/15/08	0.0	20.5	-0.6
GP-1A	10/30/08	0.0	20.4	-0.6
GP-1A	11/13/08	0.0	20.6	-0.6
GP-1A	11/26/08	0.0	21.2	-0.7
GP-1A	01/22/09 [2]	0.0	21.1	-0.9
GP-1A	02/05/09	0.0	20.5	-0.8
GP-1A	02/17/09	0.0	21.0	-1.2
GP-1A	03/16/09	0.0	20.0	-1.1
GP-1A	04/24/09	0.0	20.4	-1.4
GP-1A	05/20/09	0.0	20.5	-1.4
GP-1A	06/23/09	0.0	19.9	-1.2
GP-1A	07/23/09	0.0	19.8	-1.2
GP-1A	10/20/09	0.0	20.6	-1.8
GP-1A	02/01/10	0.0	19.3	-1.4
GP-1A	04/22/10	0.0	20.2	-1.5
GP-1A	07/23/10	0.0	19.9	-1.4
GP-1A	10/22/10	0.0	20.8	-1.1
GP-1A	01/24/11	0.1	19.3	-1.6
GP-1A	04/29/11	0.0	20.5	-2.4
GP-1A	07/22/11	0.0	18.8	-1.3
GP-1A	10/26/11	0.0	19.7	-1.3
GP-1A	01/26/12	0.0	20.8	-1.4
GP-1A	04/27/12	0.0	19.6	-1.4
GP-1A	07/25/12	0.0	20.5	-1.8
GP-1A	11/21/12	0.0	20.7	-1.0
GP-1A	12/21/12 [3]	0.0	20.6	-1.2
GP-1A	01/03/13 [3]	0.0	20.6	0.0
GP-1A	04/26/13	0.0	20.5	-2.2
GP-1A	07/25/13	0.0	19.7	-1.2
GP-1A	10/23/13	0.0	20.8	0.0

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-1A	01/10/14	0.0	21.2	-0.5
GP-1A	02/07/14	0.0	21.0	-0.1
GP-1A	03/12/14	0.0	20.3	0.0
GP-1A	04/14/14	0.0	19.8	0.0
GP-1A	05/13/14 [4]	0.0	19.7	-1.2
GP-1A	08/28/14	0.0	20.8	-1.0
GP-1A	10/24/14	0.0	20.4	-0.9
GP-1A	01/21/15	0.0	20.7	-1.0
GP-1A	04/17/15	0.0	20.2	-0.9
GP-1A	07/31/15	0.0	20.7	-1.0
GP-1A	10/22/15	0.0	21.2	-1.1
GP-1A	11/12/15	0.0	21.0	-0.2
GP-1A	12/17/15	0.0	12.8	-0.6
GP-1A	01/21/16	0.0	20.6	-0.4
GP-1A	04/22/16	0.0	20.5	-0.3
GP-1A	07/27/16	0.0	19.2	0.0
GP-1A	10/26/16	0.0	19.2	-0.2
GP-1A	01/10/17	0.0	20.3	0.0
GP-1A	04/05/17	0.0	20.3	0.0
GP-1A	07/24/17	0.0	20.7	0.0
GP-1A	10/30/17	0.0	20.0	0.9
GP-1A	01/24/18	0.0	20.6	0.0
GP-1A	05/17/18	0.0	19.1	-0.3
GP-1A	07/31/18	0.0	18.4	0.0
GP-1A	11/16/18	0.0	20.8	-0.1
GP-1A	01/23/19	0.0	21.2	0.0
GP-1A	04/26/19	0.0	19.7	-0.2
GP-1A	07/23/19	0.0	19.6	0.0
GP-1A	10/31/19	0.0	20.8	0.0
GP-1A	02/18/20	0.0	18.9	-2.0
GP-1A	06/23/20	0.0	19.3	0.1
GP-1A	08/17/20	0.0	18.6	0.0
GP-1A	11/05/20	0.0	20.8	0.0
GP-1A	01/20/21	0.0	20.8	0.0
GP-1A	04/22/21	0.0	20.5	0.0
GP-1A	10/21/21	0.0	20.9	0.2
GP-1A	03/28/22	0.0	20.5	-0.1
GP-1A	05/26/22	0.0	20.3	0.0

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-1A	08/23/22	0.0	20.2	0.0
GP-1A	12/06/22	0.0	19.9	-0.2
GP-1A	4/13/2023	0.0	18.7	-0.2
GP-1A	8/31/2023	0.0	20.6	0.0
GP-1A	12/21/2023	0.0	-	-0.1
GP-02	08/27/08 [1]	41.4	0.0	-0.2
GP-02	09/23/08	41.8	0.0	-1.2
GP-02	09/25/08	13.3	5.2	-1.5
GP-02	10/02/08	0.1	2.8	-1.5
GP-02	10/07/08	0.0	9.2	-0.6
GP-02	10/15/08	0.0	13.1	-1.6
GP-02	10/30/08	0.0	20.4	-1.8
GP-02	11/13/08	0.0	20.6	-2.0
GP-02	11/26/08	0.0	20.6	-2.0
GP-02	01/22/09 [2]	0.0	15.8	-1.9
GP-02	02/05/09	0.0	15.8	-1.9
GP-02	02/17/09	0.0	21.0	-2.2
GP-02	03/16/09	0.0	20.7	-2.5
GP-02	04/24/09	0.0	18.8	-2.0
GP-02	05/20/09	0.0	18.3	-1.8
GP-02	06/23/09	0.0	19.8	-4.1
GP-02	07/23/09	0.0	19.4	-1.0
GP-02	10/20/09	0.0	20.1	-1.6
GP-02	02/01/10	0.0	19.2	-1.3
GP-02	04/22/10	0.0	18.4	-1.2
GP-02	07/23/10	0.0	20.1	-1.4
GP-02	10/22/10	0.0	20.9	-0.9
GP-02	01/24/11	0.0	18.9	-1.0
GP-02	04/29/11	0.0	21.0	-1.4
GP-02	07/22/11	0.0	14.4	0.0
GP-02	10/26/11	0.0	18.4	-0.6
GP-02	01/26/12	0.0	20.4	-1.0
GP-02	04/27/12	0.0	19.7	-0.8
GP-02	07/25/12	0.0	15.7	-0.8
GP-02	11/21/12 [3]	0.0	20.5	-0.4
GP-02	12/21/12 [3]	0.0	20.4	-0.3
GP-02	01/03/13 [3]	0.0	20.6	-1.6

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-02	04/26/13	0.0	17.8	-1.0
GP-02	07/25/13	0.0	20.4	-0.6
GP-02	10/23/13	0.0	20.2	-0.4
GP-02	01/10/14	0.0	19.5	-0.3
GP-02	02/07/14	0.0	9.3	0.0
GP-02	03/12/14	12.2	0.6	0.0
GP-02	04/14/14	13.6	0.0	0.0
GP-02	05/13/14 [4]	6.2	17.2	-1.6
GP-02	05/28/14 [4]	0.0	14.7	-0.3
GP-02	08/28/14	11.1	3.7	-0.5
GP-02	10/24/14	0.0	19.2	-0.1
GP-02	01/21/15	0.0	20.1	-0.4
GP-02	04/17/15	0.0	19.3	-0.4
GP-02	07/31/15	0.0	20.8	-0.6
GP-02	10/22/15	0.0	18.6	-0.6
GP-02	11/12/15	0.0	18.0	-0.5
GP-02	12/17/15	0.0	17.5	-0.5
GP-02	01/21/16	0.0	19.4	-0.8
GP-02	04/22/16	0.0	19.1	-0.4
GP-02	07/27/16	0.0	16.2	0.0
GP-02	10/26/16	0.0	14.2	-0.2
GP-02	01/10/17	0.0	16.4	0.2
GP-02	04/05/17	0.0	17.1	-0.1
GP-02	07/24/17	0.0	16.9	-0.2
GP-02	10/30/17	0.0	16.9	1.0
GP-02	01/24/18	0.0	20.4	-0.2
GP-02	05/17/18	0.0	18.3	-0.3
GP-02	07/31/18	0.0	15.4	0.0
GP-02	11/16/18	12.3	0.0	-0.1
GP-02	01/23/19	0.0	18.0	0.0
GP-02	04/26/19	0.0	17.4	0.0
GP-02	07/23/19	0.0	16.3	0.0
GP-02	10/31/19	0.0	16.3	0.0
GP-02	02/18/20	0.0	20.5	-0.2
GP-02	06/23/20	0.0	15.9	0.1
GP-02	08/17/20	0.0	15.0	0.0
GP-02	11/05/20	0.0	18.4	0.3
GP-02	01/20/21	0.0	19.3	0.3

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-02	04/22/21	0.0	18.5	0.3
GP-02	10/21/21	0.0	18.6	0.1
GP-02	03/28/22	0.0	18.8	0.0
GP-02	05/26/22	0.0	18.6	-0.2
GP-02	08/23/22	0.0	19.0	0.0
GP-02	12/06/22	0.0	18.5	-0.2
GP-02	4/13/2023	0.0	18.8	0.0
GP-02	8/31/2023	0.0	17.6	-0.6
GP-02	12/21/2023	0.0	-	-0.2
GP-2A	08/27/08 [1]	37.4	0.0	-0.4
GP-2A	09/23/08	14.0	12.9	-2.7
GP-2A	09/25/08	16.6	9.6	-2.7
GP-2A	10/02/08	0.0	20.9	-3.5
GP-2A	10/07/08	0.0	16.0	-0.7
GP-2A	10/15/08	0.0	15.9	-3.7
GP-2A	10/30/08	0.0	20.4	-3.7
GP-2A	11/13/08	0.0	20.5	-3.7
GP-2A	11/26/08	0.0	20.5	-3.7
GP-2A	01/22/09 [2]	0.0	17.7	-3.7
GP-2A	02/05/09	0.0	17.7	-3.7
GP-2A	02/17/09	0.0	20.9	-2.9
GP-2A	03/16/09	0.0	20.7	-4.3
GP-2A	04/24/09	0.0	19.9	-4.2
GP-2A	05/20/09	0.0	20.5	-3.3
GP-2A	06/23/09	0.0	20.0	-1.6
GP-2A	07/23/09	0.0	19.9	-3.4
GP-2A	10/20/09	0.0	20.7	-3.7
GP-2A	02/01/10	0.0	19.4	-3.0
GP-2A	04/22/10	0.0	20.2	-3.2
GP-2A	07/23/10	0.0	20.1	-3.6
GP-2A	10/22/10	0.0	20.8	-2.1
GP-2A	01/24/11	0.0	19.6	-2.5
GP-2A	04/29/11	0.0	20.9	-10.5
GP-2A	07/22/11	0.0	17.1	-1.5
GP-2A	10/26/11	0.0	19.6	-1.8
GP-2A	01/26/12	0.0	20.1	-1.7
GP-2A	04/27/12	0.0	19.7	-2.2

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-2A	07/25/12	0.0	17.4	-0.5
GP-2A	11/21/12 [3]	0.0	19.8	-0.7
GP-2A	12/21/12 [3]	0.0	20.5	-0.6
GP-2A	01/03/13 [3]	0.0	19.9	-0.5
GP-2A	04/26/13	0.0	19.8	-1.0
GP-2A	07/25/13	0.0	19.3	-1.4
GP-2A	10/23/13	0.0	20.3	-1.0
GP-2A	01/10/14	0.0	19.0	-0.6
GP-2A	02/07/14	0.0	11.7	0.2
GP-2A	03/12/14	5.9	5.6	0.0
GP-2A	04/14/14	10.3	2.7	0.0
GP-2A	05/13/14 [4]	10.5	8.0	-3.6
GP-2A	05/28/14 [4]	3.3	12.6	-0.2
GP-2A	08/28/14	6.8	3.8	-0.7
GP-2A	10/24/14	0.0	19.6	-0.2
GP-2A	01/21/15	0.0	20.3	-2.1
GP-2A	04/17/15	0.0	19.7	-1.5
GP-2A	07/31/15	0.0	20.5	-2.0
GP-2A	10/22/15	0.0	19.6	-2.2
GP-2A	11/12/15	0.0	20.3	-1.8
GP-2A	12/17/15	0.0	19.8	-1.6
GP-2A	01/21/16	0.0	19.8	-0.8
GP-2A	04/22/16	0.0	18.9	-1.8
GP-2A	07/27/16	0.0	17.0	0.0
GP-2A	10/26/16	0.0	17.5	-0.3
GP-2A	01/10/17	0.0	17.9	-0.3
GP-2A	04/05/17	0.0	18.5	-0.1
GP-2A	07/24/17	0.0	18.8	-0.1
GP-2A	10/30/17	0.0	18.7	1.0
GP-2A	01/24/18	0.0	20.0	-0.1
GP-2A	05/17/18	0.0	18.7	0.0
GP-2A	07/31/18	0.0	16.3	0.1
GP-2A	11/16/18	1.8	10.9	-0.9
GP-2A	01/23/19	0.0	17.5	0.6
GP-2A	04/26/19	0.0	17.8	-0.2
GP-2A	07/23/19	0.0	17.6	-0.2
GP-2A	10/31/19	0.0	15.8	0.1
GP-2A	02/18/20	0.0	19.4	-0.4

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-2A	06/23/20	0.0	17.4	0.0
GP-2A	08/17/20	0.0	13.2	-0.3
GP-2A	11/05/20	0.0	18.2	-0.1
GP-2A	01/20/21	0.0	19.4	1.8
GP-2A	04/22/21	0.0	18.6	0.4
GP-2A	10/21/21	0.0	19.1	0.7
GP-2A	03/28/22	0.0	19.0	0.0
GP-2A	05/26/22	0.0	18.9	0.0
GP-2A	08/23/22	0.0	19.2	0.0
GP-2A	12/06/22	0.0	18.4	-0.2
GP-2A	4/13/2023	0.0	15.9	-0.3
GP-2A	8/31/2023	0.0	18.5	-0.4
GP-2A	12/21/2023	0.0	-	-0.3
GP-2B	08/27/08 [1]	17.8	10.4	0.0
GP-2B	09/23/08	13.2	13.2	-1.2
GP-2B	09/25/08	0.0	19.5	-1.5
GP-2B	10/02/08	0.0	21.0	-1.5
GP-2B	10/07/08	0.0	20.6	-1.1
GP-2B	10/15/08	0.0	20.7	-2.6
GP-2B	10/30/08	0.0	20.4	-2.2
GP-2B	11/13/08	0.0	20.6	-1.4
GP-2B	11/26/08	0.0	20.6	-1.4
GP-2B	01/22/09 [2]	0.0	21.2	-1.8
GP-2B	02/05/09	0.0	21.2	-1.8
GP-2B	02/17/09	0.0	21.0	-0.2
GP-2B	03/16/09	0.0	20.7	-2.2
GP-2B	04/24/09	0.0	20.3	-2.4
GP-2B	05/20/09	0.0	20.7	-1.2
GP-2B	06/23/09	0.0	20.1	-2.8
GP-2B	07/23/09	0.0	20.0	-1.9
GP-2B	10/20/09	0.0	20.6	-2.4
GP-2B	02/01/10	0.0	19.4	-1.4
GP-2B	04/22/10	0.0	20.2	-1.7
GP-2B	07/23/10	0.0	19.9	-2.7
GP-2B	10/22/10	0.0	20.8	-1.0
GP-2B	01/24/11	0.0	19.7	-1.9
GP-2B	04/29/11	0.0	21.0	-1.5

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-2B	07/22/11	0.0	19.0	-0.8
GP-2B	10/26/11	0.0	19.7	-2.0
GP-2B	01/26/12	0.0	21.0	-1.1
GP-2B	04/27/12	0.0	19.7	-2.2
GP-2B	07/25/12	0.0	20.4	-0.2
GP-2B	11/21/12 [3]	0.0	20.7	-0.4
GP-2B	12/21/12 [3]	0.0	20.5	-0.7
GP-2B	01/03/13 [3]	0.0	20.5	-1.8
GP-2B	04/26/13	0.0	20.3	-0.8
GP-2B	07/25/13	0.0	20.3	-1.2
GP-2B	10/23/13	0.0	20.9	-1.2
GP-2B	01/10/14	0.0	19.8	-1.6
GP-2B	02/07/14	0.0	18.5	0.4
GP-2B	03/12/14	1.0	16.1	-0.6
GP-2B	04/14/14	3.1	12.1	-0.6
GP-2B	05/13/14 [4]	0.0	20.5	-2.8
GP-2B	05/28/14 [4]	0.0	20.1	-0.9
GP-2B	08/28/14	0.2	15.3	-0.2
GP-2B	10/24/14	0.0	20.6	0.2
GP-2B	01/21/15	0.0	20.8	-2.0
GP-2B	04/17/15	0.0	20.2	-0.6
GP-2B	07/31/15	0.0	20.8	-1.3
GP-2B	10/22/15	0.0	20.6	-1.7
GP-2B	11/12/15	0.0	20.8	-2.7
GP-2B	12/17/15	0.0	19.4	-1.8
GP-2B	01/21/16	0.0	20.8	-0.7
GP-2B	04/22/16	0.0	20.6	-1.8
GP-2B	07/27/16	0.0	18.9	0.2
GP-2B	10/26/16	0.0	19.0	-0.1
GP-2B	01/10/17	0.0	19.4	-0.2
GP-2B	04/05/17	0.0	17.3	-0.2
GP-2B	07/24/17	0.0	17.9	-0.1
GP-2B	10/30/17	0.0	17.5	1.0
GP-2B	01/24/18	0.0	18.8	-0.1
GP-2B	05/17/18	0.0	18.6	0.0
GP-2B	07/31/18	0.0	17.4	0.4
GP-2B	11/16/18	1.2	16.0	-1.2
GP-2B	01/23/19	0.0	17.2	1.2

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-2B	04/26/19	0.0	19.1	0.0
GP-2B	07/23/19	0.0	19.2	-0.1
GP-2B	10/31/19	0.0	20.1	0.6
GP-2B	02/18/20	0.0	18.8	-0.1
GP-2B	06/23/20	0.0	18.9	0.0
GP-2B	08/17/20	0.0	17.1	-0.4
GP-2B	11/05/20	0.0	19.6	-0.6
GP-2B	01/20/21	0.0	20.0	4.0
GP-2B	04/22/21	0.0	19.6	0.7
GP-2B	10/21/21	0.0	21.2	1.3
GP-2B	03/28/22	0.0	18.8	-0.6
GP-2B	05/26/22	0.0	20.1	-0.2
GP-2B	08/23/22	0.0	19.8	-0.2
GP-2B	12/06/22	0.0	19.3	-0.4
GP-2B	4/13/2023	0.0	19.8	-0.7
GP-2B	8/31/2023	0.0	20.5	-0.6
GP-2B	12/21/2023	0.0	-	-0.8
GP-03	08/27/08 [1]	0.0	12.5	0.0
GP-03	09/23/08	0.0	13.4	-0.3
GP-03	09/25/08	0.0	18.1	-0.2
GP-03	10/02/08	0.0	21.1	-0.3
GP-03	10/07/08	0.0	20.5	0.0
GP-03	10/15/08	0.0	20.5	-0.3
GP-03	10/30/08	0.0	20.2	-0.2
GP-03	11/13/08	0.0	20.5	-0.6
GP-03	11/26/08	0.0	20.5	-0.6
GP-03	01/22/09 [2]	0.0	21.0	-0.6
GP-03	02/05/09	0.0	20.4	-0.5
GP-03	02/17/09	0.0	21.1	-0.7
GP-03	03/16/09	0.0	19.9	-0.8
GP-03	04/24/09	0.0	20.2	-0.5
GP-03	05/20/09	0.0	20.1	-0.3
GP-03	06/23/09	0.0	19.8	-0.4
GP-03	07/23/09	0.0	19.7	-0.2
GP-03	10/20/09	0.0	20.7	-0.3
GP-03	02/01/10	0.0	19.5	-0.2
GP-03	04/22/10	0.0	20.2	-0.2

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-03	07/23/10	0.0	20.0	-0.3
GP-03	10/22/10	0.0	21.0	-0.1
GP-03	01/24/11	0.0	19.6	-0.2
GP-03	04/29/11	0.0	20.7	-0.2
GP-03	07/22/11	0.0	18.4	-0.1
GP-03	10/26/11	0.0	19.4	0.0
GP-03	01/26/12	0.0	20.5	0.0
GP-03	04/27/12	0.0	19.4	-0.2
GP-03	07/25/12	0.0	20.0	0.0
GP-03	11/21/12 [3]	0.0	20.5	0.0
GP-03	12/21/12 [3]	0.0	20.7	-0.2
GP-03	01/03/13 [3]	0.0	20.6	-0.1
GP-03	04/26/13	0.0	20.4	-0.1
GP-03	07/25/13	0.0	20.0	-0.1
GP-03	10/23/13	0.0	20.7	0.0
GP-03	01/10/14	0.0	20.2	-0.2
GP-03	02/07/14	0.0	20.8	0.4
GP-03	03/12/14	0.0	20.6	0.0
GP-03	04/14/14	0.0	19.9	-0.1
GP-03	05/13/14 [4]	0.0	19.9	-1.0
GP-03	08/28/14	0.0	18.6	-0.1
GP-03	10/24/14	0.0	20.3	0.0
GP-03	01/21/15	0.0	20.9	-0.1
GP-03	04/17/15	0.0	19.9	-0.3
GP-03	07/31/15	0.0	20.7	0.0
GP-03	10/22/15	0.0	20.1	-0.1
GP-03	11/12/15	0.0	20.7	-0.2
GP-03	12/17/15	0.0	20.8	-0.4
GP-03	01/21/16	0.0	20.4	-0.4
GP-03	04/22/16	0.0	20.3	-0.3
GP-03	07/27/16	0.0	18.0	0.1
GP-03	10/26/16	0.0	19.1	-0.2
GP-03	01/10/17	0.0	20.5	-0.1
GP-03	04/05/17	0.0	20.2	-0.1
GP-03	07/24/17	0.0	20.0	-0.1
GP-03	10/30/17	0.0	20.2	0.9
GP-03	01/24/18	0.0	20.5	0.0
GP-03	05/17/18	0.0	16.3	-0.3

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-03	07/31/18	0.0	17.9	0.0
GP-03	11/16/18	0.0	20.4	0.0
GP-03	01/23/19	0.0	20.7	0.0
GP-03	04/26/19	0.0	19.5	0.0
GP-03	07/23/19	0.0	17.3	0.0
GP-03	10/31/19	0.0	20.1	0.0
GP-03	02/18/20	0.0	17.6	-0.3
GP-03	06/23/20	0.0	18.0	0.1
GP-03	08/17/20	0.0	16.2	0.0
GP-03	11/05/20	0.0	19.2	0.9
GP-03	01/20/21	0.0	20.5	0.2
GP-03	04/22/21	0.0	20.1	0.3
GP-03	10/21/21	0.0	19.7	0.2
GP-03	03/28/22	0.0	20.1	0.0
GP-03	05/26/22	0.0	20.2	-0.7
GP-03	08/23/22	0.0	17.3	0.0
GP-03	12/06/22	0.0	19.7	-0.2
GP-03	4/13/2023	0.0	20.4	0.0
GP-03	8/31/2023	0.0	14.5	-0.6
GP-03	12/21/2023	0.0	-	-0.1
GP-3A	08/27/08 [1]	0.0	12.2	0.0
GP-3A	09/23/08	0.1	12.2	-0.2
GP-3A	09/25/08	0.0	11.7	-0.2
GP-3A	10/02/08	0.0	14.8	-0.3
GP-3A	10/07/08	0.0	18.2	-0.2
GP-3A	10/15/08	0.0	18.0	-0.6
GP-3A	10/30/08	0.0	20.3	-0.4
GP-3A	11/13/08	0.0	20.5	-0.8
GP-3A	11/26/08	0.0	20.5	-0.8
GP-3A	01/22/09 [2]	0.0	18.7	-0.8
GP-3A	02/05/09	0.0	19.1	-0.6
GP-3A	02/17/09	0.0	20.0	-0.6
GP-3A	03/16/09	0.0	19.4	-0.9
GP-3A	04/24/09	0.0	19.9	-0.8
GP-3A	05/20/09	0.0	19.7	-0.4
GP-3A	06/23/09	0.0	19.2	-0.7
GP-3A	07/23/09	0.0	19.7	-0.4

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-3A	10/20/09	0.0	20.7	-0.4
GP-3A	02/01/10	0.0	19.6	-0.1
GP-3A	04/22/10	0.0	20.0	-0.3
GP-3A	07/23/10	0.0	19.4	-0.5
GP-3A	10/22/10	0.0	20.9	-0.1
GP-3A	01/24/11	0.0	19.7	-0.4
GP-3A	04/29/11	0.0	20.8	-0.2
GP-3A	07/22/11	0.0	17.5	0.0
GP-3A	10/26/11	0.0	18.9	-0.2
GP-3A	01/26/12	0.0	19.7	-0.2
GP-3A	04/27/12	0.0	19.6	-0.4
GP-3A	07/25/12	0.0	19.4	0.0
GP-3A	11/21/12 [3]	0.0	19.2	-0.1
GP-3A	12/21/12 [3]	0.0	20.7	-0.3
GP-3A	01/03/13 [3]	0.0	20.2	-0.2
GP-3A	04/26/13	0.0	19.5	-0.1
GP-3A	07/25/13	0.0	20.0	-0.4
GP-3A	10/23/13	0.0	19.4	-0.2
GP-3A	01/10/14	0.0	18.8	0.0
GP-3A	02/07/14	0.0	19.5	0.3
GP-3A	03/12/14	0.0	19.5	0.0
GP-3A	04/14/14	0.0	16.3	0.0
GP-3A	05/13/14 [4]	0.0	20.0	-1.2
GP-3A	08/28/14	0.0	19.0	0.0
GP-3A	10/24/14	0.0	18.4	0.0
GP-3A	01/21/15	0.0	19.3	-0.1
GP-3A	04/17/15	0.0	19.2	-0.4
GP-3A	07/31/15	0.0	19.6	-0.1
GP-3A	10/22/15	0.0	18.4	-0.2
GP-3A	11/12/15	0.0	18.7	-0.6
GP-3A	12/17/15	0.0	17.6	-0.6
GP-3A	01/21/16	0.0	18.5	-0.2
GP-3A	04/22/16	0.0	18.1	-0.6
GP-3A	07/27/16	0.0	17.3	0.2
GP-3A	10/26/16	0.0	17.9	-0.2
GP-3A	01/10/17	0.0	20.7	-0.4
GP-3A	04/05/17	0.0	20.2	0.0
GP-3A	07/24/17	0.0	20.4	0.0

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-3A	10/30/17	0.0	19.9	0.9
GP-3A	01/24/18	0.0	20.1	-0.1
GP-3A	05/17/18	0.0	17.6	-0.4
GP-3A	07/31/18	0.0	19.3	0.2
GP-3A	11/16/18	0.0	20.4	0.0
GP-3A	01/23/19	0.0	19.6	0.2
GP-3A	04/26/19	0.0	17.8	0.0
GP-3A	07/23/19	0.0	16.7	0.0
GP-3A	10/31/19	0.0	17.9	0.2
GP-3A	02/18/20	0.0	20.3	0.0
GP-3A	06/23/20	0.0	14.9	0.1
GP-3A	08/17/20	0.0	15.6	0.0
GP-3A	11/05/20	0.0	16.9	0.8
GP-3A	01/20/21	0.0	18.0	0.7
GP-3A	04/22/21	0.0	17.5	0.4
GP-3A	10/21/21	0.0	21.3	0.0
GP-3A	03/28/22	0.0	17.3	0.0
GP-3A	05/26/22	0.0	17.3	-0.6
GP-3A	08/23/22	0.0	18.9	0.0
GP-3A	12/06/22	0.0	16.9	-0.2
GP-3A	4/13/2023	0.0	17.3	-0.2
GP-3A	8/31/2023	0.0	16.6	-0.7
GP-3A	12/21/2023	0.0	-	0.2
GP-4A	08/27/08 [1]	46.6	0.0	0.0
GP-4A	09/23/08	46.2	0.0	-0.2
GP-4A	09/25/08	1.1	16.8	-2.7
GP-4A	10/02/08	0.0	20.5	-2.5
GP-4A	10/07/08	0.0	19.9	-2.6
GP-4A	10/15/08	-	-	-
GP-4A	10/30/08	0.0	20.3	-2.7
GP-4A	11/13/08	0.0	20.6	-4.6
GP-4A	11/26/08	0.0	21.2	-3.3
GP-4A	01/22/09 [2]	0.0	20.4	-4.2
GP-4A	02/05/09	0.0	20.3	-3.1
GP-4A	02/17/09	0.0	21.1	-4.7
GP-4A	03/16/09	0.0	19.9	-4.1
GP-4A	04/24/09	0.0	20.3	-2.4

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-4A	05/20/09	0.0	20.1	-1.9
GP-4A	06/23/09	0.0	19.9	-1.8
GP-4A	07/23/09	0.0	20.0	-1.4
GP-4A	10/20/09	0.0	20.7	-3.4
GP-4A	02/01/10	0.0	19.6	-3.2
GP-4A	04/22/10	0.0	20.1	-2.5
GP-4A	07/23/10	0.0	20.0	-2.1
GP-4A	10/22/10	0.0	20.9	-1.0
GP-4A	01/24/11	0.1	19.4	-2.8
GP-4A	04/29/11	0.0	20.6	-5.1
GP-4A	07/22/11	0.0	18.6	-1.5
GP-4A	10/26/11	0.0	19.8	-1.1
GP-4A	01/26/12	0.0	20.4	-2.4
GP-4A	04/27/12	0.0	19.6	-1.7
GP-4A	07/25/12	0.0	20.6	-2.2
GP-4A	11/21/12 [3]	0.0	20.6	-0.6
GP-4A	12/21/12 [3]	0.0	20.4	-2.0
GP-4A	01/03/13 [3]	0.0	20.5	0.0
GP-4A	04/26/13	0.0	20.5	-2.8
GP-4A	07/25/13	0.0	20.0	-1.1
GP-4A	10/23/13	0.0	20.8	-1.2
GP-4A	01/10/14	0.0	20.5	-0.6
GP-4A	02/07/14	0.0	20.7	0.0
GP-4A	03/12/14	0.0	20.6	0.0
GP-4A	04/14/14	0.0	20.9	0.0
GP-4A	05/13/14 [4]	0.0	20.6	-2.5
GP-4A	08/28/14	0.0	20.8	-1.3
GP-4A	10/24/14	0.0	20.4	-1.0
GP-4A	01/21/15	0.0	20.8	-1.2
GP-4A	04/17/15	0.0	20.1	-1.6
GP-4A	07/31/15	0.0	20.6	-1.6
GP-4A	10/22/15	0.0	20.7	-1.4
GP-4A	11/12/15	0.0	20.7	-2.1
GP-4A	12/17/15	0.0	19.0	-0.3
GP-4A	01/21/16	0.0	20.8	-0.9
GP-4A	04/22/16	0.0	20.4	-0.4
GP-4A	07/27/16	0.0	18.9	0.0
GP-4A	10/26/16	0.0	19.9	-0.8

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-4A	01/10/17	0.0	20.5	-0.4
GP-4A	04/05/17	0.0	20.5	-0.4
GP-4A	07/24/17	0.0	20.6	-0.3
GP-4A	10/30/17	0.0	20.4	0.8
GP-4A	01/24/18	0.0	20.7	-0.4
GP-4A	05/17/18	0.0	15.9	0.0
GP-4A	07/31/18	0.0	18.3	0.0
GP-4A	11/16/18	0.0	21.1	-0.2
GP-4A	01/23/19	0.0	21.1	-0.3
GP-4A	04/26/19	0.0	19.8	-0.2
GP-4A	07/23/19	0.0	18.9	-0.1
GP-4A	10/31/19	0.0	20.8	0.0
GP-4A	02/18/20	0.0	20.3	-0.2
GP-4A	06/23/20	0.0	18.9	0.0
GP-4A	08/17/20	0.0	18.3	0.0
GP-4A	11/05/20	0.0	20.8	0.0
GP-4A	01/20/21	0.0	20.1	0.1
GP-4A	04/22/21	0.0	20.4	0.1
GP-4A	10/21/21	0.0	21.0	0.1
GP-4A	03/28/22	0.0	20.4	-0.2
GP-4A	05/26/22	0.0	20.4	0.0
GP-4A	08/23/22	0.0	20.7	-0.4
GP-4A	12/06/22	0.0	19.8	-0.1
GP-4A	4/13/2023	0.0	18.2	-0.2
GP-4A	8/31/2023	0.0	20.8	0.0
GP-4A	12/21/2023	0.0	-	0.0
GP-8A	08/27/08 [1]	0.9	1.4	0.2
GP-8A	09/23/08	1.0	1.3	0.0
GP-8A	09/25/08	0.9	0.5	-0.1
GP-8A	10/02/08	0.6	8.9	-0.1
GP-8A	10/07/08	0.4	11.6	-0.2
GP-8A	10/15/08	0.0	18.4	-1.5
GP-8A	10/30/08	0.0	20.5	-0.4
GP-8A	11/13/08	0.0	20.5	-0.1
GP-8A	11/26/08	0.0	20.5	-0.1
GP-8A	01/22/09 [2]	0.0	20.4	-0.8
GP-8A	02/05/09	0.0	20.4	0.3

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-8A	02/17/09	0.0	20.2	1.0
GP-8A	03/16/09	0.0	18.0	-0.5
GP-8A	04/24/09	0.0	19.7	-1.2
GP-8A	05/20/09	0.0	20.4	0.0
GP-8A	06/23/09	0.0	20.1	-1.5
GP-8A	07/23/09	0.0	20.0	-0.6
GP-8A	10/20/09	0.0	20.8	0.0
GP-8A	02/01/10	0.0	19.5	0.0
GP-8A	04/22/10	0.0	20.3	-0.4
GP-8A	07/23/10	0.0	19.2	-1.5
GP-8A	10/22/10	0.0	20.0	-0.3
GP-8A	01/24/11	0.0	18.6	-0.8
GP-8A	04/29/11	0.0	20.6	-8.5
GP-8A	07/22/11	0.0	18.8	-0.9
GP-8A	10/26/11	0.0	19.5	-1.5
GP-8A	01/26/12	0.0	20.8	-0.5
GP-8A	04/27/12	0.0	19.7	-1.5
GP-8A	07/25/12	0.0	19.6	0.0
GP-8A	11/21/12 [3]	0.0	19.6	0.0
GP-8A	12/21/12 [3]	0.0	20.5	-2.2
GP-8A	01/03/13 [3]	0.0	20.6	-1.4
GP-8A	04/26/13	0.0	20.0	0.0
GP-8A	07/25/13	0.0	20.2	-0.8
GP-8A	10/23/13	0.0	20.8	-0.6
GP-8A	01/10/14	0.0	19.2	-0.5
GP-8A	02/07/14	0.0	19.5	0.4
GP-8A	03/12/14	0.0	20.6	-3.2
GP-8A	04/14/14	0.0	19.6	-0.4
GP-8A	05/13/14 [4]	0.0	20.5	-2.2
GP-8A	08/28/14	0.0	20.3	0.2
GP-8A	10/24/14	0.0	19.8	0.5
GP-8A	01/21/15	0.0	20.2	-2.1
GP-8A	04/17/15	0.0	19.9	-0.1
GP-8A	07/31/15	0.0	20.3	-0.9
GP-8A	10/22/15	0.0	19.8	-1.1
GP-8A	11/12/15	0.0	20.8	-2.8
GP-8A	12/17/15	0.0	20.7	-1.5
GP-8A	01/21/16	0.0	20.8	-0.9

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-8A	04/22/16	0.0	20.6	-2.3
GP-8A	07/27/16	0.0	19.2	0.6
GP-8A	10/26/16	0.0	19.5	0.3
GP-8A	01/10/17	0.0	19.7	-0.1
GP-8A	04/05/17	0.0	19.9	0.0
GP-8A	07/24/17	0.0	19.8	-0.1
GP-8A	10/30/17	0.0	19.7	1.0
GP-8A	01/24/18	0.0	20.9	-0.2
GP-8A	05/17/18	0.0	19.0	-0.1
GP-8A	07/31/18	0.0	19.3	0.0
GP-8A	11/16/18	0.0	20.1	-1.2
GP-8A	01/23/19	0.0	20.3	1.4
GP-8A	04/26/19	0.0	18.8	-0.4
GP-8A	07/23/19	0.0	18.9	0.0
GP-8A	10/31/19	0.0	19.7	1.0
GP-8A	02/18/20	0.0	18.5	-0.2
GP-8A	06/23/20	0.0	18.2	0.0
GP-8A	08/17/20	0.0	17.6	-0.3
GP-8A	11/05/20	0.0	19.4	-0.3
GP-8A	01/20/21	0.0	20.2	4.6
GP-8A	04/22/21	0.0	19.9	0.8
GP-8A	10/21/21	0.0	21.1	1.3
GP-8A	03/28/22	0.0	19.8	-0.6
GP-8A	05/26/22	0.0	20.1	-0.4
GP-8A	08/23/22	0.0	19.7	-0.6
GP-8A	12/06/22	0.0	19.5	-0.6
GP-8A	4/13/2023	0.0	19.4	-1.0
GP-8A	8/31/2023	0.0	18.7	-0.8
GP-8A	12/21/2023	0.0	-	-0.9
GP-8B	08/27/08 [1]	0.2	3.8	0.3
GP-8B	09/23/08	0.2	3.8	0.5
GP-8B	09/25/08	0.0	2.8	0.3
GP-8B	10/02/08	0.0	2.3	0.3
GP-8B	10/07/08	0.0	3.0	-0.1
GP-8B	10/15/08	0.0	8.4	-1.2
GP-8B	10/30/08	0.0	18.7	0.0
GP-8B	11/13/08	0.0	16.1	0.3

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-8B	11/26/08	0.0	16.1	0.3
GP-8B	01/22/09 [2]	0.0	15.9	-0.4
GP-8B	02/05/09	0.0	18.9	0.5
GP-8B	02/17/09	0.0	16.8	1.5
GP-8B	03/16/09	0.0	17.0	-0.2
GP-8B	04/24/09	0.0	18.4	-0.9
GP-8B	05/20/09	0.0	19.3	0.2
GP-8B	06/23/09	0.0	20.1	-1.2
GP-8B	07/23/09	0.0	20.0	-0.3
GP-8B	10/20/09	0.0	20.2	-0.8
GP-8B	02/01/10	0.0	19.1	-0.6
GP-8B	04/22/10	0.0	19.5	-0.3
GP-8B	07/23/10	0.0	19.6	-1.2
GP-8B	10/22/10	0.0	20.3	0.0
GP-8B	01/24/11	0.0	18.8	-0.6
GP-8B	04/29/11	0.0	20.6	-3.8
GP-8B	07/22/11	0.0	18.2	-0.6
GP-8B	10/26/11	0.0	19.1	-1.4
GP-8B	01/26/12	0.0	20.4	-0.6
GP-8B	04/27/12	0.0	19.7	-1.3
GP-8B	07/25/12	0.0	19.8	0.0
GP-8B	11/21/12 [3]	0.0	19.8	0.0
GP-8B	12/21/12 [3]	0.0	20.5	-2.2
GP-8B	01/03/13 [3]	0.0	20.7	-1.2
GP-8B	04/26/13	0.0	19.9	0.0
GP-8B	07/25/13	0.0	19.5	-0.4
GP-8B	10/23/13	0.0	20.7	-0.8
GP-8B	01/10/14	0.0	19.7	-2.2
GP-8B	02/07/14	0.0	20.1	0.5
GP-8B	03/12/14	0.0	20.6	0.0
GP-8B	04/14/14	0.0	19.5	0.0
GP-8B	05/13/14 [4]	0.0	19.3	-2.1
GP-8B	08/28/14	0.0	19.8	0.4
GP-8B	10/24/14	0.0	19.6	0.6
GP-8B	01/21/15	0.0	21.1	-2.2
GP-8B	04/17/15	0.0	19.7	0.0
GP-8B	07/31/15	0.0	19.9	-0.6
GP-8B	10/22/15	0.0	19.8	-1.3

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-8B	11/12/15	0.0	20.1	-2.9
GP-8B	12/17/15	0.0	18.5	-1.4
GP-8B	01/21/16	0.0	20.2	-0.9
GP-8B	04/22/16	0.0	19.9	-2.2
GP-8B	07/27/16	0.0	18.9	0.6
GP-8B	10/26/16	0.0	19.5	0.1
GP-8B	01/10/17	0.0	20.1	0.0
GP-8B	04/05/17	0.0	20.4	0.0
GP-8B	07/24/17	0.0	20.6	-0.1
GP-8B	10/30/17	0.0	20.2	0.9
GP-8B	01/24/18	0.0	20.8	-0.3
GP-8B	05/17/18	0.0	18.3	-0.4
GP-8B	07/31/18	0.0	19.2	0.0
GP-8B	11/16/18	0.0	20.3	-1.1
GP-8B	01/23/19	0.0	20.7	1.4
GP-8B	04/26/19	0.0	18.8	-0.4
GP-8B	07/23/19	0.0	19.2	0.0
GP-8B	10/31/19	0.0	19.8	1.0
GP-8B	02/18/20	0.0	18.7	-0.5
GP-8B	06/23/20	0.0	18.7	0.0
GP-8B	08/17/20	0.0	18.0	-0.3
GP-8B	11/05/20	0.0	19.4	-0.3
GP-8B	01/20/21	0.0	20.5	4.5
GP-8B	04/22/21	0.0	19.7	0.9
GP-8B	10/21/21	0.0	21.2	1.2
GP-8B	03/28/22	0.0	19.2	-0.7
GP-8B	05/26/22	0.0	19.5	-0.6
GP-8B	08/23/22	0.0	19.4	-0.7
GP-8B	12/06/22	0.0	18.9	-0.7
GP-8B	4/13/2023	0.0	19.4	-1.0
GP-8B	8/31/2023	0.0	19.0	-0.9
GP-8B	12/21/2023	0.0	-	-1.0
GP-09	08/27/08 [1]	0.0	13.9	0.0
GP-09	09/23/08	0.0	19.9	0.0
GP-09	09/25/08	0.0	19.3	0.0
GP-09	10/02/08	0.0	21.1	0.0
GP-09	10/07/08	0.0	20.4	0.0

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-09	10/15/08	0.0	20.5	0.0
GP-09	10/30/08	0.0	20.3	-0.1
GP-09	11/13/08	0.0	20.5	-0.2
GP-09	11/26/08	0.0	20.5	-0.2
GP-09	01/22/09 [2]	0.0	21.0	0.0
GP-09	02/05/09	0.0	20.4	0.0
GP-09	02/17/09	0.0	21.0	-0.1
GP-09	03/16/09	0.0	19.9	-0.3
GP-09	04/24/09	0.0	20.2	-0.2
GP-09	05/20/09	0.0	19.9	0.0
GP-09	06/23/09	0.0	19.6	-0.2
GP-09	07/23/09	0.0	19.9	0.0
GP-09	10/20/09	0.0	20.8	0.0
GP-09	02/01/10	0.0	19.5	0.0
GP-09	04/22/10	0.0	19.7	0.0
GP-09	07/23/10	0.0	19.2	-0.1
GP-09	10/22/10	0.0	20.4	0.0
GP-09	01/24/11	0.0	19.4	0.0
GP-09	04/29/11	0.0	20.2	0.0
GP-09	07/22/11	0.0	17.9	0.0
GP-09	10/26/11	0.0	19.5	0.0
GP-09	01/26/12	0.0	20.8	0.0
GP-09	04/27/12	0.0	19.2	-0.1
GP-09	07/25/12	0.0	16.9	0.0
GP-09	11/21/12 [3]	0.0	20.5	0.0
GP-09	12/21/12 [3]	0.0	20.4	0.0
GP-09	01/03/13 [3]	0.0	20.5	0.0
GP-09	04/26/13	0.0	20.2	0.0
GP-09	07/25/13	0.0	19.6	0.0
GP-09	10/23/13	0.0	20.7	-0.1
GP-09	01/10/14 [5]	-	-	-
GP-09	02/07/14	0.0	20.3	0.0
GP-09	03/12/14	0.0	20.5	0.0
GP-09	04/14/14	0.0	17.2	0.0
GP-09	05/13/14 [4]	0.0	19.9	-0.4
GP-09	08/28/14	0.0	19.4	0.0
GP-09	10/24/14	0.0	20.0	0.2
GP-09	01/21/15	0.0	20.9	-0.5

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-09	04/17/15	0.0	19.7	0.0
GP-09	07/31/15	0.0	20.2	0.0
GP-09	10/22/15	0.0	19.8	-0.1
GP-09	11/12/15	0.0	19.8	-0.2
GP-09	12/17/15	0.0	20.6	-0.8
GP-09	01/21/16	0.0	20.4	-0.1
GP-09	04/22/16	0.0	20.3	-0.6
GP-09	07/27/16	0.0	19.0	0.0
GP-09	10/26/16	0.0	19.2	0.0
GP-09	01/10/17	0.0	20.7	0.0
GP-09	04/05/17	0.0	20.0	0.0
GP-09	07/24/17	0.0	19.8	-0.1
GP-09	10/30/17	0.0	20.4	1.0
GP-09	01/24/18	0.0	20.4	0.0
GP-09	05/17/18	0.0	18.7	0.0
GP-09	07/31/18	0.0	18.0	0.0
GP-09	11/16/18	0.0	20.1	0.0
GP-09	01/23/19	0.0	19.8	0.0
GP-09	04/26/19	0.0	19.5	0.0
GP-09	07/23/19	0.0	19.1	0.0
GP-09	10/31/19	0.0	19.8	0.0
GP-09	02/18/20	0.0	16.5	-1.4
GP-09	06/23/20	0.0	18.2	0.2
GP-09	08/17/20	0.0	17.7	0.0
GP-09	11/05/20	0.0	19.6	0.8
GP-09	01/20/21	0.0	19.9	0.3
GP-09	04/22/21	0.0	20.0	0.3
GP-09	10/21/21	0.0	20.9	0.2
GP-09	03/28/22	0.0	19.8	-2.7
GP-09	05/26/22	0.0	19.8	-0.6
GP-09	08/23/22	0.0	19.6	-0.6
GP-09	12/06/22	0.0	0.5	-19.8
GP-09	4/13/2023	0.0	20.0	-0.1
GP-09	8/31/2023	0.0	19.5	-0.7
GP-09	12/21/2023	0.0	-	-0.2
GP-9A	08/27/08 [1]	0.0	11.4	0.0
GP-9A	09/23/08	0.0	19.2	-0.2

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-9A	09/25/08	0.0	19.4	-0.1
GP-9A	10/02/08	0.0	21.1	-0.1
GP-9A	10/07/08	0.0	20.4	0.0
GP-9A	10/15/08	0.0	20.6	-0.2
GP-9A	10/30/08	0.0	20.5	-0.2
GP-9A	11/13/08	0.0	20.6	-0.4
GP-9A	11/26/08	0.0	20.6	-0.4
GP-9A	01/22/09 [2]	0.0	21.1	-0.2
GP-9A	02/05/09	0.0	20.5	-0.3
GP-9A	02/17/09	0.0	20.9	-0.3
GP-9A	03/16/09	0.0	20.1	-0.4
GP-9A	04/24/09	0.0	20.2	-0.4
GP-9A	05/20/09	0.0	20.0	-0.2
GP-9A	06/23/09	0.0	19.5	-0.2
GP-9A	07/23/09	0.0	20.0	-0.1
GP-9A	10/20/09	0.0	20.8	-0.2
GP-9A	02/01/10	0.0	19.4	0.0
GP-9A	04/22/10	0.0	20.0	0.0
GP-9A	07/23/10	0.0	19.8	-0.2
GP-9A	10/22/10	0.0	20.3	0.0
GP-9A	01/24/11	0.0	19.5	0.0
GP-9A	04/29/11	0.0	20.7	-4.2
GP-9A	07/22/11	0.0	18.3	0.0
GP-9A	10/26/11	0.0	19.5	-0.1
GP-9A	01/26/12	0.0	20.9	0.0
GP-9A	04/27/12	0.0	19.6	-0.1
GP-9A	07/25/12	0.0	18.5	0.0
GP-9A	11/21/12 [3]	0.0	20.4	0.0
GP-9A	12/21/12 [3]	0.0	20.4	-0.1
GP-9A	01/03/13 [3]	0.0	20.6	0.0
GP-9A	04/26/13	0.0	20.3	0.0
GP-9A	07/25/13	0.0	20.0	0.0
GP-9A	10/23/13	0.0	20.7	-0.1
GP-9A	1/10/14 [5]	-	-	-
GP-9A	02/07/14	0.0	20.4	0.0
GP-9A	03/12/14	0.0	20.6	0.0
GP-9A	04/14/14	0.0	20.9	0.0
GP-9A	05/13/14 [4]	0.0	19.9	-0.6

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-9A	08/28/14	0.0	19.2	0.0
GP-9A	10/24/14	0.0	20.1	0.1
GP-9A	01/21/15	0.0	20.9	-0.1
GP-9A	04/17/15	0.0	20.1	0.0
GP-9A	07/31/15	0.0	20.5	0.0
GP-9A	10/22/15	0.0	20.0	-0.1
GP-9A	11/12/15	0.0	20.5	-0.4
GP-9A	12/17/15	0.0	20.7	0.0
GP-9A	01/21/16	0.0	20.4	-0.2
GP-9A	04/22/16	0.0	20.2	-0.6
GP-9A	07/27/16	0.0	18.7	0.1
GP-9A	10/26/16	0.0	19.1	0.0
GP-9A	01/10/17	0.0	19.6	0.0
GP-9A	04/05/17	0.0	18.8	-0.2
GP-9A	07/24/17	0.0	18.6	-0.2
GP-9A	10/30/17	0.0	18.3	1.0
GP-9A	01/24/18	0.0	19.8	-0.1
GP-9A	05/17/18	0.0	16.6	-0.1
GP-9A	07/31/18	0.0	17.9	0.0
GP-9A	11/16/18	0.0	19.5	0.0
GP-9A	01/23/19	0.0	19.9	0.0
GP-9A	04/26/19	0.0	19.0	0.0
GP-9A	07/23/19	0.0	18.8	0.0
GP-9A	10/31/19	0.0	19.4	0.1
GP-9A	02/18/20	0.0	18.9	-0.1
GP-9A	06/23/20	0.0	18.6	0.1
GP-9A	08/17/20	0.0	17.5	0.0
GP-9A	11/05/20	0.0	19.2	0.8
GP-9A	01/20/21	0.0	20.5	0.4
GP-9A	04/22/21	0.0	19.6	0.3
GP-9A	10/21/21	0.0	20.1	0.2
GP-9A	03/28/22	0.0	19.4	0.0
GP-9A	05/26/22	0.0	19.8	-0.6
GP-9A	08/23/22	0.0	19.4	-0.4
GP-9A	12/06/22	0.0	19.4	-0.2
GP-9A	4/13/2023	0.0	19.9	0.0
GP-9A	8/31/2023	0.0	18.8	-0.7
GP-9A	12/21/2023	0.0	-	-0.2

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-10	08/27/08 [1]	1.2	5.3	0.0
GP-10	09/23/08	0.0	19.8	0.0
GP-10	09/25/08	0.0	19.2	-0.1
GP-10	10/02/08	0.0	20.8	-0.1
GP-10	10/07/08	0.0	20.6	0.0
GP-10	10/15/08	0.0	20.7	-0.1
GP-10	10/30/08	0.0	20.5	-0.1
GP-10	11/13/08	0.0	20.6	-0.2
GP-10	11/26/08	0.0	20.6	-0.2
GP-10	01/22/09 [2]	0.0	21.3	-0.2
GP-10	02/05/09	0.0	21.3	-0.2
GP-10	02/17/09	0.0	20.9	-0.4
GP-10	03/16/09	0.0	20.6	-0.4
GP-10	04/24/09	0.0	20.4	-0.3
GP-10	05/20/09	0.0	20.3	-0.2
GP-10	06/23/09	0.0	20.0	-0.2
GP-10	07/23/09	0.0	19.9	0.0
GP-10	10/20/09	0.0	20.8	-0.1
GP-10	02/01/10	0.0	19.5	-0.1
GP-10	04/22/10	0.0	20.3	-0.1
GP-10	07/23/10	0.0	19.9	-0.1
GP-10	10/22/10	0.0	20.7	0.0
GP-10	01/24/11	0.0	19.5	-0.1
GP-10	04/29/11	0.0	20.9	-8.4
GP-10	07/22/11	0.0	19.0	0.0
GP-10	10/26/11	0.0	19.7	0.0
GP-10	01/26/12	0.0	21.0	-0.1
GP-10	04/27/12	0.0	19.7	0.0
GP-10	07/25/12	0.0	19.6	0.0
GP-10	11/21/12	0.0	20.6	0.0
GP-10	12/21/12 [3]	0.0	20.6	0.0
GP-10	01/03/13 [3]	0.0	20.5	-0.1
GP-10	04/26/13	0.0	20.3	0.0
GP-10	07/25/13	0.0	20.0	0.0
GP-10	10/23/13	0.0	20.7	0.0
GP-10	01/10/14	0.0	19.8	-0.2
GP-10	02/07/14	0.0	20.2	0.0

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-10	03/12/14	0.0	20.3	0.0
GP-10	04/14/14	0.0	20.2	0.0
GP-10	05/13/14 [4]	0.0	20.3	-0.3
GP-10	08/28/14	0.0	19.8	-0.1
GP-10	10/24/14	0.0	20.4	0.0
GP-10	01/21/15	0.0	20.9	0.0
GP-10	04/17/15	0.0	20.4	0.0
GP-10	07/31/15	0.0	20.4	0.2
GP-10	10/22/15	0.0	20.4	-0.1
GP-10	11/12/15	0.0	20.7	-0.5
GP-10	12/17/15	0.0	19.9	-0.6
GP-10	01/21/16	0.0	20.7	-0.4
GP-10	04/22/16	0.0	20.5	-0.4
GP-10	07/27/16	0.0	18.7	0.0
GP-10	10/26/16	0.0	19.4	-0.3
GP-10	01/10/17	0.0	19.1	0.1
GP-10	04/05/17	0.0	19.0	0.2
GP-10	07/24/17	0.0	20.0	-0.2
GP-10	10/30/17	0.0	18.8	0.9
GP-10	01/24/18	0.0	20.7	0.0
GP-10	05/17/18	0.0	18.8	0.0
GP-10	07/31/18	0.0	18.3	0.0
GP-10	11/16/18	0.0	20.8	0.0
GP-10	01/23/19	0.0	20.7	0.0
GP-10	04/26/19	0.0	19.8	-0.1
GP-10	07/23/19	0.0	19.0	0.0
GP-10	10/31/19	0.0	20.5	0.0
GP-10	02/18/20	0.0	18.7	-2.2
GP-10	06/23/20	0.0	18.7	0.2
GP-10	08/17/20	0.0	18.3	0.1
GP-10	11/05/20	0.0	20.4	0.6
GP-10	01/20/21	0.0	20.6	0.0
GP-10	04/22/21	0.0	20.4	0.2
GP-10	10/21/21	0.0	20.0	0.0
GP-10	03/28/22	0.0	18.9	0.0
GP-10	05/26/22	0.0	20.2	-0.2
GP-10	08/23/22	0.0	19.7	-0.1
GP-10	12/06/22	0.0	19.5	-0.2

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-10	4/13/2023	0.0	20.3	-0.1
GP-10	8/31/2023	0.0	19.9	-0.5
GP-10	12/21/2023	0.0	-	-0.2
GP-10A	08/27/08 [1]	18.3	0.0	0.0
GP-10A	09/23/08	0.6	10.2	-0.3
GP-10A	09/25/08	0.0	18.8	-0.4
GP-10A	10/02/08	0.0	20.8	-0.4
GP-10A	10/07/08	0.0	20.3	0.0
GP-10A	10/15/08	0.0	20.6	-0.5
GP-10A	10/30/08	0.0	20.4	-0.6
GP-10A	11/13/08	0.0	20.6	-0.6
GP-10A	11/26/08	0.0	20.6	-0.6
GP-10A	01/22/09 [2]	0.0	21.3	-0.6
GP-10A	02/05/09	0.0	21.3	-0.6
GP-10A	02/17/09	0.0	20.9	-0.7
GP-10A	03/16/09	0.0	20.8	-0.9
GP-10A	04/24/09	0.0	20.3	-0.6
GP-10A	05/20/09	0.0	20.3	-0.4
GP-10A	06/23/09	0.0	20.2	-0.4
GP-10A	07/23/09	0.0	20.0	-0.2
GP-10A	10/20/09	0.0	20.9	-0.4
GP-10A	02/01/10	0.0	19.4	-0.3
GP-10A	04/22/10	0.0	20.4	-0.3
GP-10A	07/23/10	0.0	20.0	-0.3
GP-10A	10/22/10	0.0	20.9	-0.1
GP-10A	01/24/11	0.0	19.7	-0.3
GP-10A	04/29/11	0.0	20.9	-5.8
GP-10A	07/22/11	0.0	19.1	-0.2
GP-10A	10/26/11	0.0	19.6	0.0
GP-10A	01/26/12	0.0	21.0	-0.3
GP-10A	04/27/12	0.0	19.7	0.0
GP-10A	07/25/12	0.0	20.1	0.0
GP-10A	11/21/12	0.0	20.7	0.0
GP-10A	12/21/12 [3]	0.0	20.3	-0.2
GP-10A	01/03/13 [3]	0.0	20.6	0.0
GP-10A	04/26/13	0.0	20.4	-0.2
GP-10A	07/25/13	0.0	20.2	-0.1

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-10A	10/23/13	0.0	20.7	-0.1
GP-10A	01/10/14	0.0	19.6	-0.2
GP-10A	02/07/14	0.0	20.2	0.0
GP-10A	03/12/14	0.0	19.8	0.0
GP-10A	04/14/14	0.0	19.0	-0.1
GP-10A	05/13/14 [4]	0.0	17.9	-0.4
GP-10A	08/28/14	0.0	18.3	-0.1
GP-10A	10/24/14	0.0	20.3	0.0
GP-10A	01/21/15	0.0	21.1	0.0
GP-10A	04/17/15	0.0	20.4	0.0
GP-10A	07/31/15	0.0	20.7	-0.1
GP-10A	10/22/15	0.0	20.2	-0.1
GP-10A	11/12/15	0.0	20.3	-0.6
GP-10A	12/17/15	0.0	20.2	-0.7
GP-10A	01/21/16	0.0	20.6	-0.6
GP-10A	04/22/16	0.0	20.3	-0.4
GP-10A	07/27/16	0.0	18.3	0.0
GP-10A	10/26/16	0.0	18.8	-0.3
GP-10A	01/10/17	0.0	18.8	0.0
GP-10A	04/05/17	0.0	18.7	0.0
GP-10A	07/24/17	0.0	20.1	-0.2
GP-10A	10/30/17	0.0	18.9	1.0
GP-10A	01/24/18	0.0	20.2	0.0
GP-10A	05/17/18	0.0	18.9	0.0
GP-10A	07/31/18	0.0	17.6	0.0
GP-10A	11/16/18	0.0	19.5	0.0
GP-10A	01/23/19	0.0	20.3	0.0
GP-10A	04/26/19	0.0	19.6	0.0
GP-10A	07/23/19	0.0	18.5	0.0
GP-10A	10/31/19	0.0	19.8	-0.1
GP-10A	02/18/20	0.0	16.9	-0.3
GP-10A	06/23/20	0.0	18.7	0.2
GP-10A	08/17/20	0.0	18.1	0.0
GP-10A	11/05/20	0.0	19.7	0.6
GP-10A	01/20/21	0.0	20.6	0.1
GP-10A	04/22/21	0.0	20.2	0.2
GP-10A	10/21/21	0.0	20.1	0.0
GP-10A	03/28/22	0.0	20.2	0.0

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-10A	05/26/22	0.0	20.1	-0.3
GP-10A	08/23/22	0.0	19.6	-0.1
GP-10A	12/06/22	0.0	19.6	-0.2
GP-10A	4/13/2023	0.0	20.3	0.0
GP-10A	8/31/2023	0.0	18.8	-0.5
GP-10A	12/21/2023	0.0	-	-0.2
GP-11	08/27/08 [1]	0.0	14.9	0.0
GP-11	09/23/08	0.0	15.3	0.0
GP-11	09/25/08	0.0	16.5	0.0
GP-11	10/02/08	0.0	19.2	0.0
GP-11	10/07/08	0.0	19.0	0.0
GP-11	10/15/08	0.0	19.3	0.0
GP-11	10/30/08	0.0	19.7	0.0
GP-11	11/13/08	0.0	20.2	0.0
GP-11	11/26/08	0.0	20.2	0.0
GP-11	01/22/09 [2]	0.0	20.5	-1.0
GP-11	02/05/09	0.0	20.5	-1.0
GP-11	02/17/09	0.0	21.0	0.0
GP-11	03/16/09	0.0	20.7	0.0
GP-11	04/24/09	0.0	19.4	0.0
GP-11	05/20/09	0.0	18.9	0.0
GP-11	06/23/09	0.0	18.2	0.0
GP-11	07/23/09	0.0	18.6	0.0
GP-11	10/20/09	0.0	20.3	0.0
GP-11	02/01/10	0.0	19.6	0.0
GP-11	04/22/10	0.0	17.6	0.0
GP-11	07/23/10	0.0	15.5	0.0
GP-11	10/22/10	0.0	17.2	0.0
GP-11	01/24/11	0.0	17.0	0.0
GP-11	04/29/11	0.0	19.0	-14.2
GP-11	07/22/11	0.0	15.5	0.0
GP-11	10/26/11	0.0	19.4	0.0
GP-11	01/26/12	0.0	20.6	0.0
GP-11	04/27/12	0.0	18.3	0.0
GP-11	07/25/12	0.0	13.5	0.0
GP-11	11/21/12	0.0	20.2	0.0
GP-11	12/21/12 [3]	0.0	19.9	0.0

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-11	01/03/13 [3]	0.0	20.4	-0.3
GP-11	04/26/13	0.0	18.1	0.0
GP-11	07/25/13	0.0	17.5	0.0
GP-11	10/23/13	0.0	19.9	-0.1
GP-11	01/10/14	0.0	19.3	-0.6
GP-11	02/07/14	0.0	19.3	0.0
GP-11	03/12/14	0.1	19.9	0.1
GP-11	04/14/14	0.0	23.1	-0.2
GP-11	05/13/14 [4]	0.0	17.7	-0.2
GP-11	08/28/14	0.0	14.3	0.0
GP-11	10/24/14	0.0	19.7	0.0
GP-11	01/21/15	0.0	20.5	0.0
GP-11	04/17/15	0.0	20.1	0.0
GP-11	07/31/15	0.0	11.3	0.0
GP-11	10/22/15	0.0	19.9	0.0
GP-11	11/12/15	0.0	17.5	-2.0
GP-11	12/17/15	0.0	19.7	-0.4
GP-11	01/21/16	0.0	20.6	-0.1
GP-11	04/22/16	0.0	17.4	0.0
GP-11	07/27/16	0.0	16.2	0.0
GP-11	10/26/16	0.0	17.1	-0.3
GP-11	01/10/17	0.0	19.9	0.0
GP-11	04/05/17	0.0	18.7	0.0
GP-11	07/24/17	0.0	20.3	0.0
GP-11	10/30/17	0.0	18.2	0.9
GP-11	01/24/18	0.0	20.8	0.1
GP-11	05/17/18	0.0	17.0	0.0
GP-11	07/31/18	0.0	17.5	0.0
GP-11	11/16/18	0.0	21.1	0.0
GP-11	01/23/19	0.0	19.7	0.0
GP-11	04/26/19	0.0	18.1	0.0
GP-11	07/23/19	0.0	15.2	0.0
GP-11	10/31/19	0.0	16.8	0.0
GP-11	02/18/20	0.0	20.1	0.0
GP-11	06/23/20	0.0	15.0	0.2
GP-11	08/17/20	0.0	13.9	0.1
GP-11	11/05/20	0.0	19.0	0.4
GP-11	01/20/21	0.0	20.2	0.2

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-11	04/22/21	0.0	18.0	0.0
GP-11	10/21/21	0.0	19.6	0.0
GP-11	03/28/22	0.0	18.9	0.0
GP-11	05/26/22	0.0	16.1	-0.1
GP-11	08/23/22	0.0	17.7	-0.1
GP-11	12/06/22	0.0	19.3	-0.2
GP-11	4/13/2023	0.0	19.4	0.0
GP-11	8/31/2023	0.0	18.4	-0.4
GP-11	12/21/2023	0.0	-	-0.2
GP-11A	08/27/08 [1]	4.1	0.0	0.0
GP-11A	09/23/08	3.4	0.0	-0.2
GP-11A	09/25/08	0.0	14.7	-0.6
GP-11A	10/02/08	0.0	19.1	-0.6
GP-11A	10/07/08	0.0	19.3	-0.4
GP-11A	10/15/08	0.0	19.5	-0.8
GP-11A	10/30/08	0.0	20.0	-0.8
GP-11A	11/13/08	0.0	20.2	-0.9
GP-11A	11/26/08	0.0	20.2	-0.9
GP-11A	01/22/09 [2]	0.0	21.2	0.0
GP-11A	02/05/09	0.0	21.2	0.0
GP-11A	02/17/09	0.0	20.9	-1.2
GP-11A	03/16/09	0.0	20.8	-1.5
GP-11A	04/24/09	0.0	20.0	-1.3
GP-11A	05/20/09	0.0	19.6	-0.9
GP-11A	06/23/09	0.0	20.0	-1.2
GP-11A	07/23/09	0.0	19.9	-1.0
GP-11A	10/20/09	0.0	20.8	-1.2
GP-11A	02/01/10	0.0	19.4	-0.9
GP-11A	04/22/10	0.0	20.4	-1.1
GP-11A	07/23/10	0.0	20.0	-1.2
GP-11A	10/22/10	0.0	19.1	-0.9
GP-11A	01/24/11	0.0	19.4	-1.2
GP-11A	04/29/11	0.0	20.7	-8.6
GP-11A	07/22/11	0.0	19.1	-1.2
GP-11A	10/26/11	0.0	19.6	-0.7
GP-11A	01/26/12	0.0	20.7	-0.8
GP-11A	04/27/12	0.0	18.5	-0.6

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-11A	07/25/12	0.0	15.6	-0.4
GP-11A	11/21/12	0.0	20.6	-0.4
GP-11A	12/21/12 [3]	0.0	20.2	-0.5
GP-11A	01/03/13 [3]	0.0	20.2	-0.1
GP-11A	04/26/13	0.0	20.2	-1.0
GP-11A	07/25/13	0.0	18.1	-0.5
GP-11A	10/23/13	0.0	19.6	-0.4
GP-11A	01/10/14	0.0	19.6	0.0
GP-11A	02/07/14	0.0	19.7	0.9
GP-11A	03/12/14	0.1	19.6	0.0
GP-11A	04/14/14	0.0	19.0	0.1
GP-11A	05/13/14 [4]	0.0	18.3	-1.2
GP-11A	08/28/14	0.0	16.1	-0.6
GP-11A	10/24/14	0.0	19.5	-0.3
GP-11A	01/21/15	0.0	20.5	-0.4
GP-11A	04/17/15	0.0	20.3	0.0
GP-11A	07/31/15	0.0	20.5	-0.7
GP-11A	10/22/15	0.0	19.6	0.0
GP-11A	11/12/15	0.0	19.2	-0.6
GP-11A	12/17/15	0.0	19.9	-0.4
GP-11A	01/21/16	0.0	20.1	-0.2
GP-11A	04/22/16	0.0	19.0	-0.2
GP-11A	07/27/16	0.0	16.1	-0.1
GP-11A	10/26/16	0.0	15.6	-0.4
GP-11A	01/10/17	0.0	17.9	0.0
GP-11A	04/05/17	0.0	16.4	-0.1
GP-11A	07/24/17	0.0	17.7	0.0
GP-11A	10/30/17	0.0	17.0	0.9
GP-11A	01/24/18	0.0	20.8	0.0
GP-11A	05/17/18	0.0	18.3	0.0
GP-11A	07/31/18	0.0	16.8	0.0
GP-11A	11/16/18	0.0	21.1	-0.1
GP-11A	01/23/19	0.0	19.7	-0.1
GP-11A	04/26/19	0.0	17.3	-0.2
GP-11A	07/23/19	0.0	15.0	0.0
GP-11A	10/31/19	0.0	16.8	0.0
GP-11A	02/18/20	0.0	20.4	-0.2
GP-11A	06/23/20	0.0	15.6	0.2

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-11A	08/17/20	0.0	16.9	0.0
GP-11A	11/05/20	0.0	17.3	0.2
GP-11A	01/20/21	0.0	19.9	0.4
GP-11A	04/22/21	0.0	18.5	0.2
GP-11A	10/21/21	0.0	18.2	0.2
GP-11A	03/28/22	0.0	19.7	0.0
GP-11A	05/26/22	0.0	18.8	-0.1
GP-11A	08/23/22	0.0	17.5	-0.1
GP-11A	12/06/22	0.0	18.3	NA [2]
GP-11A	4/13/2023	0.0	19.1	0.0
GP-11A	8/31/2023	0.0	17.1	-0.4
GP-11A	12/21/2023	0.0	-	-0.2
GP-12	08/27/08 [1]	0.0	18.2	0.0
GP-12	09/23/08	0.0	18.9	0.0
GP-12	09/25/08	0.0	18.4	0.0
GP-12	10/02/08	0.0	20.4	0.0
GP-12	10/07/08	0.0	20.4	0.0
GP-12	10/15/08	0.0	20.4	0.0
GP-12	10/30/08	0.0	20.1	0.0
GP-12	11/13/08	0.0	20.4	0.0
GP-12	11/26/08	0.0	20.4	0.0
GP-12	01/22/09 [2]	0.0	21.1	0.0
GP-12	02/17/09	0.0	20.8	0.0
GP-12	03/16/09	0.0	20.7	0.0
GP-12	04/24/09	0.0	20.2	0.0
GP-12	05/20/09	0.0	20.3	0.0
GP-12	06/23/09	0.0	19.5	0.0
GP-12	07/23/09	0.0	19.5	-0.1
GP-12	10/20/09	0.0	20.8	0.0
GP-12	02/01/10	0.0	19.7	0.0
GP-12	04/22/10	0.0	19.9	0.0
GP-12	07/23/10	0.0	19.5	0.0
GP-12	10/22/10	0.0	19.9	0.0
GP-12	01/24/11	0.0	19.5	0.0
GP-12	04/29/11	0.0	20.5	-8.4
GP-12	07/22/11	0.0	18.1	0.0
GP-12	10/26/11	0.0	19.5	0.0

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-12	01/26/12	0.0	20.9	0.0
GP-12	04/27/12	0.0	19.1	0.0
GP-12	07/25/12	0.0	18.8	0.0
GP-12	11/21/12	0.0	20.5	0.0
GP-12	12/21/12 [3]	0.0	20.4	0.0
GP-12	01/03/13 [3]	0.0	20.6	0.0
GP-12	04/26/13	0.0	20.1	0.0
GP-12	07/25/13	0.0	20.0	0.0
GP-12	10/23/13	0.0	20.5	0.0
GP-12	01/10/14	0.0	19.9	-0.1
GP-12	02/07/14	0.0	20.2	0.8
GP-12	03/12/14	0.0	21.1	0.1
GP-12	04/14/14	0.0	17.9	-0.2
GP-12	05/13/14 [4]	0.0	19.8	0.0
GP-12	08/28/14	0.0	19.7	0.0
GP-12	10/24/14	0.0	20.3	0.0
GP-12	01/21/15	0.0	20.7	0.0
GP-12	04/17/15	0.0	20.0	0.0
GP-12	07/31/15	0.0	19.4	0.0
GP-12	10/22/15	0.0	20.3	0.0
GP-12	11/12/15	0.0	19.9	-0.1
GP-12	12/17/15	0.0	20.4	-0.6
GP-12	01/21/16	0.0	20.8	0.0
GP-12	04/22/16	0.0	20.0	0.0
GP-12	07/27/16	0.0	19.2	0.0
GP-12	10/26/16	0.0	20.2	-0.4
GP-12	01/10/17	0.0	20.4	0.1
GP-12	04/05/17	0.0	20.1	0.0
GP-12	07/24/17	0.0	20.2	0.0
GP-12	10/30/17	0.0	20.3	0.8
GP-12	01/24/18	0.0	20.3	0.0
GP-12	05/17/18	0.0	18.7	0.0
GP-12	07/31/18	0.0	18.1	0.1
GP-12	11/16/18	0.0	20.9	-0.2
GP-12	01/23/19	0.0	20.7	0.0
GP-12	04/26/19	0.0	19.2	0.0
GP-12	07/23/19	0.0	18.4	0.0
GP-12	10/31/19	0.0	19.7	0.0

Appendix E.4

Historical Gas Probe Monitoring Data
New Richmond Landfill (#2492)
New Richmond, Wisconsin

Location	Date	Combustible Gas (%)	Oxygen (%)	Pressure (in H_2O)
GP-12	02/18/20	0.0	18.9	-2.1
GP-12	06/23/20	0.0	18.7	0.2
GP-12	08/17/20	0.0	18.0	0.0
GP-12	11/05/20	0.0	20.4	0.2
GP-12	01/20/21	0.0	20.6	0.2
GP-12	04/22/21	0.0	20.1	0.4
GP-12	10/21/21	0.0	20.6	0.1
GP-12	03/28/22	0.0	19.5	0.0
GP-12	05/26/22	0.0	19.7	-0.1
GP-12	08/23/22	0.0	19.8	0.0
GP-12	12/06/22	0.0	19.9	-0.3
GP-12	4/13/2023	0.0	20.3	0.0
GP-12	8/31/2023	0.0	19.7	-0.3
GP-12	12/21/2023	0.0	-	-0.2

Notes:
[1] Pre-startup readings
[2] System was restarted on 1-19-2009 after being down for a month for SVE well cleaning and condensate collection system installation.
[3] System was shutdown on 11/21/12 following monthly monitoring for 1 month shutdown period. Post 1 month shutdown monitoring was conducted at startup (12/21/12) and two weeks after startup (1/3/13).
[4] System was shutdown on 01/10/13 for 4 month shutdown period. Post 4 month shutdown monitoring was conducted at startup (05/13/14). Based on the results, gas probes were not monitored on 05/28/14.
[5] Not measured. Unable to locate.
With approval from the WDNR on 10/21/15, System modifications occurred on 10/29/15. Modifications included operating the system on a part time schedule (16 hrs/day), turning off select SVE wells, and adjusting the LFG wells to focus extraction in the vicinity of the GP-2 nest.

Appendix F

Unscheduled LFG/SVE System Shutdowns

Appendix F

Unscheduled LFG/SVE System Shutdowns
New Richmond Landfill (#2492)
New Richmond, Wisconsin

There were nine (9) unscheduled LFG/SVE system shutdowns during 2023 (January 1, 2023 to December 31, 2023). They were as follows:

- On January 12, 2023, the system shut down due to a vapor/liquid separator high level alarm, because of a full sump. The sump was pumped out, and the system was restarted on January 12, 2023.
- On January 18, 2023, the system shut down due to a vapor/liquid separator high level alarm, because of a full sump. The knockout tank was drained, the sump was pumped out, and the system was restarted on January 18, 2023.
- On January 26, 2023, the system shut down due to a vapor/liquid separator high level alarm, because the sump within the building had become filled. The sump was pumped out, and the system was restarted on January 26, 2023.
- On February 16, 2023, the system shut down due to a vapor/liquid separator high level alarm. The sump and the knockout tank were full, the knockout tank had a bad gasket which was replaced, and the condensate peristaltic pump had a bad hose and belt which were replaced. The knockout tank was drained, the sump was pumped out to ground, and the system was restarted on February 16, 2023.
- On March 20, 2023, the system shut down due to a vapor/liquid separator high level alarm, because the sump had reached capacity and iced over. The sump had the ice broken up and was pumped out, and the system was restarted on March 20, 2023.
- On April 13, 2023, the system shut down due to a vapor/liquid separator high level alarm, because of a full large condensate tank and sump. The large condensate tank and the sump (~1100 gallons) were pumped out and the system was restarted on April 13, 2023.
- On May 2, 2023, the system shut down due to a vapor/liquid separator high level alarm. The large condensate tank and sump (~900 gallons) were drained and pumped and the system was restarted on March 20, 2023.
- On May 16, 2023, the system shut down due to a vapor/liquid separator high level alarm. The sump was pumped out and the system was restarted on May 16, 2023.
- On October 24, 2023, the system shut down due to a power alarm caused by a transformer failure. On November 27, 2023 the transformer was replaced and it was found that 1 leg of the 3 phase was out. The power company was notified. GHD was notified on December 1, 2023 that the service was fixed. On December 7, 2023, the sump was pumped, the system was restarted, the batteries were replaced in the auto dialer, and the timer was reset.