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ADDENDUM #1 TO Bid #23-027 REBID

BID NUMBER: 23-027 REBID

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Pre-Bid Conference/Site Inspection: [None]

PROCUREMENT FOR: Consolidated Solid Waste Engineering and Monitoring Services-REBID

This addendum will amend **Bid #23-027 REBID, Consolidated Solid Waste Engineering and Monitoring Services-REBID** originally issued on Thursday, June 22, 2023. This clarification is being provided to all known and registered correspondents in response to questions received. All addenda and original bid documents are also available online at: www.gtcounty.org, select "Bid Opportunities" from the Quick Links section.

Question #1: Would it be possible to get a copy of the following documents:

- The last Annual GW Report
- Current NPDES permit
- 2019 Permit for the Class III landfill?

Response: Yes, please find all attached.

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ADDENDUM ACKNOWLEDGEMENT

Bid #23-027 REBID
Consolidated Solid Waste Engineering and Monitoring Services-
REBID
Mandatory Submittal Form

To be returned with the final proposal submission to Georgetown County.

COMPANY NAME: _____

Addendum #1 Received Date: _____ Initialed By: _____

Addendum #2 Received Date: _____ Initialed By: _____

Addendum #3 Received Date: _____ Initialed By: _____

Addendum #4 Received Date: _____ Initialed By: _____

Addendum #5 Received Date: _____ Initialed By: _____

Addendum #6 Received Date: _____ Initialed By: _____



GEORGETOWN COUNTY LANDFILL

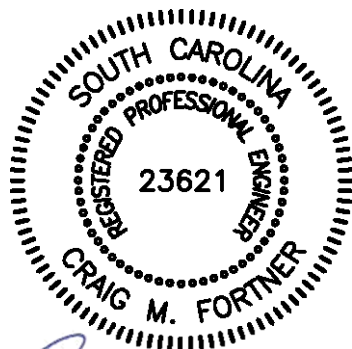
FALL 2022 SEMI-ANNUAL WATER QUALITY DETECTION MONITORING REPORT

JANUARY 2023

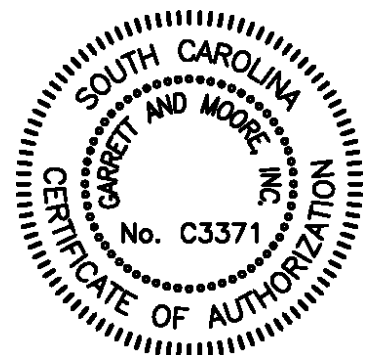
GEORGETOWN SOLID WASTE FACILITY
203 LANDFILL ROAD
GEORGETOWN, SOUTH CAROLINA 29442
SOLID WASTE PERMIT #S:
221001-1101 CLOSED MSW LANDFILL
221001-1102 CLASS THREE LANDFILL
221001-1202 CLASS TWO LANDFILL

PREPARED FOR:
GEORGETOWN COUNTY DEPARTMENT OF PUBLIC SERVICES
GEORGETOWN COUNTY, SOUTH CAROLINA

PREPARED BY:
GARRETT & MOORE, INC.



Craig Fortner, P.E.
Professional Engineer



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CONTENTS

1.0 INTRODUCTION & SAMPLING METHODOLOGY 1

 1.1 SAMPLING LOCATIONS 1

 1.2 GROUNDWATER & SURFACE WATER SAMPLING 3

 1.3 GROUNDWATER & SURFACE WATER FIELD PARAMETERS 5

 1.4 HYDROGEOLOGIC INVESTIGATION / GROUNDWATER FLOW 5

 1.5 LANDFILL GAS MONITORING 7

2.0 STATISTICAL ANALYSIS OVERVIEW 7

3.0 ANALYTICAL RESULTS 10

 3.1 CLOSED MSW LANDFILL AND VICINITY 10

 3.1.1 COMPLIANCE MONITORING WELL MW-2VR 10

 3.1.2 BACKGROUND MONITORING WELL MW-4V 10

 3.1.3 COMPLIANCE MONITORING WELL MW-5V 11

 3.1.4 COMPLIANCE MONITORING WELL MW-6VR 11

 3.1.5 COMPLIANCE MONITORING WELL MW-7VR 12

 3.1.6 COMPLIANCE MONITORING WELL MW-8V 13

 3.1.7 ASSESSMENT MONITORING WELL MW-AM-4R 13

 3.1.8 ASSESSMENT MONITORING WELL MW-AM-6 14

 3.2 CLASS THREE LANDFILL 15

 3.2.1 BACKGROUND MONITORING WELL MW-1HR 15

 3.2.2 COMPLIANCE MONITORING WELL MW-3H 15

 3.2.3 COMPLIANCE MONITORING WELL MW-5HR 15

 3.2.4 COMPLIANCE MONITORING WELL MW-6H 16

 3.2.5 COMPLIANCE MONITORING WELL MW-8H 16

 3.2.6 COMPLIANCE MONITORING WELL MW-9HR 17

 3.2.7 COMPLIANCE MONITORING WELL MW-11H 17

 3.2.8 COMPLIANCE MONITORING WELL MW-25H 17

 3.2.9 COMPLIANCE MONITORING WELL MW-26H 18

 3.2.10 COMPLIANCE MONITORING WELL MW-27H 18

 3.2.11 COMPLIANCE MONITORING WELL MW-28H 19

3.3 CLASS TWO LANDFILL 19

 3.3.1 BACKGROUND MONITORING WELL MW-1CD 19

 3.3.2 COMPLIANCE MONITORING WELL MW-2CD 20

 3.3.3 COMPLIANCE MONITORING WELL MW-3CD 20

3.4 SURFACE WATER SAMPLING 21

 3.4.1 SURFACE WATER COLLECTION POINT SMC-1 (UPSTREAM) 21

 3.4.2 SURFACE WATER COLLECTION POINT SMC-2 (DOWNSTREAM) 21

 3.4.3 SURFACE WATER COLLECTION POINT SW/TW-1 THROUGH SW/TW-5..... 22

3.5 SUMMARY OF ANALYTICAL RESULTS BY DETECTED PARAMETERS 22

4.0 CONCLUSIONS 23

 4.1 CLOSED MSW LANDFILL 23

 4.2 CLASS THREE LANDFILL 23

 4.3 CLASS TWO LANDFILL 23

 4.4 SURFACE WATER 24

5.0 RECOMMENDATIONS 24

FIGURE 1. VICINITY MAP A

FIGURE 2. SAMPLING LOCATION MAP B

FIGURE 3. WATER TABLE ELEVATION CONTOUR MAP-NOV. 2022 C

FIGURE 4. EXPLOSIVE GAS MONITORING LOCATIONS D

TABLE 1. MONITORING WELL & GROUNDWATER FIELD DATA E

TABLE 2. STATISTICAL ANALYSIS SUMMARY – NOV. 2022 F

TABLE 3A. SUMMARY OF HISTORICAL WATER QUALITY MONITORING ANALYTICAL DATA – INORGANIC & INDICATOR PARAMETERS (CLOSED VERTICAL EXPANSION) G

TABLE 3B. SUMMARY OF HISTORICAL WATER QUALITY MONITORING ANALYTICAL DATA – INORGANIC & INDICATOR PARAMETERS (SUBTITLE D HORIZONTAL EXPANSION) H

TABLE 3C. SUMMARY OF HISTORICAL SURFACE WATER MONITORING ANALYTICAL DATA – INORGANIC & INDICATOR PARAMETERS I

TABLE 3D. SUMMARY OF HISTORICAL WATER QUALITY MONITORING ANALYTICAL DATA – INORGANIC & INDICATOR PARAMETERS (CLASS II FACILITY) J

TABLE 4. SUMMARY OF HISTORICAL WATER QUALITY MONITORING

ANALYTICAL DATA – VOLATILE ORGANIC COMPOUNDS K
APPENDIX A. GROUNDWATER SAMPLE COLLECTION FORMS L
APPENDIX B. LANDFILL GAS MONITORING RECORDS M
APPENDIX C. STATISTICAL ANALYSIS DATA & TIME SERIES GRAPHS.....N
APPENDIX D. LABORATORY ANALYTICAL REPORTS.....O

1.0 INTRODUCTION & SAMPLING METHODOLOGY

Garrett & Moore, Inc. (G&M) has completed the November 2022 semi-annual detection-monitoring event for the Georgetown County Solid Waste Facility, located in Georgetown County, South Carolina. Sampling activities for the semi-annual events were conducted in accordance with the Groundwater Monitoring Plan that is included as Section 7 of the document entitled Georgetown County Subtitle D Landfill Expansion Phases 2, 3, and 4 dated February 2002, Groundwater Detection Monitoring Plan Georgetown County Class II Landfill dated April 2009, and in compliance with the South Carolina Department of Health and Environmental Control (SCDHEC) Solid Waste Management Regulation R.61-107.19.

This report summarizes the ongoing detection monitoring program. A total of twenty-two (22) groundwater-monitoring wells and seven (7) surface water collection points are currently included in the detection-monitoring program. Five (5) of the surface-water samples are collected from the intermittent tributary to Six Mile Creek located between the closed landfill and the Subtitle D Horizontal expansion, and the remaining two surface-water samples are collected from Six Mile Creek. This report includes discussion of groundwater and surface-water sampling methodology, hydrogeological information including groundwater flow direction and velocity derivations, groundwater and surface water quality analytical data and associated statistical analysis, contaminant trend analysis via multiple parameter graphing, and our conclusions and recommendations.

The following sections describe pertinent information regarding field measurement of groundwater quality parameters, site hydrogeology, groundwater, analytical data and associated statistical analysis, contaminant trend analysis via multiple parameter graphing, surface water analytical data, and our conclusions and recommendations for this semi-annual monitoring event.

1.1 SAMPLING LOCATIONS

Sampling locations are described below, as differentiated by disposal unit. Figures 1, 2 and 3 show the general site location, the facility layout, and the locations of all existing monitoring wells and surface water collection points, respectively.

Closed MSW Landfill (Permit No. 221001-1101)

Compliance monitoring wells associated with the Closed MSW landfill and unlined MSW landfill bear identities with a "V" or "VR" suffix. Additionally, two assessment monitoring wells were incorporated into the semi-annual monitoring program, MW-AM-6 in Fall 2016 and MW-AM-4 in Spring 2017 (relocated in April 2020), each to remain a part of the program for 2 years from installation.

Closed MSW Landfill 221001-1101	
Location	Description
MW-2VR	Side-Gradient
MW-4V	Background
MW-5V	Downgradient
MW-6VR	Downgradient
MW-7VR	Side-Gradient
MW-8V	Downgradient
MW-AM-4R	Assessment
MW-AM-6	Assessment

Class Three Landfill (Permit No. 221001-1102)

Compliance monitoring wells associated with the Class Three landfill bear identities with a “H” or “HR” suffix. Two additional deep groundwater wells exist at the site; however, these two wells (MW-2HR and MW-7H) are not included in ongoing detection monitoring. Wells previously used for background monitoring, MW-4H and MW-10H, were abandoned in July 2018 for an expansion of landfill operations at the site. In March of 2020, the following 4 wells were installed and were sampled as part of the November 2020 sampling event: MW-25H, MW-26H, MW-27H, and MW-28H.

Class Three Landfill 221001-1102	
Location	Description
MW-1HR	Background
MW-3H	Side-Gradient
MW-5HR	Side-Gradient
MW-6H	Downgradient
MW-8H	Downgradient
MW-9HR	Downgradient
MW-11H	Downgradient
MW-25H	Side-Gradient
MW-26H	Side-Gradient
MW-27H	Downgradient
MW-28H	Downgradient

Class Two Landfill (Permit No. 221001-1201)

Compliance monitoring wells associated with the Class Two landfill bear identities with a “CD” suffix.

Class Two Landfill 221001-1201	
Location	Description
MW-1CD	Background
MW-2CD	Downgradient
MW-3CD	Downgradient

Surface Water

Five surface-water sampling points are located along the unnamed tributary to Six Mile Creek, designated SW/TW-1, SW/TW-2, SW/TW-3, SW/TW-4 and SW/TW-5. The unnamed tributary runs generally south to north between the Closed MSW landfill and Class Two and Class Three landfills.

Two surface water collection points along Six Mile Creek are designated SMC-1, located upstream, and SMC-2, which is located downstream of the landfill facility. Six Mile Creek forms the northern boundary of the facility, and generally runs from west to east.

1.2 GROUNDWATER & SURFACE WATER SAMPLING

Groundwater Monitoring Well Sampling

Sampling activities for the semi-annual events reported herein were conducted on November 28-30, 2022. New disposable nitrile or latex gloves were worn at each well location during purging and sampling. Prior to purging, each well was opened to allow water levels to equilibrate to atmospheric pressure. After a minimum 15-minute equilibration period, water levels were measured with respect to the top of the well casing using a properly decontaminated electronic water level meter. The readings were recorded on individual Groundwater Sample Collection forms, copies of which are provided in **Appendix A**. Depths to groundwater and calculated water table elevations for the November 2022 event, as well as well construction details, are summarized in **Table 1**.

Each well was subsequently purged using pre-cleaned Teflon-lined disposable polyethylene tubing connected to a peristaltic pump. Measurements of groundwater temperature, pH, specific conductance, turbidity, oxidation/reduction potential (ORP), and dissolved oxygen (DO) were obtained using calibrated field instruments during the purging process, and the readings were recorded on the Groundwater Sample Collection forms. After field parameters had stabilized over three consecutive recording intervals, groundwater samples were collected using the same tubing that was used to purge the well. The samples were decanted

into laboratory prepared containers, which were then placed into ice-filled coolers and shipped under proper chain-of-custody to Prism Laboratory, Inc. (Prism) for analysis.

Samples associated with the Class 3 landfill were analyzed for Appendix IV Volatile Organic Compounds (VOCs) by EPA Method 8260B, Appendix IV metals by EPA Methods 6010B and 7841, pH by EPA Method 9040B, specific conductance by EPA Method 120.1, and 1,2-Dibromo-3-chloropropane (DBCP) and 1,2-Dibromoethane (EDB) by EPA Method 8011. Samples associated with the Class 2 landfill were analyzed for Appendix III Volatile Organic Compounds (VOCs) by EPA Method 8260B, Appendix III metals by EPA Methods 6010B and 7841, chloride by EPA Method 300.0, nitrate by EPA Method 353.1, sulfate by EPA Method 300.0, pH by EPA Method 9040B and specific conductance by EPA Method 120.1.

Surface Water Sampling

Field parameter measurements were made of pH, temperature, specific conductance, turbidity, dissolved oxygen, and oxidation-reduction potential (ORP) of all surface water samples in accordance with the SCDHEC letter dated July 24, 2013 and subsequent response from Garrett & Moore dated September 25, 2013. The surface water samples were obtained using a peristaltic pump, flow-through cell, an YSI 556 multi-parameter meter and a Hach 2100Q turbidity meter. The intake tubing of the peristaltic pump was immersed in the surface water at the mid-point of the water column at each sampling location. The collected samples were decanted directly into laboratory prepared containers. The containers were then placed into ice-filled coolers and shipped under proper chain-of-custody to Prism for analysis of Appendix IV VOCs, Appendix IV metals, pH, specific conductance, DBCP, and EDB by the EPA Methods referenced previously for the groundwater samples.

Two surface water samples were obtained from Six Mile Creek, which flows to the east along the northern border of the subject site. The up-stream sample was obtained from surface water collection point SMC-1, located along Six Mile Creek immediately east of the International Paper Canal and near the northwest corner of the facility property. The down-stream sample was collected from surface water collection point SMC-2, located along Six Mile Creek immediately west of Highway 51 and near the extreme northeast corner of the facility property.

Five samples of surface water were collected from the intermittent tributary to Six Mile Creek, which separates the closed vertically expanded landfill from the Class Three Landfill (samples SW/TW-1 through SW/TW-5). SW/TW-5 was added in November 2018 to monitor surface water conditions at the outfall of the Class Two Landfill stormwater pond.

Quality Assurance / Quality Control

Prior to commencement of sampling activities, Prism prepared two trip blanks for internal quality assurance/quality control (QA/QC) purposes. The trip blanks were shipped along with the empty sample containers and stayed in the cooler during sampling activities and during

transport back to Prism. The trip blanks were then analyzed for Appendix IV VOCs and metals.

Groundwater and surface water sample collection was conducted using individual pre-cleaned disposable bailers or pre-cleaned disposable tubing; therefore, no equipment blank was submitted for analysis.

1.3 GROUNDWATER & SURFACE WATER FIELD PARAMETERS

Temperature, pH, specific conductance, turbidity, oxidation/reduction potential (ORP), and dissolved oxygen (DO) were measured during purging of groundwater from each monitoring well and during collection of surface water samples.

November 2022 Semi-Annual Sampling Event

During the November 2022 event, sample temperatures ranged from 14.4 to 22.1 °C. Values of pH ranged from 4.79 to 7.24, and specific conductance ranged from 138.9 to 2,652 μ mhos/cm. The final turbidity of the samples ranged from 1.40 to 45.4 NTUs (nephelometric turbidity units). Values of ORP ranged from -111.6 mV to 298.8 mV, and values of DO ranged from 0.11 to 4.02 mg/l.

The field parameter measurements from November 2022 are included on the Groundwater Sample Collection forms in **Appendix A** and in **Table 1**.

1.4 HYDROGEOLOGIC INVESTIGATION / GROUNDWATER FLOW

A Supplemental Site Hydrogeologic Characterization for the Proposed Horizontal Expansion of the Georgetown County Subtitle D Landfill Permit Application dated January 2002 was submitted for review by SCDHEC. The characterization report describes the site as being located in the Lower Coastal Plain physiographic province of the Atlantic Coastal Plain. The region is underlain by approximately 1,000 feet of eastward dipping coastal plain sediments primarily of Tertiary and Cretaceous age, which overlie basement rocks of Precambrian to mid-Paleozoic age. These coastal plain sediments consist of alternating sequences of sands, clays, sandstones, mudstones and limestones. The Tertiary and Quaternary age formations in this region include, from youngest to oldest, the Socastee, Canepatch, Waccamaw, Bear Bluff, Marietta, and Duplin Formations. The underlying Cretaceous age formations include, from youngest to oldest, the Pee Dee, Black Creek, and Middendorf (Tuscaloosa) Formations.

The site is located within an exposure of the Socastee Formation. This formation has been characterized as undifferentiated quartzose sands, clayey and silty sands, and clays of late Pleistocene age. The undifferentiated deposits of the Socastee Formation are believed to unconformably overlie glauconitic muddy sandstones of the Upper Pee Dee Formation or the Miocene Duplin marl, which form a semi-confining unit above the aquifer-bearing deposits of the Black Creek Formation.

According to the Supplemental Site Hydrogeologic Characterization Report, the geologic materials in the vicinity of the site may be very generally described as follows: sandy clay to clayey sand from 0.0 to 15.0 feet; silty sand with shell fragments from 15.0 to 27.0 feet; narrowly graded fine to medium sand from 27.0 to 37.0 feet; and, below the narrowly graded sand, intermittent lenses of silt and fat clay were observed. The considerable variability in sand and clay content within the upper 30 feet of sediment encountered at the site is consistent with the nature of the undifferentiated Pleistocene-age deposits of the Atlantic Coastal Plain.

Groundwater elevation contours developed from the November 2022 monitoring data are depicted in **Figure 3**. Based on the configuration of the water-table elevation contours depicted in **Figure 3**, the direction of groundwater flow within the surficial aquifer beneath the Class Three Landfill is generally to the east-northeast under an average hydraulic gradient of approximately 0.0069 ft/ft and the direction of groundwater flow beneath the closed landfill is generally towards the west-northwest under an average hydraulic gradient of 0.0048 ft/ft. Groundwater flow beneath the Class Two Landfill is generally from northwest to the southeast under an average hydraulic gradient of 0.0048 ft/ft.

Previous groundwater monitoring reports prepared by others suggest a range of surficial aquifer horizontal hydraulic conductivity between 7.42×10^{-5} cm/s and 5.83×10^{-6} cm/s, and an average effective porosity of 40%. Based on the above hydraulic conductivity, porosity, and average hydraulic gradient values, a range of linear groundwater seepage velocities has been calculated for the surficial aquifer beneath the site using the following formula:

$$v_x = \frac{K}{n_e} \cdot \frac{dh}{dl}$$

Where:

v_x = average linear velocity, or seepage velocity (*flow/distance/time*)

K = hydraulic conductivity (*distance/time*)

$\frac{dh}{dl}$ = hydraulic gradient (*distance/distance*)

n_e = effective porosity, or specific yield (*unitless*)

Based on the estimated values for these parameters, the groundwater seepage velocity is expected to range between 3.93×10^{-3} ft/day (1.43 ft/year) and 0.225 ft/day (82.0 ft/year) beneath the Class Three Landfill, between 2.72×10^{-3} ft/day (0.99 ft/year) and 0.155 ft/day (56.6 ft/year) beneath the Class Two Landfill, and between 2.73×10^{-3} ft/day (1.00 ft/year) and 0.156 ft/day (56.9 ft/year) beneath the closed landfill.

1.5 LANDFILL GAS MONITORING

Georgetown County environmental staff monitor landfill gas monitoring stations quarterly for the presence of methane gas in accordance with the Division of Solid Waste Management Regulations R.61-107.19, Part V, Subpart C, and the approved Landfill Gas Management Plan dated April 2013. The regulations require that the concentration of methane gas not exceed:

1. 25% of the Lower Explosive Limit (LEL) for methane (5%) in facility structures (excluding gas control or recovery system components). This limit corresponds to a methane concentration of 1.25% by volume.
2. 100% of the LEL for methane (5%) at the landfill property boundary. This limit corresponds to a methane concentration of 5% by volume.

Methane probe locations and monitored structures are indicated on **Figure 4**.

The Landfill Gas Monitoring Data forms for the quarterly events during the semi-annual groundwater monitoring period are included in **Appendix B**.

2.0 STATISTICAL ANALYSIS OVERVIEW

This report describes the statistical methods used to analyze the laboratory analytical data from the November 28 through 30, 2022 monitoring of two landfills (Georgetown County Closed and Subtitle D Landfills). These methods comply with current South Carolina Department of Health and Environmental Control (SCDHEC) requirements for statistical analysis (Regulation 61-107.258).53(g)) and with published guidance documents from the Environmental Protection Agency (EPA). The analysis was performed using the ChemPoint environmental database software and ChemStat Resource Conservation and Recovery Act statistical software from Starpoint Software, Cincinnati, Ohio.

Statistical Analysis Goals

The overall goal of each analysis was to determine if any real changes have occurred in the groundwater quality at the Georgetown County Landfill. This was accomplished by reducing the chance of false contamination results (false positives) while maximizing the potential for detecting a real contaminant impact to ground water quality. Per EPA and SCDHEC guidance and regulations, a 95% (group well tests) or 99% (individual well tests) significance level was used for the various test methods in order to avoid false positive results. As described below, if an individual analysis did not meet these goals, alternate analysis methods were used and either both results reported, or the more accurate result reported.

Statistical Analysis Methodology

The November 2022 laboratory analytical results were reviewed then added to the existing ChemPoint database for this facility. The database includes all monitoring data from 1992

through the current sampling event. All supplied laboratory analytical data were reviewed for missing data, outliers, or other discrepancies. Electronic data were then imported into the existing database, and hard copies of the laboratory reports were used to check that the data was incorporated correctly. The data were then analyzed to evaluate trends and/or anomalies in the results using the ChemStat statistical software program. Statistical analyses were performed according to current EPA and SCDHEC regulations and guidelines, as well as the site's approved Ground Water Monitoring Plan.

Statistical analysis was performed on all constituents with detected concentrations in the November 2022 laboratory analyses. Monitoring wells MW-1HR and MW-4V were used as the background data for inter-well testing. For each detected parameter, all compliance wells with a detected level were compared to the background data. Outlier screening was performed on any suspect data (i.e., at least one order of magnitude greater than the maximum concentration for that constituent in the historical data set) using Rosner's test for outliers.

For inter-well testing to compare compliance wells to a background well, pooled background concentration data from the background well is compared to individual compliance well data for each parameter detected at each of the compliance well locations. Due to the large percentage of non-detected values for most of the parameters and lack of normal distribution, non-parametric analysis methods were primarily used. Following EPA guidelines, Poisson prediction limits were used to analyze the results for all constituents with over 90 percent non-detected concentrations. Constituents with less than 50 percent non-detects were tested for normal distribution. Distribution testing was performed on the original data and commonly accepted transformations of the data including logarithm, natural logarithm, Aitchison's, and Cohen's adjustments. If the data were not distributed normally and the variances were not equal, the Wilcoxon Rank Sum (WRS) test was performed on each well with detected results. If the data were not distributed normally, but the wells had equal variances, the data were tested using the Kruskal-Wallis test. If testing showed normal distribution of the original or transformed data, parametric Analysis of Variance (ANOVA) testing was performed.

For testing of the background wells, the WRS test was performed on an intra-well basis to compare new concentration data to the historical data for the given well.

Since all statistical methodology has at least a minimal chance of yielding a false positive result (detecting "contamination" when none is present), additional testing was performed on any wells that showed statistically significant differences in concentrations of a parameter as compared to the background data set. This involved the analysis of trends using Sen's slope estimator, which evaluates increasing and decreasing trends in the data over time. In addition, times versus concentration graphs were produced to allow direct review of trends and/or fluctuations in the data. The Table below summarizes the rationale behind the test methods used in this analysis.

Statistical Methodology Summary

Percent Non-Detect	Normal Data	Equal Variance	Test
ND > 90%	-	-	Poisson Prediction Limits
ND < 15%	Yes	-	Parametric ANOVA
15% ≤ ND ≤ 50%	Yes	-	Parametric Prediction Limits
ND ≤ 90%	No	Yes	Wilcoxon Rank Sum or Kruskal Wallis
ND ≤ 90%	No	No	Wilcoxon Rank Sum

Statistical Analysis Results

Table 2 summarizes the results of the statistical analysis performed for the Georgetown County Landfill November 2022 monitoring event. In addition, time-series graphs of each constituent showing all wells with detected results from the current monitoring event are attached. For parameters with many wells, the data is graphed by landfill unit. Full documentation of each analytical process, including distribution testing and analysis methods, are available upon request in either hard copy or electronic format but have been omitted from this report due to the large volume of test results. Outliers were detected in the current laboratory analytical data. It should be noted that different laboratories have been used to analyze samples between 1992 and 2022 and that detection limits for some parameters vary greatly between these labs. Intra-well testing was not used during these analyses due to the lack of sufficient baseline data for intra-well comparisons.

All parameters with a detected result during the November 2022 monitoring event were tested using the methodology and analysis described above. As seen in **Table 2**, 18 constituents were detected during this event. Of the seventeen (17) compliance wells tested, thirteen (13) wells reported statistically significant results for one or more constituents. There was only one increasing trend in data based on Sen’s slope analysis, for barium at MW-26H.

As with all statistical methods, these analyses are subject to erroneous results. All efforts have been made to reduce the false positive results per EPA and DHEC guidelines. However, the 95% and 99% significance levels required by current regulations, leave at least a 1% to 5% chance of a false positive result occurring during each statistical analysis. There is an even greater chance that at least one result is false as the number of tests increases (i.e., as the number of constituents increases). Besides inherent statistical errors, the inter-well statistical methods used above do not differentiate between spatial variation in ground water chemistry (especially for naturally occurring inorganic constituents) and variation due to a release from the monitored facility. Additional qualitative review is necessary to determine possible sources of the statistically significant results.

3.0 ANALYTICAL RESULTS

The analytical data and discussion of results obtained for the November 2022 semi-annual sampling water-quality monitoring event are presented as separate sections for each monitoring well and surface water sampling point. A historical summary of the results of analyses for inorganic and indicator parameters is presented in **Table 3**. A historical summary of the results of analyses for volatile organic compounds is presented in **Table 4**. In addition, a synopsis of pertinent statistical results has been presented within each section. Laboratory analysis reports and chain of custody records for the November 2022 sampling event are included as **Appendix D**.

3.1 CLOSED MSW LANDFILL AND VICINITY

3.1.1 COMPLIANCE MONITORING WELL MW-2VR

Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-2VR is screened between 5.0 and 15.0-feet below land surface (bls).

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-2VR in November 2022. Additionally, trace concentrations of arsenic, barium, chromium, cobalt, copper, lead, nickel, vanadium, and zinc were detected at concentrations well below the respective MCLs. No other Appendix IV metals were identified in the groundwater sample collected from MW-2VR in November 2022.

Analytical Discussion:

Groundwater quality conditions in November 2022 at location MW-2VR were generally like those measured over the past several years. Values of general water quality indicator parameters were like those of previous events and were generally within acceptable ranges. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.1.2 BACKGROUND MONITORING WELL MW-4V

Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-4V is screened between 4.3 and 14.3-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-4V in November 2022. Additionally, trace concentrations of arsenic, barium, cobalt, copper, and lead were detected at concentrations well below the respective MCLs. No other Appendix IV metals were identified in the groundwater sample collected from MW-4V in November 2022.

Analytical Discussion:

Groundwater quality conditions in November 2022 at location MW-4V were generally like those measured over the past several years. Values of general water quality indicator parameters were like those of previous events and were generally within acceptable ranges.

Inasmuch as MW-4V is an up-gradient background monitoring well, the detection of trace concentrations of Appendix IV metals is not considered to be associated with landfill operations. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.1.3 COMPLIANCE MONITORING WELL MW-5V

Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-5V is screened between 2.2 and 12.2-feet bls.

November 2022 Semi-Annual Results:

A trace concentration of chlorobenzene was in the groundwater sample collected from monitoring well MW-5V in November 2022, at a concentration well below the corresponding MCL. No other Appendix III VOCs were detected. Additionally, trace concentrations of arsenic, barium, cobalt, and nickel were detected at concentrations well below the respective MCLs. No other Appendix IV metals were identified in the groundwater sample collected from MW-5V in November 2022.

Analytical Discussion:

Groundwater quality conditions in November 2022 at location MW-5V were generally like those measured over the past several years, with low levels of several Appendix IV metals. Other values of general water quality indicator parameters were like those of previous events and were generally within acceptable ranges. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.1.4 COMPLIANCE MONITORING WELL MW-6VR

Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-6VR is screened between 3.3 and 13.3-feet bls.

November 2022 Semi-Annual Results:

Trace concentrations of 1,4-dichlorobenzene, benzene, chlorobenzene, tetrahydrofuran, and xylenes were detected in the groundwater sample collected from monitoring well MW-6VR in November 2022, at concentrations well below the corresponding MCLs. It should be noted that the detected level of tetrahydrofuran was identified as an outlier during statistical analysis. No other Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-6VR in November 2022. Arsenic, barium, chromium, cobalt, and

nickel were also detected at MW-6VR, at concentrations below their respective MCLs. No other Appendix IV metals were identified in the groundwater sample collected from MW-6VR in November 2022.

Analytical Discussion:

The reported concentrations of metals and VOCs in the November 2022 collected from monitoring well MW-6VR are consistent with historical intermittent concentrations. Additionally, the values of the general water quality indicators pH and specific conductance reported for the November 2022 event are consistent with historical results. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

It is noted that arsenic in the groundwater in the vicinity of MW-8V is currently under investigation as presented in the “Closed Pre-1992 Unlined MSW Landfill Assessment of Corrective Measure Report” and ongoing Corrective Measures Plan. A decreasing trend in arsenic concentration at MW-6VR was identified during statistical analysis.

3.1.5 COMPLIANCE MONITORING WELL MW-7VR

Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-7VR is screened between 5.0 and 15.0-foot bls.

November 2022 Semi-Annual Results:

A trace concentration of chlorobenzene was detected in the groundwater sample collected from monitoring well MW-7VR in November 2022, at a concentration well below the corresponding MCL. No other Appendix III VOCs were detected. Arsenic was detected at a concentration of 0.0189 mg/L, which is above the associated MCL of 0.01 mg/L. Barium, cobalt, and nickel were also detected at MW-7VR, at concentrations well below their respective MCLs. No other Appendix IV metals were identified in the groundwater sample collected from MW-7VR in November 2022.

Analytical Discussion:

The values of the general water quality indicators pH and specific conductance reported for the November 2022 event are consistent with historical results. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

It is noted that arsenic in the groundwater in the vicinity of MW-8V is currently under investigation as presented in the “Closed Pre-1992 Unlined MSW Landfill Assessment of Corrective Measure Report” and ongoing Corrective Measures Plan. A decreasing trend in arsenic concentration at MW-7VR was identified during statistical analysis.

3.1.6 COMPLIANCE MONITORING WELL MW-8V

Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-8V is screened between 2.0 and 12.0-feet bls.

November 2022 Semi-Annual Results:

Trace concentrations of 1,2-Dichlorobenzene, 1,4-Dichlorobenzene, Benzene, and chlorobenzene were detected in the groundwater sample collected from monitoring well MW-8V in November 2022, at concentrations well below the corresponding MCLs. No other Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-8V in November 2022. Arsenic was reported at a concentration of 0.0442 mg/L in the November 2022 groundwater sample, which exceeds the MCL of 0.010 mg/L. Barium, chromium, cobalt, and nickel were also detected at MW-8V, at concentrations well below their respective MCLs. No other Appendix IV metals were identified in the groundwater sample collected from MW-8V in November 2022.

Analytical Discussion:

The reported concentrations of Arsenic are consistent with historical concentrations; no significant changes in concentrations are evident with respect to the historical data.

The values of the general water quality indicators pH and specific conductance reported for the November 2022 event are consistent with historical results. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

It is noted that Arsenic in the groundwater in the vicinity of MW-8V is currently under investigation as presented in the “Closed Pre-1992 Unlined MSW Landfill Assessment of Corrective Measure Report” and ongoing Corrective Measures Plan. No trend in arsenic concentration at MW-6VR was identified during statistical analysis.

3.1.7 ASSESSMENT MONITORING WELL MW-AM-4R

Assessment Monitoring Well MW-AM-4 was installed in September 2015 as a part of the Phase 1 Groundwater Quality Assessment. MW-AM-4 is screened between 5 and 15-feet bls. As recommended in the Report of Corrective Measure Plan: Phase 1 Groundwater Quality Assessment dated August 18, 2016, MW-AM-4 is to be incorporated into the semi-annual groundwater monitoring program for a period of two years, beginning in Spring 2017. MW-AM-4 is being monitored beyond the minimum required period to document groundwater conditions leading up to the upcoming corrective action.

November 2022 Semi-Annual Results:

Trace concentrations of 1,4-Dichlorobenzene, Benzene, and chlorobenzene were detected in the groundwater sample collected from monitoring well MW-AM-4R in November 2022, at

concentrations well below the corresponding MCLs. No other Appendix III VOCs were reported for the November 2022 groundwater sample. Arsenic was detected at a level of 0.0417 mg/L which is above the associated MCL of 0.01 mg/L. Barium and cobalt were also detected at levels below their corresponding MCLs. No other Appendix IV metals were identified in the groundwater sample collected from MW-AM-4R in November 2022.

Analytical Discussion:

The reported concentrations of metals and VOCs are consistent with historical concentrations; no significant changes in concentrations are evident with the respect to the historical data. The arsenic concentration in the groundwater at MW-AM-4 is under further evaluation as part of the “Closed Pre-1992 Unlined MSW Landfill Assessment of Corrective Measure Report” and ongoing Corrective Measures Plan. No trend in arsenic concentration at MW-AM-4R was identified during statistical analysis.

3.1.8 ASSESSMENT MONITORING WELL MW-AM-6

Assessment Monitoring Well MW-AM-6 was installed in September 2015 as a part of the Phase 1 Groundwater Quality Assessment. MW-AM-6 is screened between 5 and 15-feet bls. As recommended in the Report of Corrective Measure Plan: Phase 1 Groundwater Quality Assessment dated August 18, 2016, MW-AM-6 is to be incorporated into the semi-annual groundwater monitoring program for a period of two years, beginning in Fall 2016. MW-AM-6 is being monitored beyond the minimum required period to document groundwater conditions leading up to the upcoming corrective action.

November 2022 Semi-Annual Results:

A trace concentration of toluene was detected in the groundwater sample collected from monitoring well MW-AM-6 in November 2022, at a concentration well below the corresponding MCL. No other Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-AM-6 in November 2022.

Arsenic was reported at a concentration of 0.0179 mg/L in the November 2022 groundwater sample, which exceeds the MCL of 0.010 mg/L. Barium and cobalt were also detected at concentrations well below the corresponding MCLs. No other Appendix IV metals were identified in the groundwater sample collected from MW-AM-6 in November 2022.

Analytical Discussion:

The arsenic concentration in the groundwater at MW-AM-6 appears to be relatively consistent since the assessment well was incorporated into the semi-annual monitoring program. Historic data associated with the Phase 1 Groundwater Quality Assessment are presented in Table 3 for reference. Arsenic concentration at MW-AM-6 is under further evaluation as part of the “Closed Pre-1992 Unlined MSW Landfill Assessment of Corrective

Measure Report” and ongoing Corrective Measures Plan. No trend in arsenic concentration at MW-AM-6 was identified during statistical analysis.

3.2 CLASS THREE LANDFILL

3.2.1 BACKGROUND MONITORING WELL MW-1HR

Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-1HR is screened between 5 and 15-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-1HR in November 2022. All the detected Appendix IV metals in the groundwater sample collected from MW-1HR in November 2022 were below the respective MCLs.

Analytical Discussion:

Groundwater quality conditions at location MW-1HR were generally like those measured over the past several years. Values of general water quality indicator parameters were like those historically measured at this location and were generally within acceptable ranges. Inasmuch as MW-1HR is an up-gradient background monitoring well, the detection of trace concentrations of Appendix IV metals is not considered to be associated with landfill operations. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.2.2 COMPLIANCE MONITORING WELL MW-3H

Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-3H is screened between 4.3 and 14.3-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-3H in November 2022. All the detected Appendix IV metals in the groundwater sample collected from MW-3H in November 2022 were below the respective MCLs.

Analytical Discussion:

Groundwater quality at location MW-3H reported for the November 2022 monitoring event was like that of the previous several years. Values of general water quality parameters were like those reported previously. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.2.3 COMPLIANCE MONITORING WELL MW-5HR

Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-5HR is screened between 8.3 and 18.3-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-5H in November 2022. All the detected Appendix IV metals in the groundwater sample collected from MW-5HR in November 2022 were below the respective MCLs.

Analytical Discussion:

Groundwater quality at location MW-5HR reported for the November 2022 monitoring event was like that of the previous several years, indicating relative stability. Values reported for general indicator parameters were consistent with historical values for this location. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.2.4 COMPLIANCE MONITORING WELL MW-6H

Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-6H is screened between 8.6 and 18.6-feet bls.

November 2022 Semi-Annual Results:

1,2-Dichlorobenzene was detected in the groundwater sample collected from monitoring well MW-6H in November 2022 at a level well below the associate MCL. No other Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-6H in November 2022. All the detected Appendix IV metals in the groundwater sample collected from MW-6H in November 2022 were below the respective MCLs.

Analytical Discussion:

Groundwater quality at location MW-6H reported for the November 2022 monitoring event was like that of the previous six years, indicating relative stability. Values reported for general indicator parameters were consistent with historical values for this location. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.2.5 COMPLIANCE MONITORING WELL MW-8H

Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-8H is screened between 7.3 and 17.3-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-8H in November 2022. All the detected Appendix IV metals in the groundwater sample collected from MW-8H in November 2022 were below the respective MCLs.

Analytical Discussion:

Groundwater quality at location MW-8H reported for the November 2022 monitoring event was like that of the previous eight years, indicating relative stability. Values reported for general indicator parameters were consistent with historical values for this location. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.2.6 COMPLIANCE MONITORING WELL MW-9HR

Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-9HR is screened between 3.0 and 13.0-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-9HR in November 2022. All the detected Appendix IV metals in the groundwater sample collected from MW-9HR in November 2022 were below the respective MCLs.

Analytical Discussion:

Groundwater quality at location MW-9HR reported for the November 2022 monitoring event was like that of the previous eight years, indicating relative stability. Values reported for general indicator parameters were consistent with historical values for this location. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.2.7 COMPLIANCE MONITORING WELL MW-11H

Construction of groundwater-monitoring well MW-11H was completed in April 2015. The well has a depth of 20 feet and is screened between 10 and 20-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-11H in November 2022. All the detected Appendix IV metals in the groundwater sample collected from MW-11H in November 2022 were below the respective MCLs.

Analytical Discussion:

Groundwater quality at location MW-11H reported for the November 2022 monitoring event was like that the previous three years, indicating relative stability. Values reported for general indicator parameters were consistent with historical values for this location. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.2.8 COMPLIANCE MONITORING WELL MW-25H

Construction of groundwater-monitoring well MW-25H was completed in April 2021. The well has a depth of 15 feet and is screened between 5 and 15-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-25H in November 2022. All the detected Appendix IV metals in the groundwater sample collected from MW-25H in November 2022 were below the respective MCLs.

Analytical Discussion:

Groundwater quality at location MW-25H reported for the November 2022 monitoring event was like that the previous event. Values reported for general indicator parameters were consistent with historical values for this location. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.2.9 COMPLIANCE MONITORING WELL MW-26H

Construction of groundwater-monitoring well MW-26H was completed in April 2021. The well has a depth of 15 feet and is screened between 5 and 15-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-26H in November 2022. All the detected Appendix IV metals in the groundwater sample collected from MW-26H in November 2022 were below the respective MCLs.

Analytical Discussion:

Groundwater quality at location MW-26H reported for the November 2022 monitoring event was like the previous event. Values reported for general indicator parameters were consistent with historical values for this location. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.2.10 COMPLIANCE MONITORING WELL MW-27H

Construction of groundwater-monitoring well MW-27H was completed in April 2021. The well has a depth of 19.5 feet and is screened between 9.5 and 19.5-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-27H in November 2022. All the detected Appendix IV metals in the groundwater sample collected from MW-27H in November 2022 were below the respective MCLs.

Analytical Discussion:

Groundwater quality at location MW-27H reported for the November 2022 monitoring event was like the previous event. Values reported for general indicator parameters were consistent

with historical values for this location. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.2.11 COMPLIANCE MONITORING WELL MW-28H

Construction of groundwater-monitoring well MW-28H was completed in April 2021. The well has a depth of 20 feet and is screened between 8.5 and 18.5-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-28H in November 2022. All the detected Appendix IV metals in the groundwater sample collected from MW-28H in November 2022 were below the respective MCLs.

Analytical Discussion:

Groundwater quality at location MW-28H reported for the November 2022 monitoring event was like the previous event. Values reported for general indicator parameters were consistent with historical values for this location. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.3 CLASS TWO LANDFILL

3.3.1 BACKGROUND MONITORING WELL MW-1CD

Monitoring well MW-1CD is a background monitoring well for the Class 2 landfill. Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-1CD is screened between 5 and 15-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-1CD in November 2022. All detected Appendix III metals reported in the sample collected from monitoring well MW-1CD during the November 2022 monitoring event were below the corresponding MCLs.

Analytical Discussion:

The November 2022 groundwater quality data are like the previously reported data recorded since December 2009, indicating relative stability. Values reported for general indicator parameters were consistent with historical values for this location. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.3.2 COMPLIANCE MONITORING WELL MW-2CD

Monitoring Well MW-2CD is a down-gradient compliance well for the Class 2 landfill. Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-2CD is screened between 5.0 and 15.0-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-2CD in November 2022. All detected Appendix III metals reported in the sample collected from monitoring well MW-2CD during the November 2022 monitoring event were below the corresponding MCLs.

Analytical Discussion:

Arsenic has been detected intermittently at concentrations exceeding the MCL at monitoring well MW-2CD since its installation in 2005. The final cover system for the Class Two Landfill, completed in 2019, is anticipated to aid in reduction of stormwater infiltration into the waste mass, thereby reducing the potential for groundwater impact. Observations of arsenic concentrations in groundwater samples collected from MW-2CD since November 2019 suggest a reducing trend in concentration.

Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.3.3 COMPLIANCE MONITORING WELL MW-3CD

Monitoring well MW-3CD is a down-gradient compliance well for the Class 2 landfill. Based on a review of available well construction diagrams and boring logs, groundwater-monitoring well MW-3CD is screened between 5.0 and 15.0-feet bls.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from monitoring well MW-3CD in November 2022. Arsenic was detected at a level of 0.0153 mg/L which is above the associated MCL of 0.01 mg/L. All other detected Appendix III metals reported in the sample collected from monitoring well MW-3CD during the November 2022 monitoring event were below the corresponding MCLs. The concentration of arsenic reported for MW-3CD in November 2022 was identified as an outlier in statistical analysis.

Analytical Discussion:

Arsenic has been detected intermittently at concentrations exceeding the MCL at monitoring well MW-3CD since 2016. The final cover system for the Class Two Landfill, completed in 2019, is anticipated to aid in reduction of stormwater infiltration into the waste mass, thereby reducing the potential for groundwater impact. Observations of arsenic concentrations in groundwater samples collected from MW-3CD since November 2019 suggest a reducing

trend in concentration. The concentration of arsenic reported for MW-3CD in November 2022 was identified as an outlier in statistical analysis.

No other Appendix III constituents were reported at concentrations more than the corresponding regulatory standards and the groundwater indicator parameters were all within acceptable limits for the November 2022 sampling event. Complete laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.4 SURFACE WATER SAMPLING

3.4.1 SURFACE WATER COLLECTION POINT SMC-1 (UPSTREAM)

Surface water collection point SMC-1 is located along Six Mile Creek immediately east of the International Paper Canal, near the extreme northwest corner of the facility property, and is upstream from the landfill site.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from SMC-1 in November 2022. Trace concentrations of several Appendix IV metals were detected in the surface water samples from monitoring point SMC-1. Reported concentrations of Appendix IV metals were all below the corresponding MCLs at SMC-1.

Analytical Discussion:

No Appendix IV constituents were detected more than the corresponding MCLs or other applicable water quality standards during the November 2022 monitoring event. General water quality parameters including groundwater pH were consistent with the overall historical values for surface water samples collected from SMC-1. Inasmuch as SMC-1 is upstream of the active and closed components of the facility, detected constituents are not associated with facility activities. Laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.4.2 SURFACE WATER COLLECTION POINT SMC-2 (DOWNSTREAM)

Surface water collection point SMC-2 is located along Six Mile Creek immediately west of Highway 51, near the northeast corner of the facility property and is downstream from the landfill site.

November 2022 Semi-Annual Results:

No Appendix III VOCs were detected in the groundwater sample collected from SMC-2 in November 2022. Trace concentrations of several Appendix IV metals were detected in the surface water samples from monitoring point SMC-2. Reported concentrations of Appendix IV metals were all below the corresponding MCLs at SMC-2.

Analytical Discussion:

Laboratory analytical results for the sample collected from surface water collection point SMC-2 during the November 2022 monitoring event indicated the absence of VOCs and the presence of only low concentrations Appendix IV metals. General water quality parameters including groundwater pH were consistent with the overall historical values for surface water samples collected from SMC-2. Laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.4.3 SURFACE WATER COLLECTION POINT SW/TW-1 THROUGH SW/TW-5

Surface water collection points SW/TW-1, SW/TW-2, SW/TW-3, SW/TW-4 and SW/TW-5 are located within the intermittent tributary to Six Mile Creek located between the closed vertically expanded landfill to the east and the Subtitle D Horizontal Expansion to the west (see Figure 2). Sampling points SW/TW-1, SW/TW-2, SW/TW-3, and SW/TW-4 were established during Additional Assessment Monitoring Activities conducted in August 2002 prepared by others (Report dated October 17, 2002). SW/TW-5 was added in November 2018 to monitor surface water conditions at the outfall of the Class Two Landfill stormwater pond.

November 2022 Semi-Annual Results:

Trace concentrations of toluene were detected in SW/TW-1 through SW/TW-4 in November 2022. No other Appendix III VOCs were detected in the November 2022 surface water samples collected from SW/TW-1 through SW/TW-5.

In the November 2022 sampling event, trace concentrations of several Appendix IV metals were detected in the surface water samples from monitoring points SW/TW-1 through SW/TW-5. Reported concentrations of Appendix IV metals were all below the corresponding MCLs at each monitoring point.

Analytical Discussion:

All detected Appendix III VOCs were below the corresponding MCLs or other applicable water quality standards. All detected concentrations of Appendix IV metals reported for SW/TW-1 through SW/TW-5 in November 2022 were below the corresponding MCLs. Laboratory analytical reports and chain of custody records for the November 2022 monitoring event are provided in **Appendix D**.

3.5 SUMMARY OF ANALYTICAL RESULTS BY DETECTED PARAMETERS

The following is a summary of detected Appendix III and Appendix IV constituents, applicable MCLs, Action Levels and/or RBCs, and the locations where the constituents were detected at concentrations above the applicable standards for water samples collected for the November 2022 monitoring event.

Appendix IV VOCs:

No Appendix IV VOCs were detected at a concentration above the applicable MCL, Action Level and/or RBC in November 2022.

Appendix III/IV Metals:

In November 2022, Arsenic was reported at a concentration above the 0.01 mg/L MCL in the sample from monitoring wells **MW-7VR** (0.0189 mg/L), **MW-8V** (0.0442 mg/L), **MW-AM-4R** (0.0417 mg/L), **MW-AM-6** (0.0179 mg/L), and **MW-3CD** (0.0153 mg/L).

Tables 3A, 3B, and 3C contain historical summaries of inorganic and indicator parameter constituent detections. **Table 4** contains an historical summary of volatile organic constituent detections. **Appendix D** includes copies of laboratory analytical reports and chain-of-custody documentation for the November 2022 monitoring event.

4.0 CONCLUSIONS

The results of the November 2022 semi-annual detection monitoring events for the Georgetown County Solid Waste Facility indicate that water quality appears to be remaining relatively stable in the vicinity of the Closed MSW landfill, Class Three landfill, and Class Two landfill.

4.1 CLOSED MSW LANDFILL

No Appendix IV VOCs were detected at concentrations above respective established action levels in groundwater at the compliance monitoring wells. Furthermore, no Appendix IV VOCs were detected at concentrations above respective established action levels in surface water samples collected during November 2022.

Arsenic was reported at concentrations above the MCL at compliance monitoring well MW-8V, nearby monitoring wells MW-6VR and MW-7VR, and assessment monitoring wells MW-AM-4R and MW-AM-6. The levels of arsenic reported at well MW-8V, MW-6VR, MW-7VR, MW-AM-4R, and MW-AM-6 are consistent with historical results for those locations. It is further noted that arsenic in the groundwater in the vicinity of these wells is currently under investigation as presented in the Report of Corrective Measures Plan: Phase 1 Groundwater Quality Assessment dated August 18, 2016, and ongoing Corrective Measures Plan.

4.2 CLASS THREE LANDFILL

No Appendix IV VOCs or metals were detected at concentrations above respective established action levels in groundwater at the compliance monitoring wells.

4.3 CLASS TWO LANDFILL

No Appendix III VOCs were detected at concentrations above respective established action levels in groundwater at the compliance monitoring wells.

Arsenic was reported at a concentration slightly above the MCL at compliance monitoring well MW-3CD during the November 2022 semi-annual reporting period, continuing a trend of intermittent, low-level exceedances at this location. The absence of elevated levels of arsenic in surface water sample SW/TW-5 suggests that elevated concentrations of arsenic are local to the groundwater near the Class Two Landfill, and not reaching the adjacent groundwater discharge feature.

Observations of arsenic concentrations in groundwater samples collected from MW-3CD since November 2019 suggest a reducing trend in concentration. The concentration of arsenic reported for MW-3CD in November 2022 was identified as an outlier in statistical analysis.

4.4 SURFACE WATER

No Appendix IV VOCs or metals were detected at concentrations above respective established action levels in surface water samples collected during the November 2022 monitoring events.

5.0 RECOMMENDATIONS

Garrett & Moore recommends that the semi-annual Groundwater Detection Monitoring program be continued in accordance with the facility Groundwater Detection Monitoring Plan, with continued collection of surface water samples from locations SW/TW-1 through SW/TW-5.

Georgetown County has completed the closure of the Class Two Landfill. It is anticipated that closure of the Class Two landfill will serve to reduce stormwater infiltration, thereby reducing the potential for additional arsenic migration if the source of arsenic is within the waste mass.

Following certification of closure of the Class Two landfill, a period of two years is recommended to observe and establish trends in arsenic concentration during regular semi-annual sampling. A decreasing trend in arsenic concentrations has been established following the closure of the Class Two Landfill. In the April 2022 sampling event, only trace concentrations of arsenic were detected in MW-CD1 and MW-CD2 – well below the associated MCL. Arsenic was reported at a concentration slightly above the MCL at compliance monitoring well MW-3CD during the November 2022 semi-annual reporting period, continuing a trend of intermittent, low-level exceedances at this location. The absence of elevated levels of arsenic in surface water sample SW/TW-5 suggests that elevated concentrations of arsenic are local to the groundwater near the Class Two Landfill, and not reaching the adjacent groundwater discharge feature.

Observations of arsenic concentrations in groundwater samples collected from MW-3CD since November 2019 suggest a reducing trend in concentration. The concentration of arsenic reported for MW-3CD in November 2022 was identified as an outlier in statistical analysis.

As no consistent or increasing trend of arsenic concentration has been observed at the Class Two landfill after two years of monitoring, no assessment of groundwater impact is currently

required. Garrett & Moore recommends that the semi-annual Groundwater Detection Monitoring program be continued for the Class Two Landfill in accordance with the facility Groundwater Detection Monitoring Plan.

FIGURE 1. VICINITY MAP

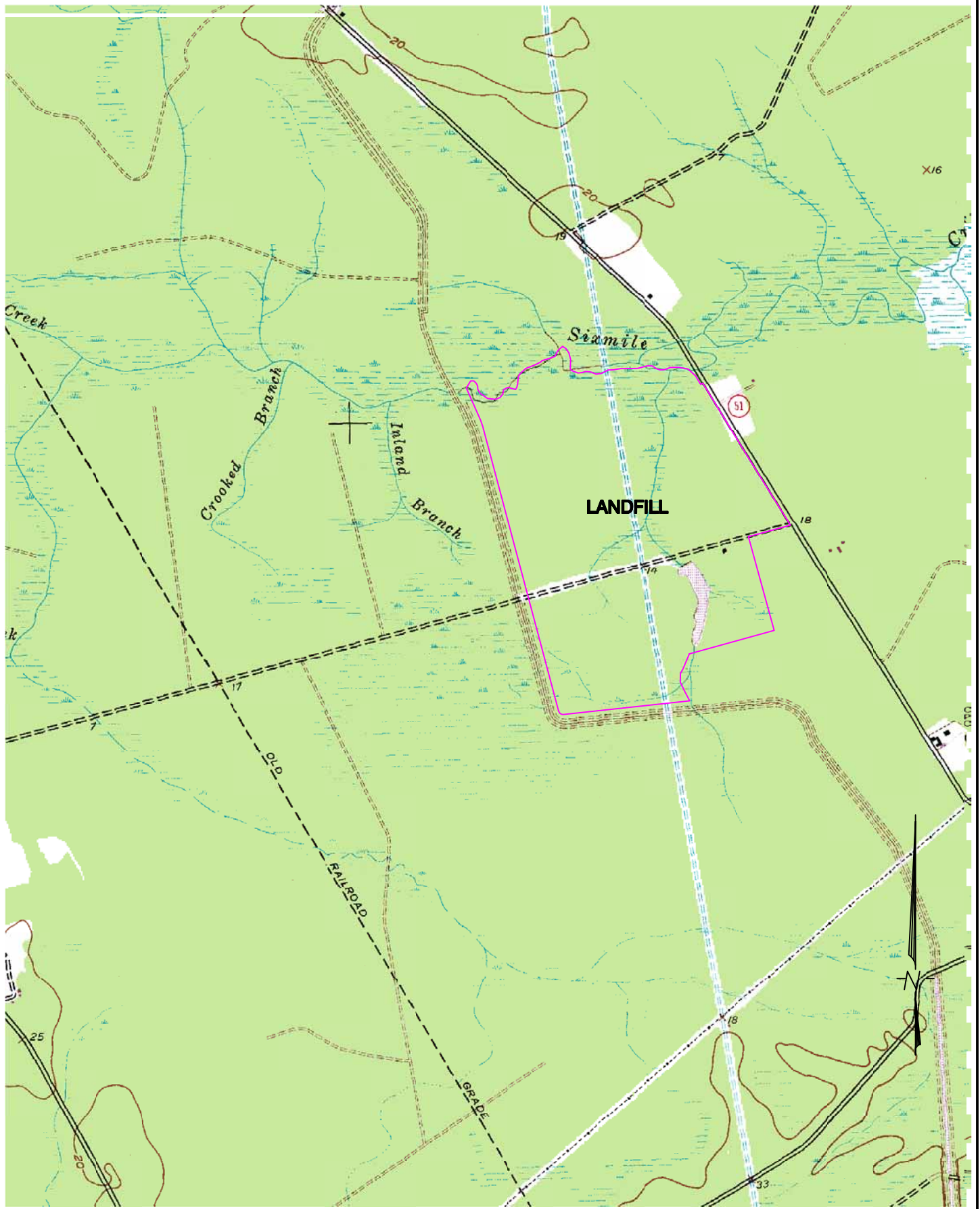
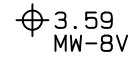




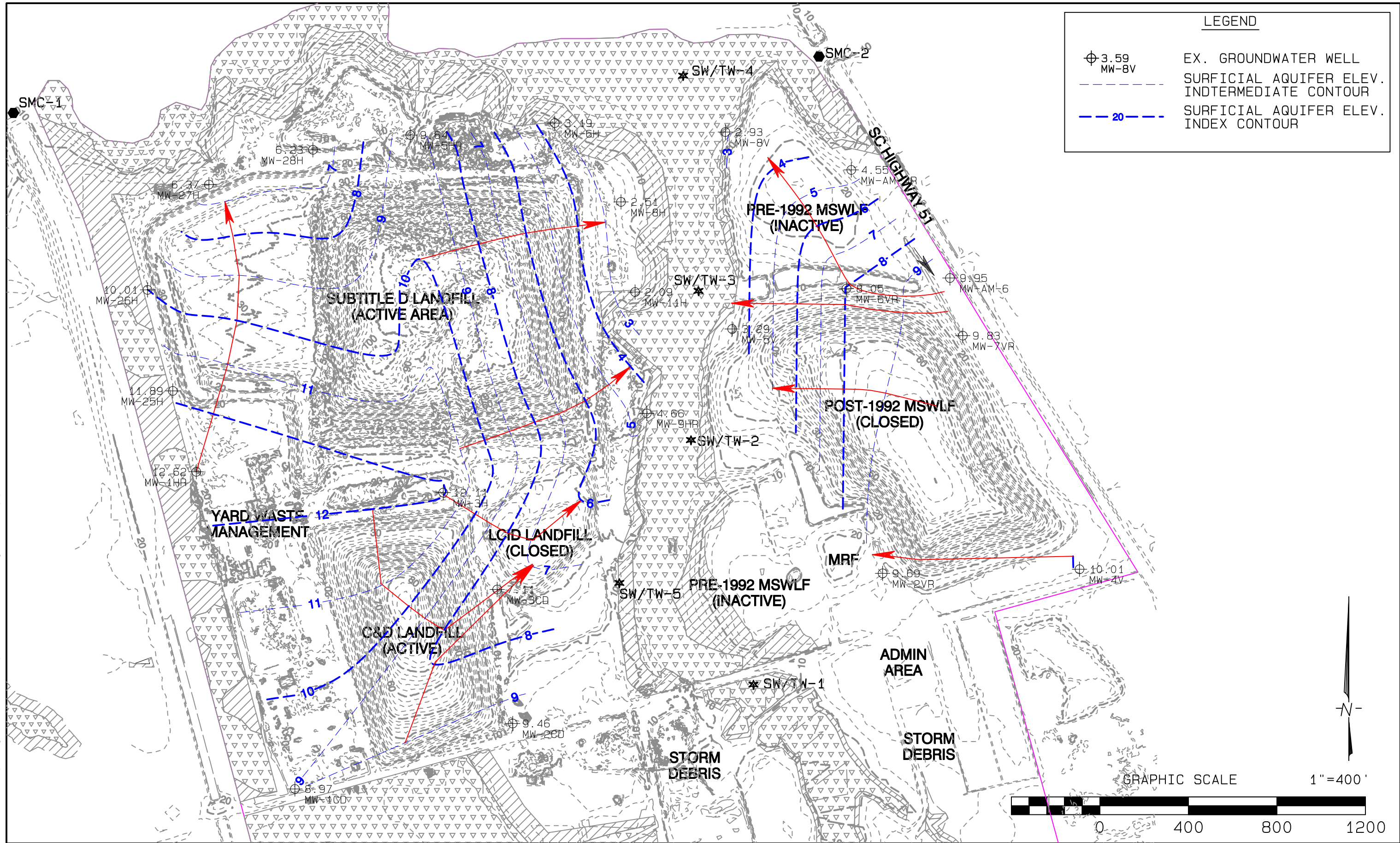
FIGURE 2. SAMPLING LOCATION MAP

FIGURE 3. WATER TABLE ELEVATION CONTOUR MAP-NOV. 2022

C:\Users\Caroline\OneDrive\Desktop\Georgetown Fall 2022\Report Files\11-2022 Georgetown GW Map.pro Sat Jan 14, 2023 11:17:06AM

LEGEND

-  EX. GROUNDWATER WELL
-  SURFICIAL AQUIFER ELEV. INTERMEDIATE CONTOUR
-  SURFICIAL AQUIFER ELEV. INDEX CONTOUR



REVISION	DATE
1)	
2)	
3)	
4)	

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**GEORGETOWN COUNTY
 SOLID WASTE FACILITY**

**GROUNDWATER ELEVATION MAP
 NOVEMBER 28-30, 2022**

JOB NUMBER

FIGURE
3

FIGURE 4. EXPLOSIVE GAS MONITORING LOCATIONS

C:\Users\cfortner\Desktop\in progress\georgetown\EG Monitoring 2021.pro Mon Jan 18, 2021 4:43:00PM

STRUCTURE MONITORING LOCATIONS

EAST	NORTH	LABEL	DESCRIPTION
2513709.70	593888.35	OMRF	MRF
2513549.74	593683.55	EG-S3	LFG TRAILER
2514034.47	593561.16	SCHS	SCALEHOUSE
2514452.84	593420.42	EWST	RECYCLING
2514361.26	593361.26	SCOF	RECYCLING
2514087.79	593415.74	OOFF	ADMIN
2514110.81	593338.18	TRCT	TRAINING
2513715.18	593174.36	EEC2	NATURE CTR
2513381.24	592945.91	OBRM	BREAK ROOM
2513446.51	592885.96	EG-S11	MAINTENANCE

WELL MONITORING LOCATIONS

EAST	NORTH	LABEL	DESCRIPTION
2514090.96	595377.64	EG-W1	HWY 51
2514470.29	594759.51	EG-W2	HWY 51
2514929.19	594028.18	EG-W3	HWY 51
2513831.15	593901.69	EG-W4	MRF
2514050.22	593583.28	EG-W5	LFG TRAILER
2513520.65	593688.40	EG-W6	SCALEHOUSE



REVISION	DATE
1)	
2)	
3)	
4)	

GARRETT & MOORE
Engineering for the Power and Waste Industries

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**GEORGETOWN COUNTY
SOLID WASTE FACILITY**

**EXPLOSIVE GAS
MONITORING
LOCATIONS**

JOB NUMBER

FIGURE
4

TABLE 1. MONITORING WELL & GROUNDWATER FIELD DATA

Table 1
Monitoring Well and Groundwater Field Data
Groundwater Detection Monitoring
November 28-30, 2022
Georgetown County Solid Waste Facility
Georgetown County, South Carolina

Well Identity	Well Depth (Feet BGS)	Well Diameter (Inches)	Screen Interval (Feet BGS)	Ground Surface Elevation (Feet MSL)	Depth to Groundwater (Feet BTOC)	Elevation Top of PVC Well Casing (Feet MSL)	Groundwater Elevation (Feet MSL)	Field Parameters					
								Temp. C°	pH	S.C. umhos/cm	Turbidity (ntu)	ORP (mV)	DO (mg/l)
MW-1CD	15.7	2.0	5.0 - 15.0	16.81	10.87	19.84	8.97	20.10	6.80	692.3	6.00	-67.7	0.14
MW-2CD	15.2	2.0	5.0 - 15.0	13.82	7.61	17.07	9.46	20.90	6.16	932.6	18.90	118.1	0.23
MW-3CD	16.3	2.0	5.0 - 15.0	12.32	8.18	15.29	7.11	19.50	6.60	864.4	12.70	-48.5	0.12
MW-1HR	15.0	2.0	5.0 - 15.0	19.00	8.88	21.50	12.62	17.40	6.52	690.0	6.90	171.8	0.60
MW-3H	14.5	2.0	4.3 - 14.3	17.50	7.66	19.77	12.11	19.10	5.23	408.7	7.40	298.8	0.68
MW-5HR	18.5	2.0	8.3 - 18.3	11.97	4.41	14.05	9.64	20.20	6.69	557.2	3.80	19.3	0.17
MW-6H	18.8	2.0	8.6 - 18.6	11.94	10.52	13.71	3.19	20.40	5.56	453.9	6.10	109.9	0.37
MW-8H	17.5	2.0	7.3 - 17.3	14.24	13.81	16.32	2.51	20.10	4.79	145.7	2.24	220.4	0.60
MW-9HR	13.0	2.0	3.0 - 13.0	7.78	5.16	9.82	4.66	17.60	6.31	826.4	2.80	298.3	1.10
MW-11H	20.0	2.0	10.0 - 20.0	14.54	14.59	16.68	2.09	20.30	5.61	217.6	4.27	121.1	0.34
MW-25H	15.0	2.0	5.0 - 15.0	17.45	8.47	20.36	11.89	20.70	7.14	541.6	4.20	-70.6	0.11
MW-26H	15.0	2.0	5.0 - 15.0	17.33	9.99	20.00	10.01	20.30	6.39	678.3	5.60	196.2	0.79
MW-27H	19.5	2.0	9.5 - 19.5	16.37	13.08	19.45	6.37	20.50	7.10	505.3	6.30	-51.0	0.27
MW-28H	20.0	2.0	8.5 - 18.5	17.43	12.71	18.94	6.23	22.10	6.78	451.8	28.10	-15.5	0.12
MW-2VR	15.0	2.0	5.0 - 15.0	15.98	8.39	18.08	9.69	18.90	5.87	167.9	17.00	94.9	4.02
MW-4V	14.5	2.0	4.3 - 14.3	16.24	8.51	18.52	10.01	21.30	7.24	732.0	45.40	-74.7	0.65
MW-5V	14.4	2.0	2.2 - 12.2	5.39	5.50	8.79	3.29	19.40	6.36	583.8	8.30	-11.3	0.11
MW-6VR	13.5	2.0	3.3 - 13.3	12.40	6.51	14.56	8.05	19.80	6.91	2,652.0	7.62	-111.6	0.17
MW-7VR	15.2	2.0	5.0 - 15.0	15.05	7.78	17.61	9.83	18.10	6.80	1,131.0	7.86	-76.1	0.19
MW-8V	12.2	2.0	2.0 - 12.0	4.65	4.31	7.24	2.93	19.00	6.69	1,241.0	12.80	-24.8	0.18
MW-AM-4R	16.0	2.0	6.0-16.0	13.53	11.81	16.36	4.55	20.50	6.42	676.0	1.40	-79.4	0.17
MW-AM-6	15.0	2.0	5.0 - 15.0	15.50	8.38	18.33	9.95	19.80	5.74	220.3	22.40	18.3	0.14
SW/TW-1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14.50	6.76	371.8	36.90	-16.6	0.69
SW/TW-2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16.10	6.91	489.1	20.40	117.0	0.73
SW/TW-3	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16.00	6.80	483.2	19.60	-5.3	0.51
SW/TW-4	N/A	N/A	N/A	N/A	N/A	N/A	N/A	16.20	6.57	418.5	21.60	8.7	0.47
SW/TW-5	N/A	N/A	N/A	N/A	N/A	N/A	N/A	15.10	7.20	895.6	38.90	244.8	2.52
SMC-1	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14.40	6.38	138.9	16.90	215.9	1.26
SMC-2	N/A	N/A	N/A	N/A	N/A	N/A	N/A	14.40	6.20	282.3	22.80	161.2	2.4

Notes: MSL = Mean Sea Level
BGS = Below Ground Surface
BTOC = Below Top of Casing
NS = Not sampled; water level below intake of dedicated pump.
S.C. = Specific Conductance
ntu = Nephelometric Turbidity Units
ORP = Oxidation/Reduction Potential
DO = Dissolved oxygen

Monitoring well construction data, as well as casing and ground surface elevation data, taken from July 15, 2007 Annual Groundwater Detection Monitoring Report prepared by Withers & Ravenel.

TABLE 2. STATISTICAL ANALYSIS SUMMARY – NOV. 2022

Table 2a

1/2/2023

Georgetown County Landfill Statistical Analysis Summary
CLOSED LANDFILL November 2022 Monitoring Event

Parameter	Methodology					Results						
	% Non-detect	Normality	Equal Variance	Transform	Method	2VR	5V	6VR	7VR	8V	AM-4R	AM-6
1,2-Dichlorobenzene	92.2%	NT	NT	1/2 DL	Poisson	-	-	-	-	O	-	-
1,4-Dichlorobenzene	76.0%	NT	No	DL	WRS	-	-	X?(D)	-	X	X?(D)	-
Arsenic	22.1%	No	No	DL	WRS	O	X(D)	X(D)	X(D)	X	X	X
Barium	7.4%	No	No	DL	WRS	O	O	X(D)	X(D)	X(D)	O	O
Benzene	71.1%	NT	No	DL	WRS	-	-	X(D)	-	X	X	-
Chlorobenzene	40.2%	No	No	DL	WRS	-	X	X(D)	X(D)	X	X	-
Chromium	61.8%	NT	Yes	DL	WRS / KW	O	-	O	-	-	-	-
Cobalt	54.6%	NT	No	DL	WRS	O	O	X(D)	X(D)	O	X(D)	X(D)
Copper	69.7%	NT	No	DL	WRS	O	-	-	-	-	-	-
Lead	61.9%	NT	No	DL	WRS	O	-	-	-	-	-	-
Nickel	58.1%	NT	No	DL	WRS	X?(D)	O	X(D)	X(D)	X(D)	-	-
Tetrahydrofuran	87.5%	NT	No	DL	WRS	-	-	O	-	-	-	-
Toluene	96.1%	NT	NT	1/2 DL	Poisson	-	-	-	-	-	-	O
Vanadium	72.2%	NT	No	DL	WRS	X(D)	-	-	-	-	-	-
Xylenes	95.6%	NT	NT	1/2 DL	Poisson	-	-	O	-	-	-	-
Zinc	43.1%	No	No	DL	WRS	O	-	-	-	-	-	-

Notes:**Methodology:****Results:**

Background wells:
MW-4V

NT Not tested
 DL Non detects replaced with the detection limit
 1/2 DL Non detects replaced with 1/2 of the detection limit
 KW Kruskal Wallis non-parametric test
 Poisson Poisson Prediction Limit
 WRS Wilcoxon Rank Sum test

X Statistically significant result
 O Result not statistically significant
 U Upward trend in data
 D Downward trend in data
 - Parameter not tested/detected in this event
 ? Primary and secondary test results differed
 X Outlier

Table 2b

1/2/2023

Georgetown County Landfill Statistical Analysis Summary
SUBTITLE D LANDFILL November 2022 Monitoring Event

Parameter	Methodology				Results										
	% Non-detect	Normality	Equal Variance	Transform	Method	3H	5HR	6H	8H	9HR	11H	25H	26H	27H	28H
1,2-Dichlorobenzene	98.2%	NT	NT	1/2 DL	Poisson	-	-	O	-	-	-	-	-	-	-
Arsenic	48.0%	No	No	DL	WRS	-	O	O	-	O	-	X	X	O	X
Barium	9.0%	No	Yes	DL	WRS / KW	O	O	O	O	O	O	X?	X(U)	O	O
Beryllium	80.8%	NT	No	DL	WRS	X?(D)	-	-	-	-	-	-	-	-	-
Cobalt	62.6%	NT	No	DL	WRS	O	O	-	O	X(D)	X(D)	-	O	-	-
Copper	73.2%	NT	Yes	DL	WRS / KW	O	-	-	-	-	-	-	-	-	-
Lead	65.1%	NT	No	DL	WRS	O	-	-	-	-	-	-	-	-	-
Mercury	93.0%	NT	NT	1/2 DL	Poisson	-	-	-	O	-	O	-	-	-	-
Nickel	73.5%	NT	No	DL	WRS	O	O	-	-	O	X	-	X?	-	-
Zinc	52.4%	NT	No	DL	WRS	O	-	-	-	-	O	-	-	-	-

Notes:

Background wells:
 MW-1HR

Methodology:

NT **Not tested**
 DL Non detects replaced with the detection limit
 1/2 DL Non detects replaced with 1/2 of the detection limit
 KW Kruskal Wallis non-parametric test
 Poisson Poisson Prediction Limit
 WRS Wilcoxon Rank Sum test

Results:


X Statistically significant result
 O Result not statistically significant
 U Upward trend in data
 D Downward trend in data
 - Parameter not tested/detected in this event
 ? Primary and secondary test results differed
 Outlier

TABLE 3A. SUMMARY OF HISTORICAL WATER QUALITY MONITORING
ANALYTICAL DATA – INORGANIC & INDICATOR PARAMETERS
(CLOSED VERTICAL EXPANSION)

**Table 3A
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Vertical Expansion)**

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductan ce (µmhos/cm)
<i>MCL/RBC/DWS</i>		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE
MW-2VR	6/13/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	34	ND	6.70	489
	11/28/2000	ND	0.012	0.082	ND	0.002	0.019	ND	ND	0.007	ND	ND	ND	0.005	0.029	0.017	11	ND	6.40	175
	8/21/2001	ND	ND	0.12	ND	ND	0.011	ND	ND	ND	ND	ND	ND	0.0024	ND	0.021	25	ND	6.53	417
	12/10/2001	0.0068	0.017	0.18	ND	ND	0.056	ND	0.015	0.038	ND	ND	ND	0.0032	0.092	0.068	34	ND	6.59	377
	6/12/2002	ND	0.032	0.032	ND	ND	ND	ND	0.0057	0.0036	ND	ND	ND	ND	ND	0.028	22	0.047	5.87	128
	11/7/2002	ND	ND	0.036	ND	ND	0.006	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	0.025	5.34	70.4
	5/22/2003	ND	ND	0.045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.023	5.6	0.032	6.65	259
	11/13/2003	ND	ND	0.041	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.8	0.04	6.57	267
	5/21/2004	ND	ND	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	0.043	6.16	177
	11/17/2004	ND	ND	0.039	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	ND	6.90	360
	5/17/2005	ND	ND	0.077	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26	ND	6.57	265
	11/7/2005	ND	ND	0.046	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.1	ND	6.80	351
	5/24/2006	ND	ND	0.064	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	ND	7.06	387
	11/2/2006	ND	ND	0.036	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.1	0.4	6.50	205
	5/16/2007	ND	ND	0.068	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.25	400
	11/7/2007	ND	ND	0.0292	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.8	ND	7.03	152
	5/21/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.77	ND	5.74	126
	11/13/2008	ND	ND	0.0382	0.00809	ND	0.00445	ND	0.00442	ND	ND	ND	ND	ND	0.00425	0.0129	10	0.238	5.02	94
	5/12/2009	ND	ND	0.0477	ND	ND	ND	ND	0.00293	ND	ND	ND	0.00146	ND	ND	0.00646	12	ND	6.39	214
	12/10/2009	ND	ND	0.0214	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.62	60.8
5/17/2010	ND	ND	0.046	ND	ND	0.0018	ND	0.0015	ND	ND	ND	ND	ND	0.0021	0.01	NA	NA	6.40	208.3	
11/2/2010	ND	0.00057 J	0.024	ND	ND	0.0011 J	0.0005 J	ND	0.00092 J	ND	ND	ND	ND	0.0021 J	0.0063 J	NA	NA	5.60	107	
5/3/2011	0.00029	0.0006	0.023	ND	ND	0.0027	0.00064	0.0014	0.0018	0.0012	0.00026	ND	0.000081	0.0031	0.0084	NA	NA	5.80	NA	
11/8/2011	ND	0.003	0.032	ND	ND	ND	ND	ND	0.0032	ND	ND	ND	ND	ND	ND	0.011	NA	NA	5.50	100
4/24/2012	ND		0.027	ND	ND	ND	ND	ND	0.0021	ND	ND	ND	ND	ND	ND	NA	NA	5.90	77	
10/9/2012	ND	0.0022	0.024	ND	ND	ND	ND	ND	0.0018	ND	ND	ND	ND	ND	ND	NA	NA	5.50	77	
5/21/2013	ND		0.028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.00	73	
11/19/2013	ND	0.0016 J B	0.02	0.00012 J	0.00016 J	ND	0.00042 J	0.0019 J	0.0018	0.0017 J	ND	ND	0.000072 J	0.0098 J B	0.0061 J	NA	NA	4.60	75	
4/28/2014	0.00018 J	ND	0.019	0.00010 J	0.000046 J	ND	0.00045 J	ND	0.0011	0.00070 J	ND	ND	0.000021 J	0.0021 J	0.0062 J	NA	NA	5.4	57	
11/25/2014	ND	0.0015	0.023	0.00019 J	ND	0.005	0.00061 J	0.0019 J	0.0038	0.0016 J	ND	ND	0.00018 J	0.0061	0.016	NA	NA	4.9	17	
4/27/2015	ND	ND	0.018	ND	ND	0.0022 B	ND	ND	0.0013	ND	ND	ND	ND	ND	ND	0.018	NA	NA	5.3	56
11/17/2015	ND	0.00048 J	0.019	0.00020 J	0.000085 J	0.0032 B	0.00054 J	0.0014 J	0.0013	0.0010 J	ND	0.000018 J	0.00014 J	ND	0.0087 J	NA	NA	5.2	56	
4/5/2016	0.00052 J	0.00057 J	0.025	0.000089 J	0.00015 J	0.0049 J B	0.00061 J	0.0011 J	0.0013	0.0010 J	ND	0.00016 J	0.000095 J	ND	0.0070 J	NA	NA	5.9	84	
11/7/2016	0.00012 J B	0.00088 J	0.019	0.00017 J	0.00016 J	0.0026	0.00069 J	0.0016 J	0.0023 B	0.00090 J	ND	0.000040 J	0.00012 J	0.0026 J	0.023	NA	NA	5.2	55	
4/17/2017	ND	0.0018	0.028	ND	0.000070 J	0.0027	0.00068 J	0.00093 J	0.0016	0.0010 J	0.00096 J	0.00011 J	0.000089 J	0.0037	0.021	NA	NA	5.8	93	
11/6/2017	ND	0.002	0.026	0.00013 J	0.00022 J	0.0033 J B	0.00078 J	0.0014 J	0.0021	0.0014 J	ND	ND	ND	0.003	0.022	NA	NA	5.8	110	
4/16/2018	ND	0.00057 J	0.036	ND	0.000087 J	0.00098 J	0.000049 J	0.0011 J	0.00094 J	ND	ND	ND	ND	0.0012	0.015	NA	NA	6.4	180	
11/12/2018	0.00022 J	0.0013	0.017	0.00010 J	0.00011 J	0.0021	0.00036 J	0.0011 J	0.0021	0.00087 J	ND	ND	ND	0.0025	0.018	NA	NA	5.8	67	
4/15/2019	ND	0.00082 J	0.032	ND	ND	0.0017 J	ND	ND	0.0011	0.0014 J	ND	ND	ND	0.0030 J	0.019 J	NA	NA	6.5	150	
11/20/2019	ND	0.0012	0.019	ND	ND	0.0035	ND	ND	0.0021	0.0013 J	0.0013 J	ND	ND	0.0038 J	ND	NA	NA	5.8	71	
4/20/2020	ND	0.0010	0.039	ND	ND	ND	ND	ND	0.00076 J	0.0012 J	0.0010 J	ND	ND	ND	ND	NA	NA	6.0	180	
11/18/2020	ND	0.0036	0.019	ND	ND	0.0022	0.00054 J	ND	0.0013	0.0010 J	0.0018 J	ND	ND	0.0030 J	ND	NA	NA	5.6	95	
11/15/2021	<0.000490	0.00212	0.0359	<0.000190	<0.000160	0.00284	<0.000520	<0.00380	0.00190	0.00157 J	<0.000740	<0.000110	<0.000570	0.00326 J	<0.00690	NA	NA	6.09	NA	
4/19/2022	<0.000680	0.00110	0.0251	<0.000240	<0.000150	0.00309	0.000994 J	0.00192 J	0.00206	0.00127 J	<0.00230	<0.000130	<0.000280	0.00406 J	0.00950 J	NA	NA	5.53	NA	
11/28/2022	<0.000680	0.00120	0.0515	<0.000240	<0.000150	0.00184 J	0.000792 J	0.00118 J	0.00248	0.00186 J	<0.00230	<0.000130	<0.000280	0.00255 J	0.0106 J	NA	NA	5.9 H	NA	

Table 3A
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Vertical Expansion)

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductan ce (µmhos/cm)	
MCL/RBC/DWS		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE	
MW-4V	5/22/2003	ND	ND	0.028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.043	8.6	0.047	4.96	64.3	
	11/13/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.22	55	
	5/21/2004	ND	ND	0.031	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.2	ND	6.42	302	
	11/16/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	0.041	5.45	73	
	5/17/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.1	0.024	6.01	84	
	11/7/2005	ND	ND	0.035	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.7	ND	5.91	139	
	5/24/2006	ND	ND	0.037	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.8	0.09	7.10	488	
	11/2/2006	ND	ND	0.026	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.86	0.08	7.02	401	
	5/17/2007	ND	ND	0.035	ND	ND	ND	ND	ND	ND	ND	0.013	ND	ND	ND	ND	8.9	0.1	7.22	470	
	11/7/2007	ND	ND	0.0306	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.54	ND	7.59	422	
	5/21/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.1	ND	7.09	441	
	11/13/2008	ND	ND	0.0574	0.00962	ND	0.00326	ND	0.0033	ND	ND	ND	ND	ND	0.00193	0.00741	24.9	ND	5.02	152	
	5/12/2009	ND	ND	0.0424	ND	ND	ND	ND	0.00379	ND	ND	ND	ND	0.00131	0.00765	ND	19	ND	7.11	455	
	12/10/2009	ND	ND	0.0343	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	7.22	106	
	5/18/2010	ND	ND	0.048	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0028	0.00038	0.0069	NA	NA	6.40	481
	11/3/2010	ND	0.00073 J	0.059	ND	ND	ND	ND	ND	0.00062 J	ND	ND	ND	ND	0.00017 J	ND	0.0038 J	NA	NA	7.00	490
	5/3/2011	0.00039	0.0036	0.046	ND	ND	0.00059	0.0005	0.0068	0.00033	0.00043	0.00036	ND	0.00093	ND	0.076	NA	NA	7.5 HT	NA	
	11/8/2011	ND	0.0014	0.063	ND	ND	ND	ND	ND	ND	0.0014	0.0012	ND	ND	ND	ND	NA	NA	6.80	440	
	4/24/2012	ND	0.0011	0.046	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	7.50	460	
	10/9/2012	ND	0.0024	0.051	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	7.10	45	
	5/21/2013	ND	ND	0.059	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	8.00	330	
	11/19/2013	ND	0.0032 B	0.061	ND	ND	ND	0.00024 J	ND	0.00034 J	ND	ND	ND	ND	0.00045 J	0.0067 J B	0.0032 J	NA	NA	7.00	500
	4/29/2014	ND	0.00043 J	0.026	0.00022 J	0.00023 J	ND	0.00050 J	ND	0.00032 J	0.00082 J	ND	ND	ND	ND	ND	0.0034 J	NA	NA	5.4	120
	11/25/2014	ND	ND	0.039	ND	0.00015 J	0.00030 J	0.00010 J	0.00092 J	0.00036 J	ND	ND	ND	ND	0.00011 J	ND	0.0016 J	NA	NA	6.7	440
	4/28/2015	ND	ND	0.027	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.017	NA	NA	5.2	130
	11/17/2015	ND	0.0015	0.02	0.00018 J	0.00014 J	0.00019 B	0.00064 J	0.0016 J	0.0015	0.0014 J	ND	0.000018 J	0.00014 J	ND	0.0060 J	NA	NA	5.5	120	
	4/5/2016	ND	0.00040 J	0.027	0.00021 J	0.00012 J	0.00074 J	0.001	0.00049 J	0.00076 J	0.0015 J	ND	ND	0.000038 J	ND	0.011	NA	NA	5.4	150	
	11/7/2016	0.00010 J, B	0.0018	0.027	0.00011 J	0.00013 J	0.00092 J	0.0011	0.00085 J	0.00084 J, B	0.0014 J	ND	0.000044 J	0.00016 J	ND	0.023	NA	NA	5.7	200	
	4/17/2017	ND	0.0031	0.044	ND	ND	0.019	0.00068 J	ND	0.00016 J	0.0024	ND	ND	0.000054 J	ND	0.013	NA	NA	7	530	
	11/6/2017	ND	0.0023	0.059	ND	0.000080 J	0.00049 J	0.00024 J	0.00074 J	0.00024 J	ND	ND	ND	ND	ND	ND	0.012	NA	NA	6.9	510
	4/16/2018	ND	0.0028	0.073	ND	ND	ND	0.000035 J	0.00063 J	0.00015 J	ND	ND	ND	ND	0.00013 J	0.015	NA	NA	7.1	540	
	11/12/2018	ND	0.0058	0.058	ND	ND	0.00036 J	0.00019 J	0.00033 J	0.00043 J	ND	ND	ND	ND	0.00020 J	0.013	NA	NA	6.9	470	
	4/15/2019	ND	0.0032	0.061	ND	ND	ND	ND	ND	0.00059 J	ND	ND	ND	ND	ND	ND	0.015 J	NA	NA	7.3	500
11/21/2019	ND	0.0021	0.069	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	7.1	610		
4/20/2020	ND	0.0024	0.059	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.8	460		
11/18/2020	ND	0.0018	0.024	ND	ND	0.00083 J	0.00061 J	ND	0.00047 J	0.00097 J	ND	ND	ND	0.0014 J	ND	ND	NA	NA	5.7	180	
11/15/2021	<0.000490	0.00276	0.0698	<0.000190	<0.000160	<0.000790	<0.000520	<0.00380	0.000332 J	<0.000510	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	7.04	NA		
4/19/2022	<0.000680	0.00323	0.105	<0.000240	<0.000150	0.00117 J	<0.000080	0.0304	0.0259	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	0.0794	NA	NA	7.08	NA		
11/28/2022	<0.000680	0.00460	0.12	<0.000240	<0.000150	<0.00100	0.000089 J	0.00178 J	0.00130	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390 J	NA	NA	6.8 H	NA		

**Table 3A
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Vertical Expansion)**

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductan ce (µmhos/cm)	
<i>MCL/RBC/DWS</i>		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE	
MW-SV	6/12/2002	ND	ND	0.096	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	160	ND	6.36	960	
	11/7/2002	ND	0.065	0.12	ND	ND	ND	ND	ND	0.0086	ND	ND	ND	ND	ND	ND	49	ND	6.58	854	
	5/22/2003	ND	0.031	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.066	36	ND	6.41	711	
	11/13/2003	ND	0.019	0.075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	0.043	6.35	518	
	5/21/2004	ND	0.026	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	35	ND	6.36	656	
	11/17/2004	ND	0.01	0.068	ND	ND	ND	ND	ND	ND	ND	0.0071	ND	ND	ND	ND	27	ND	6.50	598	
	5/17/2005	ND	0.033	0.098	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	47	ND	6.56	735	
	11/8/2005	ND	0.015	0.049	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	0.025	6.45	474	
	5/24/2006	ND	0.01	0.107	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	107	0.07	6.79	804	
	11/2/2006	ND	0.0166	0.105	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	73	5	6.50	848	
	5/16/2007	ND	ND	0.062	ND	ND	ND	ND	ND	ND	ND	0.014	ND	ND	ND	ND	28	0.15	6.10	1300	
	11/8/2007	ND	ND	0.0591	ND	ND	ND	ND	ND	ND	ND	0.0109	ND	ND	ND	ND	62.8	ND	6.30	647	
	5/21/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.019	ND	ND	ND	ND	17.9	ND	6.20	523	
	11/12/2008	ND	ND	0.0588	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00421	NA	NA	5.82	436	
	5/12/2009	ND	ND	0.0539	ND	ND	0.00237	ND	0.00228	0.00547	ND	ND	0.00183	ND	ND	ND	25	ND	6.25	498	
	12/10/2009	ND	ND	0.0334	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.18	70.3	
	5/17/2010	ND	0.0091	0.047	ND	ND	ND	ND	0.0033	ND	ND	0.014	ND	ND	ND	ND	NA	NA	6.40	528	
	11/2/2010	0.00013 J	0.0029	0.031	ND	0.00028 J	0.0005 J	0.0021	0.00013J	0.00031 J	0.0017 J	0.00048 J	0.00016 J	0.00012 J	0.00073 J	0.013	NA	NA	5.80	377	
	5/3/2011	0.00023	0.00066	0.032	ND	ND	0.00053	0.0001	ND	ND	0.00052	0.0008	ND	0.00005	ND	0.0023	NA	NA	6.20	NA	
	11/8/2011	ND	0.006	0.057	ND	ND	ND	ND	0.0029	0.0014	0.0013	ND	ND	ND	ND	ND	NA	NA	5.90	560	
	4/24/2012	ND	0.011	0.037	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.50	420	
	10/9/2012	ND	0.0085	0.065	ND	ND	ND	ND	ND	ND	ND	0.0012	ND	ND	ND	ND	NA	NA	6.40	670	
	5/21/2013	ND	0.0032	0.032	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.40	400	
	11/19/2013	ND	0.0029 B	0.051	ND	0.00016 J	ND	0.00027 J	ND	ND	0.0032	ND	ND	0.000035 J	0.0069 J B	0.0026 J	NA	NA	5.70	790	
	4/29/2014	ND	0.00043 J	0.023	0.000031 J	0.00010 J	ND	0.000051 J	ND	0.000088 J	ND	0.00029 J	ND	ND	ND	ND	0.0026 J	NA	NA	6	210
	11/25/2014	ND	ND	0.03	ND	0.0015	0.00092 J	0.000082 J	0.0011 J	ND	0.00056 J	ND	ND	ND	ND	ND	0.0042 J	NA	NA	5.9	300
	4/28/2015	ND	ND	0.021	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014	NA	NA	5.9	200
	11/18/2015	ND	0.0018	0.022	ND	0.00031 J	0.00062 J	0.00019 J	0.00058 J	0.00036 J	0.00057 J	0.00067 J	0.000021 J	0.00020 J	ND	0.0055 J	NA	NA	5.9	270	
	4/5/2016	0.00021 J	0.0011	0.023	0.00020 J	0.00021 J	0.00095 J	0.00020 J	0.00068 J	0.00021 J	0.00043 J	ND	0.00014 J	0.00033 J	ND	0.0061 J	NA	NA	6.1	300	
	11/7/2016	ND	0.00066 J	0.017	ND	0.00012 J	0.00070 J	0.00010 J	0.00063 J	0.00034 J B	0.00039 J	0.00045 J	0.000027 J	0.000066 J	ND	0.013	NA	NA	6	220	
	4/17/2017	ND	0.00048 J	0.037	ND	0.00012 J	0.00062 J	0.00025 J	0.00051 J	0.000092 J	0.0012 J	ND	ND	0.000032 J	ND	0.023	NA	NA	6	550	
	11/7/2017	ND	0.00083 J	0.019	ND	ND	0.00075 J	0.000097 J	0.00055 J	0.00015 J	ND	ND	ND	ND	0.00083 J	0.014	NA	NA	6	270	
	4/17/2018	ND	0.00032 J	0.038	ND	ND	0.00049 J	0.000073 J	0.0015 J	0.00015 J	0.0010 J	ND	ND	ND	0.00070 J	0.014	NA	NA	6.1	570	
11/12/2018	ND	0.0015	0.018	0.000081 J	0.00012 J	0.0018 J	0.00027 J	0.00091 J	0.00054 J	0.00088 J	ND	ND	ND	0.0034	0.016	NA	NA	6.0	220		
4/15/2019	ND	0.00056 J	0.024	ND	ND	0.0013 J	ND	ND	ND	ND	ND	ND	ND	0.0022 J	0.013 J	NA	NA	5.9	330		
11/20/2019	ND	0.0013	0.01	ND	ND	0.0018 J	ND	ND	0.0005 J	ND	ND	ND	ND	0.0023 J	ND	NA	NA	6	170		
4/20/2020	ND	0.0018	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.0	260		
11/18/2020	ND	0.0018	0.015	ND	ND	0.0011 J	ND	ND	0.00044 J	0.00079 J	0.00083 J	ND	ND	ND	ND	NA	NA	6.1	180		
11/16/2021	<0.000490	0.000626 J	0.0350	<0.000190	<0.000160	<0.000790	<0.000520	<0.00380	<0.000260	0.00230 J	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	6.24	NA		
4/19/2022	<0.000680	<0.000490	0.0274	<0.000240	<0.000150	<0.00100	0.000103 J	0.00185 J	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.23	NA		
11/28/2022	<0.000680	0.00101	0.0260	<0.000240	<0.000150	<0.00100	0.000203 J	<0.000890	<0.000500	0.00146 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.2 H	NA		

**Table 3A
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INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Vertical Expansion)**

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)
<i>MCL/RBC/DWS</i>		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE
MW-6V	2/25/1992	NA	NA	NA	NA	ND	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	374	ND	6.80	3120
	5/20/1992	NA	NA	NA	NA	ND	ND	NA	NA	0.021	NA	NA	NA	NA	NA	NA	280	ND	6.70	2860
	8/26/1992	NA	NA	NA	NA	ND	ND	NA	NA	0.015	0.08	NA	NA	NA	NA	0.04	448	ND	6.90	3250
	10/20/1992	NA	ND	0.4	NA	ND	ND	NA	NA	ND	0.09	NA	NA	NA	NA	0.04	487	ND	6.80	3900
	2/24/1993	NA	NA	NA	NA	ND	ND	NA	0.06	ND	0.07	NA	NA	NA	NA	0.02	176	ND	7.00	3390
	5/18/1993	NA	NA	NA	NA	ND	0.005	NA	ND	ND	0.09	NA	NA	NA	NA	0.07	363	0.6	7.00	3360
	7/13/1993	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/31/1993	NA	0.028	0.4	NA	ND	ND	0.1	ND	ND	0.08	NA	NA	NA	NA	0.03	295	ND	7.00	3720
	6/7/1994	NA	0.016	0.3	NA	ND	0.012	0.1	0.11	ND	0.06	NA	NA	NA	NA	0.04	472	0.4	6.80	3550
	12/12/1994	NA	0.017	0.5	NA	ND	ND	0.1	ND	ND	0.07	NA	NA	NA	NA	0.03	578	ND	6.70	3860
	6/6/1995	NA	0.029	0.7	NA	ND	ND	0.1	ND	ND	0.09	NA	NA	NA	NA	0.03	447.3	ND	6.70	3600
	12/1/1995	NA	0.04	0.1	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	0.03	385	ND	6.70	3260
	5/29/1996	NA	0.044	0.2	NA	ND	ND	0.1	0.05	ND	0.1	NA	NA	NA	NA	0.03	656	ND	6.70	3480
	12/5/1996	NA	0.022	ND	NA	ND	ND	ND	ND	ND	0.06	NA	NA	NA	NA	ND	313	ND	6.70	2790
	5/21/1997	NA	0.012	0.2	NA	ND	0.06	ND	ND	0.014	0.08	NA	NA	NA	NA	0.1	NA	NA	6.70	3530
	11/5/1997	NA	0.024	0.3	ND	ND	0.1	ND	ND	0.008	0.08	ND	ND	0.001	ND	0.06	395	ND	6.70	2930
	5/27/1998	NA	0.033	0.7	NA	ND	0.16	ND	ND	ND	ND	NA	NA	NA	NA	0.01	488	ND	6.70	3010
	11/11/1998	NA	0.021	0.5	NA	ND	0.19	0.1	ND	ND	0.07	NA	NA	NA	NA	0.04	588	ND	6.70	807
	6/3/1999	NA	0.042	0.405	NA	0.003	0.029	0.017	0.01	0.009	ND	NA	NA	NA	NA	0.054	622	ND	6.70	3912
	11/16/1999	NA	0.049	0.322	NA	0.001	0.013	0.011	0.016	ND	ND	NA	NA	NA	NA	0.026	602	ND	6.80	4160
8/21/2001	ND	0.057	0.34	ND	ND	0.025	ND	0.0051	ND	0.044	ND	ND	ND	ND	0.034	510	ND	6.60	3510	
12/11/2001	ND	0.054	0.31	ND	ND	0.0093	ND	ND	ND	ND	ND	ND	ND	ND	ND	530	ND	6.87	3540	
6/12/2002	ND	0.029	0.28	ND	ND	ND	ND	ND	0.003	ND	ND	ND	ND	ND	ND	550	ND	6.68	2650	
11/7/2002	ND	0.057	0.034	ND	ND	ND	ND	ND	0.01	0.042	ND	ND	ND	ND	ND	530	ND	6.90	3540	
5/22/2003	ND	0.021	0.30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.038	520	ND	6.68	3310	
11/13/2003	ND	0.025	0.27	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.031	580	ND	6.72	3470	
5/21/2004	ND	0.055	0.33	ND	ND	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	600	ND	6.62	3880	
11/17/2004	ND	0.05	0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	580	ND	6.76	3770	
5/17/2005	ND	0.039	0.29	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	540	ND	6.71	3200	
11/8/2005	ND	0.048	0.30	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	550	0.026	6.69	3620	
5/24/2006	ND	0.035	0.27	ND	ND	ND	0.011	ND	ND	ND	ND	ND	ND	ND	ND	602	ND	7.13	2650	
11/2/2006	ND	0.0485	0.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	350	0.08	6.72	3360	
5/16/2007	ND	0.0152	0.23	ND	ND	ND	ND	ND	ND	ND	0.016	ND	0.0137	ND	ND	470	0.13	6.58	3100	
11/8/2007	ND	0.036	0.154	ND	ND	ND	ND	ND	ND	0.0223	ND	ND	ND	0.006	ND	462	ND	6.70	2720	
5/22/2008	ND	0.0145	0.165	ND	ND	ND	ND	ND	ND	ND	0.0119	ND	ND	ND	ND	411	ND	6.74	2953	
11/12/2008	ND	0.0273	0.189	0.00565	ND	0.00617	0.00316	0.00388	0.00795	0.0159	0.00916	ND	ND	0.00837	0.00763	399	0.691	6.59	3050	
5/13/2009	ND	0.0187	0.155	ND	ND	0.00501	ND	0.0056	ND	0.0174	0.00789	0.00096	ND	0.00511	0.00414	340	ND	6.72	2520	
12/10/2009	ND	0.0191	0.163	ND	ND	ND	ND	ND	ND	0.0125	ND	ND	ND	ND	ND	NA	NA	6.69	2190	
5/17/2010	ND	0.019	0.120	ND	ND	0.0027	0.0024	0.0028	ND	0.013	0.0051	ND	ND	0.0055	0.0064	NA	NA	6.70	1817	
11/2/2010	ND	0.010	0.150	ND	ND	0.0023	0.002	0.0031 J	ND	0.0088 J	0.0049	ND	ND	0.0063	0.0037 J	NA	NA	6.80	2700	
5/3/2011	0.00033	0.0049	0.130	ND	ND	0.0019	0.0023	0.0013	0.00032	0.011	0.0055	ND	0.00006	0.003	0.0066	NA	NA	7.30	NA	
11/8/2011	ND	0.0500	0.190	ND	ND	0.0039	0.0066	ND	ND	0.029	0.0044	ND	ND	ND	ND	NA	NA	6.50	2700	
4/24/2012	ND	0.0200	0.150	ND	ND	ND	ND	ND	ND	ND	0.0044	ND	ND	ND	ND	NA	NA	7.00	2000	
10/9/2012	ND	0.0320	0.160	ND	ND	ND	ND	ND	ND	0.025	0.0028	ND	ND	ND	ND	NA	NA	7.20	2300	
5/21/2013	ND	0.0540	0.220	ND	ND	0.011	ND	ND	ND	0.032	0.0035	ND	ND	ND	ND	NA	NA	7.10	2500	
11/19/2013	ND	0.0034 B	0.150	0.000043 J	0.000039 J	ND	0.0022	0.0011 J	0.0001 J	0.01	ND	ND	0.0001 J	0.0094 J B	0.0046 J	NA	NA	6.60	270	
4/29/2014	0.00018 J	0.0032	0.15	0.00016 J	0.00045 J	ND	0.00085 J	0.0012 J	0.00036 J	0.003	0.0018 J	ND	ND	0.0011 J	0.0039 J	NA	NA	6.8	1300	
11/25/2014	ND	0.0054	0.16	ND	0.00040 J	0.0018 B	0.0021	0.0018 J	ND	0.0096	0.0043	ND	ND	0.0019 J	0.0054 J	NA	NA	6.8	2600	

**Table 3A
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Vertical Expansion)**

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductan ce (µmhos/cm)
<i>MCL/RBC/DWS</i>		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE
MW-6VR	4/28/2015	ND	0.006	0.17	ND	ND	0.0024 B	0.002	ND	ND	0.007	0.0022	ND	ND	ND	0.017	NA	NA	6.7	1300
	11/17/2015	ND	0.002	0.046	0.00012 J	0.00072 J	0.0026	0.00068 J	0.0022 J	0.001	0.0028	0.00068 J	0.000020 J	0.00031 J	0.0047 J	0.011	NA	NA	6.4	580
	4/5/2016	0.00036 J	0.005	0.2	0.00028 J	0.00012 J	0.0024 J, B	0.0019	0.0012 J	0.00031 J	0.0029	ND	0.000090 J	0.000052 J	0.0031 J	0.0028 J	NA	NA	6.5	1100
	11/7/2016	0.00012 J, B	0.0072	0.17	0.00017 J	0.00039 J	0.0014	0.0014	0.0021 J	0.00042 J, B	0.0059	0.0032	0.000026 J	0.000054 J	0.0036 J	0.018	NA	NA	6.6	2100
	4/17/2017	ND	0.0036	0.1	ND	0.00057 J	0.0035	0.00093 J	0.00050 J	0.000096 J	0.0053	ND	ND	ND	0.0028	0.013	NA	NA	6.6	1500
	11/7/2017	ND	0.0068	0.16	0.00012 J	0.00037 J	0.0013	0.00093 J	0.00021 J	0.0081 J	ND	ND	ND	ND	0.0026	0.017	NA	NA	6.6	210
	4/16/2018	ND	0.0040	0.12	0.000079 J	ND	0.00091 J	0.00088 J	0.00049 J	ND	0.0045	ND	ND	ND	0.0022	0.013	NA	NA	6.6	1500
	11/12/2018	0.00025 J	0.011	0.11	0.00012 J	0.000093 J	0.0011	0.00097 J	0.0054	0.00080 J	0.0064	ND	ND	ND	0.0014	0.036	NA	NA	6.5	1000
	4/15/2019	ND	0.0036	0.13	ND	ND	0.00092 J	ND	ND	0.0011 J	ND	ND	ND	ND	0.0018 J	0.014 J	NA	NA	6.9	830
	11/20/2019	ND	0.0074	0.083	ND	ND	ND	0.00072 J	ND	0.002 J	0.0011 J	ND	ND	ND	ND	ND	NA	NA	6.4	540
	4/21/2020	ND	0.0072	0.098	ND	ND	ND	0.00083 J	ND	ND	0.0030	ND	ND	ND	ND	ND	NA	NA	6.4	980
	11/18/2020	ND	0.0083	0.14	ND	ND	0.00095 J	0.00071 J	ND	ND	0.0045	ND	ND	ND	ND	ND	NA	NA	6.6	1600
	11/15/2021	<0.000490	0.0254	0.214	<0.000190	<0.000160	0.00175 J	0.00435	<0.00380	<0.000260	0.0163	<0.000740	<0.000110	<0.000570	0.00217 J	<0.00690	NA	NA	6.66	NA
	4/20/2022	<0.000680	0.00310	0.0979	<0.000240	<0.000150	0.00119 J	0.000570 J	<0.000890	<0.000500	0.00421	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.67	NA
11/28/2022	<0.000680	0.0197	0.234	<0.000240	<0.000150	0.00285	0.00384	<0.000890	<0.000500	0.0161	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.6 H	NA	
MW-7V	2/24/1993	NA	NA	NA	NA	ND	ND	NA	0.07	ND	ND	NA	NA	NA	NA	0.02	208	NA	6.90	1969
	5/18/1993	NA	NA	NA	NA	ND	ND	NA	ND	ND	0.06	NA	NA	NA	NA	0.06	102	0.4	6.80	1283
	7/13/1993	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	8/31/1993	NA	0.027	0.2	NA	ND	ND	0.1	ND	ND	ND	NA	NA	NA	NA	0.2	88	ND	6.70	1122
	6/7/1994	NA	0.05	ND	NA	ND	0.026	0.1	0.1	0.011	ND	NA	NA	NA	NA	0.05	80.2	0.4	6.80	1253
	12/12/1994	NA	0.019	0.5	NA	ND	ND	0.1	ND	0.005	ND	NA	NA	NA	NA	0.04	174	ND	6.50	1707
	6/6/1995	NA	0.047	0.7	0.0012	ND	ND	ND	ND	0.007	ND	ND	ND	0.001	ND	0.03	154	ND	6.60	1437
	12/1/1995	NA	0.048	0.1	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.03	101	ND	6.70	1157
	5/29/1996	NA	0.065	0.3	ND	ND	ND	ND	0.05	ND	0.06	ND	ND	ND	ND	ND	92	ND	6.30	1548
	12/5/1996	NA	0.041	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	190	ND	6.30	1590
	5/21/1997	NA	0.09	0.1	0.002	ND	0.17	ND	ND	0.016	ND	ND	ND	ND	ND	0.04	234	ND	6.20	1904
	11/5/1997	NA	0.054	0.1	ND	ND	0.05	ND	ND	0.006	0.05	ND	ND	ND	ND	ND	444	ND	6.40	2030
	5/27/1998	NA	0.064	0.5	NA	ND	0.19	ND	ND	0.005	ND	NA	NA	NA	NA	0.05	632	ND	5.90	1932
	11/11/1998	NA	0.092	0.8	NA	ND	0.45	0.1	ND	0.015	0.07	NA	NA	NA	NA	0.14	250	ND	6.40	719
6/3/1999	NA	ND	0.453	NA	0.002	ND	0.01	ND	ND	ND	NA	NA	NA	NA	0.024	404	ND	6.30	2568	
MW-7VR	11/16/1999	NA	0.061	0.363	NA	0.003	0.03	0.014	0.015	0.007	ND	NA	NA	NA	0.045	310	ND	6.40	1854	
	6/13/2000	ND	0.089	0.474	0.001	0.004	0.035	0.021	ND	0.006	ND	ND	ND	0.013	0.064	0.061	365	ND	6.50	2600
	11/28/2000	0.005	0.047	0.329	ND	0.003	ND	0.013	ND	ND	ND	ND	ND	0.017	ND	ND	274	0.11	6.50	2190
	8/21/2001	ND	0.079	0.5	ND	ND	0.038	ND	0.016	0.011	ND	ND	ND	0.0022	0.081	0.039	260	0.04	6.40	2160
	12/11/2001	ND	0.14	0.67	ND	ND	0.076	0.04	0.02	0.032	0.062	ND	ND	0.0022	0.14	0.09	390	ND	6.56	3070
	6/12/2002	ND	0.078	0.62	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	450	ND	6.67	2470
	11/7/2002	ND	0.033	0.3	ND	ND	ND	ND	ND	0.0048	ND	ND	ND	ND	ND	ND	270	ND	6.83	2170
	5/22/2003	ND	0.0062	0.20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.021	180	0.032	6.63	1700
	11/13/2003	ND	ND	0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.031	140	0.97	6.63	1350
	5/21/2004	ND	0.028	0.25	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	150	ND	6.49	1540
	11/17/2004	ND	0.031	0.23	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	150	ND	6.64	1440
	5/17/2005	ND	0.030	0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	86	0.021	6.60	992
	11/8/2005	ND	0.025	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	100	0.034	6.68	1170
	5/24/2006	ND	0.023	0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	97	ND	6.60	1120
11/2/2006	ND	0.026	0.187	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	102	3	6.47	1270	
5/16/2007	ND	0.012	0.138	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	56	0.16	6.58	920	
11/8/2007	ND	0.036	0.251	ND	ND	ND	ND	ND	ND	0.0116	ND	ND	ND	ND	ND	173	ND	6.40	865	
5/22/2008	ND	0.027	0.152	ND	ND	ND	ND	ND	ND	ND	0.011	ND	ND	ND	ND	60.5	ND	6.40	888	
11/12/2008	ND	0.026	0.218	0.00962	ND	0.0034	ND	0.00392	0.00551	0.0089	0.009	ND	ND	0.0058	0.0045	130	ND	6.39	1446	
5/13/2009	ND	0.015	0.121	ND	ND	0.00307	ND	0.00492	ND	ND	0.0014	0.00124	ND	0.00153	0.0031	50	ND	6.61	802	
12/10/2009	ND	0.023	0.136	ND	ND	ND	ND	ND	ND	0.00776	ND	ND	ND	ND	ND	NA	NA	6.53	788	
5/17/2010	ND	0.015	0.13	ND	ND	ND	ND	0.00078	0.0024	0.0069	0.007	ND	0.002	0.002	0.0036	NA	NA	6.60	970	
11/2/2010	ND	0.023	0.2	ND	ND	0.00038 J	0.0054	ND	ND	0.0078 J	0.002	ND	ND	0.0039 J	0.005 J	NA	NA	6.60	1470	
5/3/2011	0.00021	0.012	0.11	ND	ND	0.00062	0.0017	ND	ND	0.0031	0.00081	ND	0.00015	0.0014	0.0032	NA	NA	6.80	NA	
11/8/2011	ND	0.022	0.17	ND	ND	ND	0.0016	ND	ND	0.0056	0.0022	ND	ND	ND	ND	NA	NA	6.30	1100	
4/24/2012	ND	0.008	0.12	ND	ND	ND	ND	0.0036	ND	ND	ND	ND	ND	ND	ND	NA	NA	7.30	790	
10/9/2012	ND	0.025	0.15	ND	ND	ND	ND	0.0037	ND	ND	0.0013	ND	ND	0.02	ND	NA	NA	6.80	750	

**Table 3A
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Vertical Expansion)**

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductan ce (µmhos/cm)
<i>MCL/RBC/DWS</i>		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE
MW-7VR	5/21/2013	ND	0.009	0.12	ND	ND	ND	ND	ND	ND	ND	0.0018	ND	ND	ND	ND	NA	NA	6.90	790
	11/19/2013	ND	0.016 B	0.16	0.0001 J	0.000033 J	ND	0.0017	ND	ND	0.004	ND	ND	0.00016 J	0.0072 J B	0.0029 J	NA	NA	6.30	1000
	4/28/2014	0.00014 J	0.0079	0.14	0.000072 J	ND	ND	0.00081 J	0.0024 J	ND	0.0021	0.00076 J	ND	ND	0.0016 J	0.0027 J	NA	NA	6.7	950
	11/25/2014	ND	0.005	0.11	ND	0.000075 J	0.032 B	0.00096 J	0.0012 J	ND	0.019	ND	ND	ND	ND	0.0022 J	NA	NA	6.7	760
	4/28/2015	ND	0.0093	0.13	ND	ND	ND	0.0012	ND	ND	0.0034	0.001	ND	ND	ND	0.011	NA	NA	6.6	850
	11/17/2015	ND	0.01	0.19	0.000097 J	0.000065 J	0.0012	0.0037	0.0013 J	0.00041 J	0.0047	0.0015	ND	0.00032 J	0.0034 J	0.0032 J	NA	NA	6.5	1300
	4/5/2016	0.00019 J	0.0062	0.16	0.00012 J	0.00012 J	ND	0.0012	0.00068 J	0.00011 J	0.0028	ND	0.000080 J	0.000067 J	ND	0.0032 J	NA	NA	6.6	1200
	11/7/2016	0.00012 J B	0.0057	0.16	0.000091 J	0.000094 J	ND	0.0013	0.0017 J	0.00038 J B	0.0048	0.0011	0.000048 J	0.000089 J	ND	0.015	NA	NA	6.6	1100
	4/17/2017	ND	0.012	0.14	ND	ND	0.00057 J	0.002	ND	ND	0.0058	0.00070 J	ND	0.000027 J	0.0025	0.012	NA	NA	6.6	1000
	11/6/2017	ND	0.0053	0.15	ND	0.00045 J	0.00062 J	0.001	0.00072 J	0.00011 J	0.0040 J	ND	ND	ND	0.0016	0.013	NA	NA	6.6	1000
	4/17/2018	0.00026 J B	0.0086	0.14	ND	0.000089 J	0.00040 J	0.0014	0.00072 J	0.00014 J	0.0044	ND	ND	ND	0.0020	0.013 J	NA	NA	6.6	960
	11/12/2018	ND	0.0061	0.1	ND	ND	0.00073 J	0.00066 J	0.00069 J	0.00016 J	0.0029	ND	ND	0.00010 J	0.0013	0.016	NA	NA	6.6	820
	4/16/2019	ND	0.0068	0.14	ND	ND	ND	0.00096 J	ND	ND	0.0036	ND	ND	ND	0.0023 J	0.016 J	NA	NA	6.6	1100
	11/20/2019	ND	0.0063	0.13	ND	ND	ND	ND	ND	ND	0.0027 J	ND	ND	ND	ND	ND	NA	NA	6.7	960
	4/20/2020	ND	0.0075	0.14	ND	ND	ND	0.0011 J	ND	ND	0.0032	ND	ND	ND	0.0016 J	ND	NA	NA	6.6	1100
	11/19/2020	ND	0.0052	0.18	ND	ND	ND	0.00091 J	ND	ND	0.0029 J	0.0012 J	ND	ND	ND	ND	NA	NA	6.6	1300
	11/15/2021	<0.000490	0.0132	0.144	<0.000190	<0.000160	<0.000790	0.00175 J	<0.00380	<0.000260	0.00366	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	6.42	NA
4/20/2022	<0.000680	0.0104	0.105	<0.000240	<0.000150	<0.00100	0.000701 J	<0.000890	<0.000500	0.00298	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.77	NA	
11/28/2022	<0.000680	0.0189	0.15	<0.000240	<0.000150	<0.00100	0.000866 J	<0.000890	<0.000500	0.00303	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.5 H	NA	
MW-8V	12/5/1996	NA	0.033	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	147	ND	6.40	1340
	5/21/1997	NA	0.035	ND	ND	ND	ND	ND	ND	0.011	ND	ND	ND	0.001	ND	0.02	204	0.2	6.40	2040
	11/5/1997	NA	0.015	0.2	ND	ND	ND	ND	ND	0.005	ND	ND	ND	ND	ND	0.04	116	ND	6.30	1065
	5/27/1998	NA	0.05	0.2	NA	ND	0.34	ND	ND	ND	NA	NA	NA	NA	NA	0.02	274	1	6.10	1295
	11/11/1998	NA	ND	0.1	NA	ND	ND	ND	0.4	0.013	ND	NA	NA	NA	NA	0.03	284	0.1	6.40	720
	6/3/1999	NA	0.023	0.17	NA	0.001	0.026	ND	ND	ND	NA	NA	NA	NA	NA	0.037	269	0.18	6.80	2544
	11/16/1999	NA	0.033	0.183	NA	0.002	ND	ND	ND	ND	NA	NA	NA	NA	NA	0.032	219	ND	6.02	2160
	6/13/2000	ND	0.02	ND	0.001	0.001	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	115	ND	6.80	1526
	11/28/2000	0.006	0.021	0.084	ND	0.001	ND	ND	ND	ND	ND	ND	ND	0.017	ND	ND	118	0.16	6.60	1294
	8/21/2001	ND	0.023	0.1	ND	ND	0.011	ND	ND	ND	ND	ND	ND	ND	ND	ND	140	0.02	6.70	1860
	12/11/2001	ND	0.044	0.15	ND	ND	0.051	ND	0.0086	0.018	ND	ND	ND	0.075	0.022	120	0.43	6.73	1330	
	6/12/2002	ND	0.02	0.099	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	84	ND	6.52	772
	11/7/2002	ND	0.033	0.1	ND	ND	ND	ND	ND	0.0064	ND	ND	ND	ND	ND	ND	100	0.02	7.13	1310
	5/22/2003	ND	0.013	0.11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.032	110	ND	6.65	1420
	11/13/2003	ND	0.019	0.12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.091	120	ND	6.68	1450
	5/21/2004	ND	0.030	0.15	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	140	0.054	6.71	2050
	11/17/2004	ND	0.061	0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	120	ND	6.73	1870
	5/19/2005	ND	0.043	0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	130	ND	6.87	2120
	11/8/2005	ND	0.080	0.22	ND	ND	ND	ND	ND	0.0040	ND	ND	ND	ND	ND	ND	140	ND	6.73	2340
	5/24/2006	ND	0.062	0.16	ND	ND	ND	ND	ND	ND	ND	0.013	ND	ND	ND	ND	41.7	ND	6.65	1060
	11/2/2006	ND	0.070	0.17	ND	ND	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND	91.4	0.1	6.60	1850
	5/16/2007	ND	0.044	0.19	ND	ND	ND	ND	ND	ND	ND	0.042	ND	ND	ND	ND	110	0.16	6.83	2100
	11/8/2007	ND	0.022	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	81.8	0.771	6.30	2460
	5/22/2008	ND	0.027	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	80	ND	6.68	1079
	11/12/2008	ND	0.013	0.09	0.00519	ND	0.00406	ND	0.00452	0.00485	ND	ND	ND	ND	0.00398	0.00552	94.8	ND	6.52	1282
	5/12/2009	ND	0.024	0.10	ND	ND	0.0026	ND	0.00223	ND	ND	ND	0.00187	ND	ND	0.00221	100	ND	6.89	1300
	12/10/2009	ND	0.055	0.15	ND	ND	ND	ND	ND	ND	0.00621	ND	ND	ND	ND	ND	NA	NA	6.66	1590
5/17/2010	ND	0.054	0.12	ND	ND	0.0013	0.00077	0.0028	ND	0.006	0.0087	ND	ND	0.00074	0.0082	NA	NA	6.70	1330	
11/2/2010	ND	0.040	0.13	ND	ND	0.0014	0.0017	ND	0.00015 J	0.0045 J	0.002	ND	ND	0.0012 J	0.0019 J	NA	NA	6.80	1656	
5/3/2011	0.00026	0.030	0.12	ND	ND	0.0026	0.0013	0.00099	0.00048	0.0039	0.0019	ND	0.000088	0.002	0.0027	NA	NA	6.70	NA	
11/8/2011	ND	0.037	0.11	ND	ND	ND	0.0018	ND	ND	0.0073	0.0031	ND	ND	ND	ND	NA	NA	6.30	1400	
4/24/2012	ND	0.044	0.15	ND	ND	ND	ND	ND	ND	0.0021	ND	ND	ND	ND	ND	NA	NA	7.00	1700	
10/9/2012	ND	0.055	0.14	ND	ND	ND	ND	ND	ND	0.0012	ND	ND	ND	ND	ND	NA	NA	7.00	1600	
5/21/2013	ND	0.033	0.14	ND	ND	ND	ND	ND	ND	0.0028	ND	ND	ND	ND	ND	NA	NA	7.00	1700	
11/19/2013	ND	0.049 B	0.13	ND	0.000035 J	ND	0.002	ND	0.00011 J	0.0061	ND	ND	0.000035 J	0.008 J B	0.0042 J	NA	NA	6.70	1700	

**Table 3A
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Vertical Expansion)**

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductan ce (µmhos/cm)
<i>MCL/RBC/DWS</i>		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE
MW-8V	4/29/2014	0.00014 J	0.034	0.14	ND	ND	ND	0.0018	ND	ND	0.0048	0.002	ND	ND	0.0015 J	0.0016 J	NA	NA	6.7	1700
	11/25/2014	ND	0.026	0.12	ND	0.00023 J	0.0014 B	0.0016	0.0014 J	ND	0.0054	0.0014	ND	ND	ND	0.0022 J	NA	NA	6.8	1600
	4/27/2015	ND	0.021	0.11	ND	ND	0.0012 B	0.0017	ND	ND	0.005	0.0016	ND	ND	ND	0.013	NA	NA	6.6	1300
	11/18/2015	0.000096 J	0.044	0.13	ND	0.000073 J	0.0014	0.0018	0.00078 J	0.00011 J	0.0069	0.0013	0.000037 J	0.00027 J	ND	0.19	NA	NA	6.7	1700
	4/5/2016	0.00014 J	0.026	0.11	0.000071 J	0.000092 J	0.0021 J, B	0.0017	0.00095 J	0.00050 J	0.0036	ND	0.000037 J	0.00013 J	ND	0.0040 J	NA	NA	6.6	1300
	11/7/2016	0.000086 J, B	0.032	0.12	ND	0.000068 J	0.00091 J	0.0018	0.0018 J	0.00027 J, B	0.005	0.0014	0.000012 J	0.000045 J	ND	0.015	NA	NA	6.8	1600
	4/17/2017	ND	0.033	0.12	ND	ND	0.0012	0.0013	ND	ND	0.0041	ND	ND	ND	0.00099 J	0.015	NA	NA	6.5	1400
	11/7/2017	0.00023 J	0.04	0.12	ND	ND	0.0015 J, B	0.0013	0.0015 J	0.00024 J	0.0065 J	ND	ND	ND	0.00093 J	0.018	NA	NA	6.6	1500
	4/17/2018	ND	0.017	0.11	0.00014 J	ND	0.00086 J	0.0011	0.00095 J	ND	0.0042	ND	ND	ND	0.00054 J	0.01	NA	NA	6.5	1500
	11/12/2018	0.00020 J	0.017	0.097	ND	ND	0.0011 J	0.0011	0.00053 J	ND	0.0046	ND	ND	ND	0.00029 J	0.012	NA	NA	6.7	1400
	4/15/2019	ND	0.017	0.092	ND	ND	0.0013 J	0.0012 J	ND	ND	0.0034	ND	ND	ND	ND	0.014 J	NA	NA	6.5	1200
	11/20/2019	ND	0.018	0.089	ND	ND	0.0014 J	0.0011 J	ND	ND	0.0038	ND	ND	ND	ND	ND	NA	NA	6.8	1300
	4/20/2020	ND	0.02	0.1	ND	ND	ND	0.00091 J	ND	ND	0.0028 J	ND	ND	ND	ND	ND	NA	NA	6.7	620
	11/19/2020	ND	0.019	0.086	ND	ND	0.00080 J	0.00066 J	ND	ND	0.0031	ND	ND	ND	ND	ND	NA	NA	6.7	1100
	11/16/2021	<0.000490	0.0336	0.0839	<0.000190	<0.000160	0.000884 J	0.000823 J	<0.00380	<0.000260	0.00312	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	6.63	NA
4/19/2022	<0.000680	0.0165	0.0866	<0.000240	<0.000150	<0.00100	0.000856 J	<0.000890	<0.000500	0.00247	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.70	NA	
11/28/2022	<0.000680	0.0442	0.103	<0.000240	<0.000150	<0.00100	0.000846 J	<0.000890	<0.000500	0.00327	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.6 H	NA	
MW-AM-6	11/17/2015	ND	0.009	0.067	0.00013 J	0.00025 J	0.00075 J	0.0054	0.00053 J	0.00017 J	0.0017 J	0.00063 J	0.000019 J	0.00026 J	ND	0.0040 J	NA	NA	NA	NA
	12/31/2015	0.001	0.0128	0.0572	0.00011	0.00014	0.00063 J	0.0045	0.001	0.001	0.0014	0.001	0.0001	0.001	0.001	0.0089	NA	NA	NA	NA
	5/16/2016	ND	0.025	0.051	0.00012 J	0.000096 J	ND	0.0058	ND	0.00016 J	0.00078 J	0.00046 J	ND	0.000022 J	ND	0.0039 J	NA	NA	NA	NA
	11/8/2016	0.00055 J, B	0.0087	0.044	0.000091 J	0.00012 J	ND	0.0028	0.0016 J	0.00050 J, B	0.00098 J	0.00076 J	0.0019	0.00014 J	ND	0.017	NA	NA	5.8	290
	4/17/2017	ND	0.016	0.04	ND	0.000058 J	0.00022 J	0.0034	ND	ND	0.00071 J	ND	ND	ND	ND	0.018	NA	NA	5.7	200
	11/7/2017	0.00046 J	0.024	0.04	0.00010 J	0.00038 J	0.00053 J, B	0.0028	0.0010 J	0.00016 J	0.0011 J	ND	ND	ND	ND	0.016	NA	NA	5.9	220
	4/17/2018	ND	0.017	0.042	0.000060 J	0.00024 J	0.00039 J	0.0020	0.00070 J	0.00018 J	0.0011 J	ND	ND	ND	0.00021 J	0.014 J	NA	NA	5.9	230
	11/12/2018	ND	0.02	0.038	0.000058 J	ND	0.00023 J	0.0019	0.00047 J	0.00021 J	0.0015 J	ND	ND	0.00023 J	ND	0.016	NA	NA	5.7	180
	4/15/2019	ND	0.011	0.042	ND	ND	0.0012 J	0.00090 J	ND	0.00045 J	0.00093 J	ND	ND	ND	0.0020 J	0.019 J	NA	NA	5.9	190
	11/20/2019	ND	0.0083	0.042	ND	ND	ND	0.00084 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.6	190
	4/20/2020	ND	0.016	0.042	ND	ND	ND	0.0016 J	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.6	190
	11/19/2020	ND	0.015	0.038	ND	ND	ND	0.0011 J	ND	ND	0.00054 J	ND	ND	ND	ND	ND	NA	NA	5.7	180
	11/15/2021	<0.000490	0.0189	0.0394	<0.000190	<0.000160	<0.000790	0.00251	<0.00380	<0.000260	0.000767 J	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	5.66	NA
	4/20/2022	<0.000680	0.0137	0.0409	<0.000240	<0.000150	<0.00100	0.000937 J	0.00157 J	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	0.00671 J	NA	NA	5.85	NA
	11/29/2022	<0.000680	0.0179	0.0400	<0.000240	<0.000150	<0.00100	0.00131	<0.000890	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	5.8 H	NA
MW-AM-4	4/17/2017	ND	0.089	0.024	ND	ND	0.00027 J	0.01	ND	ND	0.00038 J	0.00087 J	ND	ND	ND	0.013	NA	NA	6.2	570
	11/6/2017	ND	0.094	0.02	ND	ND	0.00049 J, B	0.012	0.00066 J	0.00015 J	ND	ND	ND	ND	ND	0.012	NA	NA	6.1	410
	4/17/2018	ND	0.095	0.028	0.000098 J	ND	0.00041 J	0.013	0.00050 J	0.00016 J	ND	ND	ND	ND	0.00023 J	0.015	NA	NA	6.2	340
	11/13/2018	ND	0.11	0.02	ND	ND	ND	0.0095	0.00027 J	0.00029 J	ND	ND	ND	ND	ND	0.016	NA	NA	5.7	180
	4/16/2019	ND	0.092	0.023	ND	ND	ND	0.013	ND	ND	ND	ND	ND	ND	0.015 J	NA	NA	6.1	300	
MW-AM-4R	11/20/2019	ND	0.094	0.02	ND	ND	ND	0.0084	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6	190
	4/20/2020	ND	0.038	0.049	ND	ND	ND	0.0039	ND	ND	0.00092 J	ND	ND	ND	ND	ND	NA	NA	6.3	1100
	11/16/2020	ND	0.019	0.021	ND	ND	ND	0.00061 J	ND	ND	0.00080 J	0.00090 J	ND	ND	ND	ND	NA	NA	5.9	380
	11/15/2021	<0.000490	0.0969	0.0228	<0.000190	<0.000160	<0.000790	0.00484	<0.00380	<0.000260	<0.000510	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	5.93	NA
	4/19/2022	<0.000680	0.0206	0.0280	<0.000240	<0.000150	<0.00100	0.00107	0.00164 J	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.03	NA
11/28/2022	<0.000680	0.0417	0.0301	<0.000240	<0.000150	<0.00100	0.00114	<0.000890	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.1 H	NA	

Notes:

MCL/RBC/DWS = Maximum Contaminant Level/Risk-Based Standard or Drinking Water Standard as appropriate

* The Maximum Contaminant Level (MCL) for Arsenic was lowered from 0.05 mg/L to 0.01 mg/L in 2006.

All concentrations are mg/L or parts per million (ppm)

Sp. Cond - Specific Conductance; values reported in umhos/cm

NA = Not analyzed for parameter on given date

ND = Not Detected; see laboratory certificates for individual compound detection limits

pH values reported in Standard Units (su)

Sampling events between and including 11/2011 and 5/2013 performed by Smith + Gardner

TABLE 3B. SUMMARY OF HISTORICAL WATER QUALITY MONITORING
ANALYTICAL DATA – INORGANIC & INDICATOR PARAMETERS
(SUBTITLE D HORIZONTAL EXPANSION)

Table 3B
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Horizontal Expansion)

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductan ce (µmhos/cm)	
<i>MCL/RBC/DWS</i>		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE	
MW-1HR	5/28/1998	NA	ND	0.3	NA	ND	0.05	ND	ND	0.016	ND	NA	NA	NA	NA	ND	17	ND	6.70	359	
	11/12/1998	NA	ND	0.4	NA	ND	ND	ND	ND	0.012	ND	NA	NA	NA	NA	ND	18	ND	7.70	255	
	6/4/1999	NA	ND	0.079	NA	0.005	0.02	ND	0.01	ND	ND	NA	NA	NA	NA	0.029	29	0.25	8.20	412	
	11/16/1999	NA	ND	0.082	NA	0.002	ND	ND	ND	ND	ND	NA	NA	NA	NA	0.012	27	ND	7.80	457	
	6/13/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	34	ND	7.90	427	
	11/28/2000	0.005	ND	0.127	0.001	0.001	0.021	ND	ND	ND	ND	ND	ND	ND	0.008	0.025	0.011	13.3	ND	7.10	398
	8/21/2001	ND	ND	0.1	ND	ND	0.0088	ND	0.0054	ND	ND	ND	ND	ND	0.0025	ND	ND	15	ND	7.00	417
	12/10/2001	0.012	0.093	1.4	0.011	ND	0.21	0.028	0.048	0.082	0.064	ND	ND	ND	0.0061	0.31	0.2	16	0.035	7.05	409
	6/27/2002	ND	ND	0.099	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND	7.21	404
	11/7/2002	ND	ND	0.091	ND	ND	0.014	ND	0.0055	ND	ND	ND	ND	ND	ND	ND	0.023	16	ND	6.37	254
	5/22/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26	0.028	8.37	461
	11/13/2003	ND	0.0069	0.18	ND	ND	0.023	ND	0.0055	0.0053	ND	ND	ND	ND	ND	ND	0.033	27	ND	6.68	977
	5/21/2004	ND	ND	0.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	6.78	715
	11/16/2004	ND	ND	0.073	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	ND	6.32	537
	5/19/2005	ND	ND	0.087	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	6.53	650
	11/8/2005	ND	ND	0.075	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND	6.21	575
	5/23/2006	ND	ND	0.058	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	ND	6.49	464
	11/2/2006	ND	ND	0.089	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	0.1	6.70	891
	5/16/2007	ND	ND	0.047	ND	ND	ND	ND	ND	ND	ND	ND	0.011	ND	ND	ND	ND	13	0.16	5.63	460
	11/7/2007	ND	ND	0.0741	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND	7.30	795
	5/21/2008	ND	ND	ND	0.00411	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.7	ND	6.27	521
	11/12/2008	ND	ND	0.0726	ND	ND	0.00299	ND	0.00429	0.00377	ND	0.00804	ND	ND	0.00366	0.00463	10.1	0.255	6.20	590	
	5/13/2009	ND	ND	0.0452	ND	ND	0.00291	ND	0.00719	ND	ND	0.00269	0.00112	ND	ND	0.00354	17	ND	6.38	406	
	12/10/2009	ND	ND	0.0426	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.19	122	
	5/17/2010	ND	ND	0.053	ND	ND	ND	0.00063	ND	ND	ND	0.0038	ND	0.0020	ND	0.0056	NA	NA	6.50	566	
	11/2/2010	ND	0.0032	0.078	ND	ND	0.00033 J	ND	ND	ND	ND	0.0005 J	ND	ND	ND	0.0091 J	NA	NA	6.50	861	
	5/3/2011	0.00021	0.0016	0.037	ND	ND	0.00071	0.0013	ND	0.00014	0.007	0.00077	ND	0.0001	ND	0.003	NA	NA	6.20	NA	
	11/8/2011	ND	0.0035	0.052	ND	ND	ND	ND	ND	ND	0.0018	ND	ND	ND	ND	ND	NA	NA	6.10	500	
	4/24/2012	ND	ND	0.047	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.70	440	
	10/10/2012	ND	0.0023	0.057	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.90	650	
5/22/2013	ND	ND	0.043	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.80	420		
11/20/2013	ND	0.0022 B	0.05	ND	0.000092 J	ND	0.000035 J	ND	0.00012 J	ND	ND	ND	ND	ND	0.01 B	0.0028 J	NA	NA	7.00	700	
4/30/2014	ND	0.00050 J	0.033	ND	ND	ND	0.00043 J	ND	ND	ND	ND	ND	0.000041 J	0.0015 J	0.0019 J	NA	NA	6.6	340		
11/25/2014	ND	0.0013	0.051	ND	0.00040 J	0.0036 B	0.00056 J	0.0026 J	0.00079 J	0.0014 J, B	ND	ND	ND	0.0039 J	0.0088 J	NA	NA	6.3	360		
4/27/2015	ND	ND	0.043	ND	ND	0.0010 B	ND	ND	ND	ND	ND	ND	ND	ND	0.013	NA	NA	6.4	390		
11/17/2015	ND	0.00084 J	0.039	ND	0.000054 J	0.0021 B	0.00013 J	0.0015 J	0.00086 J, B	0.00022 J	ND	0.000013 J	0.000061 J	ND	0.0025 J	NA	NA	6.5	370		
4/5/2016	0.00011 J	0.00062 J	0.039	ND	0.00019 J	ND	0.00033 J	0.00085 J	0.00040 J	ND	ND	0.000051 J	0.000099 J	ND	0.0064 J	NA	NA	6.5	380		
11/8/2016	0.00021 J, B	0.0016	0.088	ND	0.000091 J	ND	0.0022	0.00069 J	0.00026 J, B	0.0017 J	0.00059 J	0.000077 J	0.000096 J	ND	0.017	NA	NA	6.4	1500		
4/18/2017	ND	0.00076 J	0.062 B	0.000093 J	0.00013 J	0.00049 J, B	0.0035	0.00056 J	ND	0.0022	ND	ND	0.00021 J	ND	0.014	NA	NA	6.2	1200		
11/6/2017	ND	0.0023	0.053	ND	0.00011 J	0.00050 J, B	0.0011	0.00072 J	0.00012 J	0.0018 J	ND	ND	ND	0.00034 J	0.011	NA	NA	6.3	1000		
4/16/2018	ND	0.00042 J	0.059	ND	ND	ND	0.00015 J	0.00078 J	ND	ND	ND	ND	ND	0.00012 J	0.013	NA	NA	6.7	1100		
11/13/2018	0.00027 J	0.0013	0.072 A	0.000063 J	0.00014 J	0.00060 J	0.00020 J	0.0012 J	0.00053 J	0.0015 J	ND	0.00015 J	0.00035 J	0.00036 J	0.0095 J	NA	NA	6.4	780		
4/16/2019	ND	ND	0.051	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.012 J	NA	NA	6.7	680		
11/20/2019	ND	0.0011	0.064	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.5	660		
4/21/2020	ND	0.00035 J	0.056	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.4	610		
11/18/2020	ND	0.00058 J	0.054	ND	ND	ND	ND	ND	ND	0.00086 J	ND	ND	ND	ND	ND	NA	NA	6.5	490		
11/16/2021	<0.000490	0.00231	0.0788	<0.000190	<0.000160	<0.000790	0.00107 J	<0.00380	<0.000260	0.00122 J	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	6.37	NA		
4/19/2022	<0.000680	0.000569 J	0.0646	<0.000240	<0.000150	<0.00100	0.000230 J	<0.000890	<0.000500	<0.000720	<0.000230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.43	NA		
11/29/2022	<0.000680	0.000997 J	0.0685	<0.000240	<0.000150	<0.00100	0.000432 J	<0.000890	<0.000500	0.00120 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.3 H	NA		

Table 3B
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Horizontal Expansion)

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)	
MCL/RBC/DWS		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE	
MW-3H	6/4/1999	NA	0.022	0.356	NA	0.004	0.062	0.017	0.025	0.061	ND	NA	NA	NA	NA	0.112	9	ND	6.40	147	
	11/16/1999	NA	0.019	0.206	NA	0.004	0.068	ND	ND	0.06	ND	NA	NA	0.008	0.084	0.064	19	ND	5.20	61	
	6/13/2000	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA
	11/28/2000	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA
	8/21/2001	ND	NA	NA	ND	NA	NA	NA	NA	NA	NA	ND	ND	NA	NA	NA	NA	NA	NA	NA	NA
	12/10/2001	ND	0.15	0.77	0.028	ND	0.56	0.05	0.12	0.28	0.13	ND	ND	0.0059	0.7	0.42	9.5	ND	6.71	225	
	6/27/2002	ND	0.017	0.094	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	0.048	7.10	376	
	11/7/2002	ND	ND	ND	ND	ND	0.0055	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	0.025	4.58	72.4	
	5/22/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	0.029	5.62	64.9	
	11/13/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.02	13	0.02	5.34	69.1	
	5/21/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	5.06	59.7	
	11/16/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND	5.19	66.4	
	5/19/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	0.38	5.19	60.7	
	11/8/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12	0.028	5.19	64	
	5/23/2006	ND	ND	0.014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	0.08	5.61	68	
	11/2/2006	ND	ND	0.013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.04	0.189	4.79	72	
	5/16/2007	ND	ND	0.017	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	0.1	5.00	98	
	11/8/2007	ND	ND	0.0199	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND	5.00	109	
	5/22/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.4	ND	5.26	75.6	
	11/13/2008	ND	ND	0.0309	ND	ND	0.0034	ND	0.0037	ND	ND	ND	ND	ND	0.00329	0.00688	12.6	ND	5.15	83	
	5/13/2009	ND	ND	0.0199	ND	ND	0.00252	ND	0.0052	ND	ND	ND	0.00139	ND	ND	0.00387	13	ND	5.56	74.8	
	12/10/2009	ND	ND	0.0132	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	5.43	50.2	
	5/17/2010	ND	ND	0.03	0.00056	ND	0.0074	0.00073	0.0022	0.0016	0.0039	ND	ND	ND	0.01	0.0085	NA	NA	5.60	80	
	11/3/2010	ND	ND	0.012	ND	ND	ND	0.00015 J	ND	0.00022 J	ND	0.00027 J	ND	0.00021 J	ND	0.0024 J	13	ND	5.40	50	
	5/4/2011	0.00038	0.00039	0.013	ND	ND	0.00099	0.24	ND	0.00015	0.00042	0.00042	ND	0.00007	0.001	0.013	10	ND	5.40	50	
	11/8/2011	ND	0.0014	0.015	ND	ND	0.0023	ND	ND	ND	ND	0.0012	ND	ND	ND	ND	10	ND	5.80	670	
	4/24/2012	ND	ND	0.019	ND	ND	ND	ND	ND	0.0011	ND	ND	ND	ND	ND	ND	16	ND	5.70	57	
	10/10/2012	ND	ND	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	5.90	93	
	5/22/2013	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	ND	5.80	57	
	11/19/2013	ND	0.0012 J B	0.017	0.00009 J	0.00017 J	ND	0.00026 J	ND	0.00038 J	ND	ND	ND	ND	0.000023 J	0.0087 J B	0.0036 J	11	1.0	5.90	92
4/30/2014	ND	ND	0.013	0.00012 J	0.00015 J	ND	0.00021 J	ND	0.00025 J	0.0011 J	ND	ND	ND	ND	0.0026 J	0.0037 J	10	0.056 J	5.6	54	
11/25/2014	ND	ND	0.014	0.00018 J	0.00028 J	0.0011 B	0.00035 J	0.00089 J	0.00019 J	0.00068 J, B	ND	ND	ND	ND	0.0045 J	10	0.14	5.2	52		
4/28/2015	ND	ND	0.013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.018	9.4	ND	5.5	55		
11/18/2015	ND	ND	0.013	0.00012 J	0.00015 J	0.0012	0.00022 J	0.0012 J	0.00036 J	0.0011 J	ND	ND	0.00028 J	ND	0.0035 J	8.9	0.2	5.6	48		
4/6/2016	ND	0.00063 J, B	0.013	0.00016 J	0.000097 J	0.00098 J, B	0.00023 J	0.00054 J	0.00036 J	0.00031 J	ND	0.000012 J	ND	ND	0.0028 J, B	8.4	0.086 J	5.3	51		
11/8/2016	0.00022 J	0.00036 J	0.014	0.00017 J	0.000074 J	0.00063 J, B	0.00027 J	0.00038 J, B	0.0026 J, B	0.00040 J	0.00088 J	0.000069 J	0.00019 J	ND	0.026	8.4	0.077 J	5	49		
4/18/2017	ND	ND	0.019 B	0.00025 J	ND	0.00043 J	0.00025 J	ND	ND	0.00034 J	0.00085 J	0.000089 J	0.0012	0.0031	0.02	7	0.083 J	5.2	44		
11/7/2017	ND	0.00012 J	0.012	0.00022 J	0.000086 J	0.00069 J, B	0.00030 J	0.00090 J	0.00034 J	ND	ND	0.000079 J	ND	0.00020 J	0.0094 J	7.8	0.089 J	5.4	56		
4/17/2018	0.00022 J	0.00019 J	0.013	0.00016 J	ND	0.00043 J	0.00021 J	0.00094 J	0.00026 J	ND	ND	ND	ND	0.00034 J	0.012	7.2	ND	5.7	62		
11/13/2018	ND	0.00024 J	0.014	0.00020 J	0.000092 J	0.00051 J	0.00024 J	0.00052 J	0.00033 J	ND	ND	ND	ND	ND	0.013	7.3	0.18	5.9	48		
4/16/2019	ND	ND	0.021	0.00039 J	ND	ND	0.00074 J	ND	ND	ND	ND	ND	ND	ND	0.012 J	5.9	ND	5.0	85		
11/21/2019	ND	ND	0.015	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2	0.26	5.5	68		
4/20/2020	ND	ND	0.016	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.9	0.65	5.2	70		
11/17/2020	ND	ND	0.016	0.00022 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.35	5.0	77		
11/17/2021	<0.000490	0.000177 J	0.0720	0.000654 J	<0.000160	<0.000790	0.00109 J	<0.00380	0.000746 J	0.00304	<0.000740	<0.000110	<0.000570	<0.00130	0.0112 J	44.4	1.89 J	4.97	NA		
4/20/2022	<0.000680	<0.000490	0.0615	0.000446 J	<0.000150	<0.00100	0.000765 J	0.0175	0.000696 J	0.00525	<0.00230	<0.000130	<0.000280	<0.00210	0.00866 J	42.3	2.3	6.42	NA		
11/30/2022	<0.000680	<0.000490	0.126	0.00104	<0.000150	<0.00100	0.00211	0.00163 J	0.00104	0.00618	<0.00230	<0.000130	<0.000280	<0.00210	0.00625 J	62.9	0.968	5.1 H	NA		

**Table 3B
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Horizontal Expansion)**

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)	
MCL/RBC/DWS		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE	
MW-4H	5/28/1998	NA	0.012	0.4	NA	0.001	0.12	ND	ND	0.015	ND	NA	NA	NA	NA	0.07	23	ND	6.90	441	
	11/12/1998	NA	ND	0.3	NA	ND	0.11	ND	ND	0.014	ND	NA	NA	NA	NA	0.03	23	ND	6.80	271	
	6/4/1999	NA	0.013	0.338	NA	0.001	0.029	ND	ND	0.008	ND	NA	NA	NA	NA	0.047	22	ND	6.80	494	
	11/16/1999	NA	ND	0.207	NA	0.001	ND	ND	ND	NA	ND	NA	NA	NA	NA	ND	22	ND	6.90	486	
	6/13/2000	ND	ND	ND	ND	ND	ND	ND	ND	NA	ND	ND	ND	0.002	ND	ND	18	ND	6.80	397	
	11/28/2000	ND	ND	0.2	0.001	0.001	0.012	ND	ND	ND	ND	ND	ND	0.007	0.015	ND	16.6	ND	7.00	460	
	8/21/2001	ND	ND	0.25	ND	ND	0.013	ND	0.0056	ND	ND	ND	ND	0.0024	ND	ND	18	ND	6.70	417	
	12/10/2001	ND	0.022	0.47	ND	ND	0.087	ND	0.023	0.033	ND	ND	ND	0.0029	0.12	0.074	18	ND	6.73	425	
	6/27/2002	ND	ND	0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	ND	7.01	471	
	11/7/2002	ND	ND	0.24	ND	ND	0.017	ND	0.0062	ND	ND	ND	ND	ND	ND	0.02	19	0.079	6.27	453	
	5/22/2003	ND	ND	0.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.024	14	0.033	6.93	320	
	11/13/2003	ND	ND	0.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	0.028	6.64	304	
	5/21/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	6.69	403	
	11/17/2004	ND	ND	0.20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	20	ND	6.95	487	
	5/18/2005	ND	ND	0.20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	ND	6.81	389	
	11/8/2005	ND	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	0.024	6.82	450	
	5/23/2006	ND	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	ND	7.04	405	
	11/2/2006	ND	ND	0.20	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14.4	0.08	6.65	423	
	5/16/2007	ND	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	0.09	6.37	460	
	11/7/2007	ND	ND	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16.9	ND	7.68	402	
	5/21/2008	ND	ND	0.199	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16.4	ND	6.71	415	
	11/12/2008	ND	ND	0.209	0.00466	ND	0.00274	ND	0.00349	0.00535	ND	ND	ND	ND	0.00427	0.00556	15.6	ND	6.54	423	
	5/13/2009	ND	ND	0.207	ND	ND	0.00152	ND	0.00489	ND	ND	ND	0.00093	ND	0.000674	0.00363	16	ND	6.48	384	
	12/10/2009	0.00506	ND	0.214	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.57	128	
	5/17/2010	ND	ND	0.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.00025	0.0063	NA	NA	6.70	392
	11/2/2010	ND	ND	0.22	ND	ND	ND	ND	0.00068 J	ND	ND	ND	ND	ND	ND	0.00083 J	0.0022 J	NA	NA	6.70	416
	5/3/2011	0.00013	0.0012	0.21	ND	ND	0.00042	0.17	ND	ND	0.00024	0.00062	ND	ND	0.00064	ND	NA	NA	6.90	NA	
	11/9/2011	ND	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.30	420	
	4/25/2012	ND	ND	0.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	7.30	420	
	10/10/2012	ND	ND	0.21	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.80	390	
	5/22/2013	ND	ND	0.24	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	7.10	430	
	11/20/2013	ND	0.00061 JB	0.18	ND	0.00011 J	ND	0.00012 J	ND	ND	ND	ND	ND	ND	0.0028 J B	0.0019 J	NA	NA	6.60	400	
4/29/2014	ND	0.00059 J	0.18	0.000047 J	0.000063 J	ND	0.00018 J	ND	ND	0.00030 J	ND	ND	ND	0.0015 J	0.0013 J	NA	NA	6.4	340		
11/25/2014	ND	0.00070 J	0.2	ND	0.0017	0.00070 J, B	0.00051 J	0.00094 J	ND	0.00067 J	ND	ND	ND	ND	0.0023 J	NA	NA	6.5	340		
4/28/2015	ND	ND	0.19	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014	NA	NA	6.4	340		
11/17/2015	ND	0.00092 J	0.18	0.000089 J	0.00037 J	0.0014 B	0.00026 J	0.0016 J	0.00068 J, B	0.00077 J	ND	0.000013 J	0.000068 J	ND	0.0077 J	NA	NA	6.3	340		
4/5/2016	ND	0.00049 J	0.18	0.00010 J	0.00028 J	ND	0.00022 J	ND	0.000092 J	ND	ND	0.000038 J	0.000071 J	ND	0.0018 J	NA	NA	6.3	330		
11/7/2016	ND	0.00052 J	0.19	ND	0.00067 J	ND	0.00020 J	0.00085 J	0.00017 J	0.00081 J	0.00061 J	0.000024 J	0.000027 J	ND	0.056	NA	NA	6.7	400		
4/18/2017	ND	ND	0.17 B	0.000079 J	ND	0.00024 J, B	0.00031 J	ND	ND	0.00045 J	ND	ND	0.00016 J	ND	0.011	NA	NA	6.2	320		
11/6/2017	ND	0.00021 J	0.17	ND	0.00078 J	0.00037 J, B	0.00016 J	0.00050 J	ND	ND	ND	ND	0.00032 J	0.014	NA	NA	NA	6.4	330		
4/16/2018	0.00021 J	0.00040 J	0.16	0.00015 J	0.00014 J	ND	0.00013 J	0.00075 J	0.00011 J	ND	ND	ND	ND	0.00035 J	0.015	NA	NA	6.4	290		

Table 3B
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Horizontal Expansion)

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)	
MCL/RBC/DWS		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE	
MW-5H	6/4/1999	NA	ND	0.228	NA	0.002	0.059	ND	0.012	0.044	ND	NA	NA	NA	NA	0.047	5.0	ND	5.50	71	
	11/16/1999	NA	0.014	0.093	NA	0.003	0.052	ND	ND	0.021	ND	NA	NA	NA	NA	0.032	ND	ND	5.00	48	
	6/13/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.0	ND	5.70	73	
	11/28/2000	ND	ND	0.101	0.002	0.002	0.042	ND	ND	0.021	ND	ND	ND	ND	0.046	0.023	6.02	0.053	5.50	90	
	8/21/2001	ND	0.023	0.097	ND	ND	0.089	ND	0.011	0.013	ND	ND	ND	0.0027	0.063	0.035	6.9	ND	5.80	106	
	12/11/2001	ND	0.022	0.086	ND	ND	0.069	ND	0.011	0.027	ND	ND	ND	ND	0.062	0.027	7.3	ND	5.95	95.8	
	6/27/2002	ND	ND	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	ND	5.82	101	
MW-5HR	11/7/2002	ND	0.03	0.14	ND	ND	0.084	ND	0.012	0.036	ND	ND	ND	ND	0.11	0.035	7.0	0.046	4.46	47.2	
	5/22/2003	ND	ND	0.028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11.0	ND	7.30	380	
	11/13/2003	ND	0.0061	0.044	ND	ND	0.011	ND	ND	ND	ND	ND	ND	ND	ND	0.021	13.0	ND	7.07	414	
	5/21/2004	ND	ND	0.028	ND	ND	0.0051	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.8	ND	7.08	384	
	11/16/2004	ND	ND	0.030	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.9	ND	7.08	377	
	5/18/2005	ND	ND	0.026	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.7	0.021	7.10	324	
	11/8/2005	ND	ND	0.032	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10	0.022	7.07	364	
	5/23/2006	ND	ND	0.024	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.2	ND	7.58	231	
	11/2/2006	ND	ND	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6.4	7	6.92	348	
	5/16/2007	ND	ND	0.019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.7	0.09	6.57	310	
	11/8/2007	ND	ND	0.0295	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.96	ND	6.90	352	
	5/22/2008	ND	ND	ND	0.00209	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.87	ND	7.26	375	
	11/12/2008	ND	ND	0.0359	0.00213	ND	0.00273	ND	0.00344	ND	ND	ND	ND	ND	0.00148	0.00944	8.47	ND	6.82	313	
	5/13/2009	ND	ND	0.02	ND	ND	0.00284	ND	0.0053	ND	ND	ND	0.00128	ND	ND	0.0034	6.1	ND	6.98	239	
	12/10/2009	0.0163	ND	0.0182	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.97	112	
	5/18/2010	ND	ND	0.026	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0016	ND	0.0067	NA	NA	6.50	304
	11/2/2010	ND	0.0021	0.024	ND	ND	ND	0.000066 J	ND	ND	ND	ND	ND	ND	ND	ND	0.0028 J	NA	NA	7.00	274.4
	5/3/2011	0.00013	0.0013	0.024	ND	ND	0.00066	0.00063 J	ND	ND	0.00066	0.00056	ND	ND	0.00048	ND	NA	NA	7.30	NA	
	11/9/2011	ND	0.048	0.73	ND	ND	0.015	ND	0.015	0.0031	0.0053	ND	ND	ND	0.012	ND	NA	NA	7.20	340	
	4/25/2012	ND	0.0039	0.026	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	7.40	280	
	10/10/2012	ND	0.002	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	7.30	320	
	5/22/2013	ND	ND	0.027	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	7.50	330	
	11/20/2013	ND	0.0014 J B	0.028	0.000038 J	0.00035 J	ND	0.00012 J	ND	0.00014 J	ND	ND	ND	ND	ND	0.0098 J B	0.0039 J	NA	NA	6.90	370
	4/29/2014	ND	0.0016	0.024	ND	0.000056 J	ND	0.00035 J	ND	0.00021 J	0.00049 J	ND	ND	ND	ND	ND	0.0043 J	NA	NA	7.3	390
	11/25/2014	ND	0.0011	0.021	ND	0.0012	0.00080 J, B	0.00011 J	0.0013 J	ND	0.00014 J, B	ND	ND	ND	ND	ND	0.0016 J	NA	NA	6.7	270
	4/28/2015	ND	0.0017	0.024	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.014	NA	NA	7.1	340
	11/17/2015	ND	0.0019	0.028	ND	0.00031 J	0.0014 B	0.000098 J	0.0017 J	0.00022 J	0.00047 J	ND	0.000028 J	0.000061 J	ND	0.011	NA	NA	7.3	390	
4/6/2016	0.00011 J	ND	0.024	ND	0.00023 J	0.0026 J, B	0.00015 J	0.0019 J	0.00045 J	0.00014 J	ND	0.000027 J	0.000028 J	ND	0.01	NA	NA	6.8	360		
11/7/2016	0.00010 J	0.0018	0.029	ND	0.00012 J	0.00053 J, B	0.00020 J	0.00052 J	0.00018 J	0.00047 J	ND	0.000024 J	0.000032 J	ND	0.034	NA	NA	7.1	380		
4/18/2017	ND	0.0013	0.018	ND	ND	0.00026 J	0.00012 J	ND	ND	ND	ND	ND	ND	ND	ND	0.019	NA	NA	6.8	240	
11/7/2017	ND	0.0017	0.027	ND	ND	0.00029 J, B	0.000020 J	0.00043 J	ND	ND	ND	ND	ND	ND	ND	0.011	NA	NA	6.9	320	
4/17/2018	ND	0.00090 J	0.024	ND	ND	0.00021 J	0.00012 J	0.00099 J	0.000095 J	ND	ND	ND	ND	ND	ND	0.015	NA	NA	6.7	300	
11/13/2018	ND	0.0020	0.027	ND	ND	0.00030 J	0.000023 J	0.00029 J	0.00019 J	ND	ND	ND	ND	ND	ND	0.017	NA	NA	6.8	300	
4/16/2019	ND	0.0013	0.031	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.017 J	NA	NA	6.8	330		
11/20/2019	ND	0.0028	0.055	ND	ND	ND	ND	ND	0.0016 J	ND	ND	ND	ND	ND	ND	NA	NA	6.5	1000		
4/21/2020	ND	0.0022	0.049	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.7	540	
11/16/2020	ND	0.0020	0.04	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.8	570	
11/16/2021	<0.000490	0.00265	0.0598	<0.000190	<0.000160	0.00122 J	<0.000520	<0.00380	<0.000260	0.000774 J	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	6.64	NA		
4/20/2022	<0.000680	0.00864	0.0684	<0.000240	<0.000150	<0.00100	0.00111	<0.000890	<0.000500	0.00151 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.47	NA		
11/28/2022	<0.000680	0.00349	0.0669	<0.000240	<0.000150	<0.00100	0.000473 J	<0.000890	<0.000500	0.000753 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.5 H	NA		

Table 3B
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Horizontal Expansion)

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)	
MCL/RBC/DWS		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE	
MW-6H	5/27/1998	NA	ND	0.4	NA	0.001	ND	ND	ND	0.007	ND	NA	NA	NA	NA	0.08	9.0	ND	5.30	100	
	11/11/1998	NA	0.015	0.3	NA	ND	0.27	ND	ND	0.019	ND	NA	NA	NA	NA	0.23	12.0	ND	5.80	91	
	6/4/1999	NA	0.016	0.167	NA	0.001	0.027	0.014	0.012	0.012	ND	NA	NA	NA	NA	0.164	6.0	ND	5.60	97	
	11/16/1999	NA	0.013	0.105	NA	0.002	0.031	ND	0.014	0.013	ND	NA	NA	NA	NA	0.069	7.0	ND	5.60	84	
	6/13/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.003	ND	ND	7.0	ND	6.00	100	
	11/28/2000	ND	0.022	0.052	0.001	0.001	0.014	ND	ND	ND	ND	ND	ND	0.004	0.017	0.015	11.2	0.044	6.00	129	
	8/21/2001	ND	0.12	0.16	ND	ND	0.053	ND	0.021	0.018	ND	ND	ND	0.003	0.064	0.075	13.0	ND	5.50	122	
	12/10/2001	ND	0.23	0.37	0.0077	ND	0.14	ND	0.035	0.056	ND	ND	ND	0.0033	0.14	0.22	8.2	ND	5.96	105	
	6/12/2002	ND	0.096	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.4	0.07	6.05	67.7	
	11/7/2002	ND	0.027	0.059	ND	ND	0.025	ND	0.0076	0.0082	ND	ND	ND	ND	ND	0.042	9.6	0.1	4.90	90.7	
	5/22/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.3	ND	6.00	105	
	11/13/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.023	9.9	ND	5.91	108	
	5/21/2004	ND	ND	0.028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.9	ND	6.16	94.8	
	11/16/2004	ND	0.005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.2	0.056	6.09	104	
	5/18/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.2	ND	6.10	89.6	
	11/8/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	ND	5.94	105	
	5/23/2006	ND	ND	0.01	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.1	0.08	6.64	94	
	11/2/2006	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.48	0.08	6.24	104	
	5/16/2007	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.01	ND	ND	ND	ND	10	0.11	5.82	2700	
	11/8/2007	ND	ND	0.0135	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0135	9.94	ND	5.60	124	
	5/22/2008	ND	ND	ND	0.0012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.7	ND	5.83	120	
	11/13/2008	ND	0.00249	0.0358	0.00718	ND	0.00391	ND	0.00344	0.00384	ND	ND	ND	ND	0.00308	0.0201	14.7	ND	5.40	152	
	5/13/2009	ND	ND	0.0108	ND	ND	0.0016	ND	0.00479	ND	ND	ND	ND	0.00118	ND	ND	0.0166	9.3	ND	6.24	108
	12/10/2009	0.0525	ND	0.0127	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.012	NA	NA	5.97	89.5
	5/18/2010	ND	0.0025	0.011	ND	ND	0.00069	ND	ND	ND	ND	ND	ND	ND	0.00053	0.013	NA	NA	5.60	126	
	11/2/2010	ND	0.0036	0.011	ND	ND	0.00052 J	0.0001 J	ND	0.00018 J	ND	ND	ND	ND	0.00085 J	0.01	NA	NA	6.00	146	
	5/3/2011	0.00012	0.0047	0.012	ND	ND	0.0005	ND	ND	ND	0.00024	0.00048	ND	ND	ND	ND	0.0095	NA	NA	5.90	NA
	11/9/2011	ND	ND	0.013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.80	150	
	4/25/2012	ND	ND	0.013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.00	160	
	10/10/2012	ND	ND	0.018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.10	180	
	5/22/2013	ND	ND	0.018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.40	220	
	11/20/2013	ND	0.0015 J	0.025	0.00014 J	ND	ND	ND	ND	0.000094 J	ND	ND	ND	ND	0.00013 J	0.0044 J B	0.013	NA	NA	5.70	350
4/29/2014	0.00011 J	0.0016	0.03	0.000094 J	0.000063 J	ND	ND	ND	0.000066 J	ND	ND	ND	ND	0.00015 J	0.0015 J	0.015	NA	NA	5.7	400	
11/25/2014	ND	0.0024	0.036	0.00015 J	0.00030 J	ND	ND	0.00059 J	ND	ND	ND	ND	ND	0.000080 J	ND	0.014	NA	NA	6.1	460	
4/28/2015	ND	0.0014	0.034	ND	ND	ND	ND	ND	0.012	ND	ND	ND	ND	ND	ND	0.022	NA	NA	5.7	440	
11/17/2015	ND	0.0028	0.044	0.00019 J	0.00015 J	ND	0.000086 J	ND	0.00015 J	ND	0.00042 J	0.000017 J	0.00042 J	ND	0.0097 J	NA	NA	5.7	450		
4/6/2016	0.00011 J	ND	0.048	0.00016 J	0.00022 J	0.0012 J, B	ND	0.0015 J	0.00045 J	ND	ND	0.000026 J	0.000037 J	ND	0.014	NA	NA	5.5	650		
11/7/2016	0.00013 J	0.0012	0.052	0.00022 J	0.000072 J	ND	0.00019 J	ND	0.00012 J	0.00055 J	ND	0.000021 J	0.000032 J	ND	0.023	NA	NA	5.8	580		
4/18/2017	ND	0.0014	0.048	ND	ND	0.00026 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.021	NA	NA	5.5	640	
11/7/2017	ND	0.00049 J	0.048	0.00012 J	ND	0.00025 J, B	ND	0.00030 J	ND	0.0024 J	ND	ND	ND	0.00015 J	0.015	NA	NA	5.6	590		
4/17/2018	ND	0.00050 J	0.047	0.00012 J	ND	ND	ND	0.0012 J	ND	ND	ND	ND	ND	0.00014 J	0.017	NA	NA	5.7	640		
11/12/2018	ND	0.00085 J	0.048	0.00015 J	ND	0.00030 J	ND	0.00066 J	0.00024 J	ND	ND	ND	ND	ND	0.021	NA	NA	5.6	590		
4/16/2019	ND	0.00043 J	0.042	ND	0.0020	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.017 J	NA	NA	6.2	590		
11/20/2019	ND	0.00091 J	0.043	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.9	560		
4/20/2020	ND	0.00047 J	0.045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.7	560		
11/18/2020	ND	0.00054 J	0.045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.8	550		
11/16/2021	<0.000490	0.000516 J	0.0402	<0.000190	<0.000160	<0.000790	<0.000520	<0.00380	0.000306 J	<0.000510	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	5.61	NA		
4/20/2022	<0.000680	<0.000490	0.0374	<0.000240	<0.000150	<0.00100	<0.000080	<0.000890	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	5.70	NA		
11/28/2022	<0.000680	0.000764 J	0.0392	<0.000240	<0.000150	<0.00100	<0.000080	<0.000890	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	5.5 H	NA		

Table 3B
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Horizontal Expansion)

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)	
MCL/RBC/DWS		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE	
MW-8H	11/16/1999	NA	0.01	0.078	NA	0.003	0.044	ND	ND	0.023	ND	NA	NA	NA	NA	0.03	5.0	0.1	4.70	50	
	6/13/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001	ND	ND	6.0	ND	5.00	51	
	11/28/2000	ND	ND	0.141	ND	0.001	0.012	ND	ND	0.007	ND	ND	ND	0.002	0.019	ND	29.2	5.3	4.40	285	
	8/21/2001	ND	0.013	0.14	ND	ND	0.036	ND	0.011	0.02	ND	ND	ND	ND	0.052	ND	27.0	2.2	4.60	160	
	12/10/2001	ND	0.012	0.15	ND	ND	0.05	ND	0.011	0.028	ND	ND	ND	0.0022	0.072	0.021	33.0	1.6	4.89	143	
	6/12/2002	ND	ND	0.055	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.0	1.0	4.84	59.1	
	11/7/2002	ND	ND	0.065	ND	ND	0.012	ND	ND	0.0047	ND	ND	ND	ND	ND	ND	18.0	0.7	3.84	112	
	5/22/2003	ND	ND	0.056	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.030	17.0	0.5	4.89	131
	11/13/2003	ND	ND	0.047	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.035	14.0	0.4	4.77	125
	5/21/2004	ND	ND	0.052	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	0.7	4.85	103
	11/16/2004	ND	ND	0.052	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	0.25	4.91	112
	5/18/2005	ND	ND	0.054	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17	0.69	4.91	101
	11/8/2005	ND	ND	0.058	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	21	0.45	4.94	153
	5/23/2006	ND	ND	0.055	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	24	0.70	5.62	119
	11/2/2006	ND	ND	0.052	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13.8	0.864	4.47	115
	5/16/2007	ND	ND	0.05	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14	0.66	5.06	140
	11/8/2007	ND	ND	0.0486	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.8	0.578	4.90	107
	5/22/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	23.3	0.358	4.85	135
	11/12/2008	ND	ND	0.0747	0.00267	ND	0.00326	ND	0.00381	0.0061	ND	0.00834	ND	ND	0.00468	0.00516	40.9	0.506	5.17	250	
	5/13/2009	ND	ND	0.0485	ND	ND	0.00183	ND	0.00456	ND	ND	ND	ND	0.00089	ND	0.000434	0.00359	19	0.5	5.08	123
	12/10/2009	ND	ND	0.047	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	4.87	87.9
	5/17/2010	ND	ND	0.04	ND	ND	ND	0.00087	0.0017	ND	ND	ND	ND	ND	ND	ND	0.0074	NA	NA	4.90	120.4
	11/3/2010	ND	0.00051 J	0.038	ND	ND	0.00023 J	0.00087 J	ND	0.00045 J	ND	0.00028 J	0.00010 J	0.00010 J	ND	ND	NA	NA	NA	4.80	138.4
	5/3/2011	0.00014	ND	0.059	ND	ND	0.00055	0.0014	ND	0.00029	0.00059	0.00027	NC	0.000055	ND	0.0024	NA	NA	5.00	NA	
	11/9/2011	ND	ND	0.068	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	4.70	140	
	4/25/2012	ND	ND	0.055	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.027	ND	ND	NA	NA	5.40	120	
	10/10/2012	ND	ND	0.053	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.10	100	
	5/22/2013	ND	ND	0.054	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.30	110	
	11/20/2013	ND	0.001 J	0.044	0.00011 J	0.00008 J	ND	0.00099 J	ND	0.00021 J	ND	ND	ND	ND	0.00022 J	0.012 B	0.004 J	NA	NA	4.50	100
	4/30/2014	ND	ND	0.039	0.00013 J	0.000052 J	ND	0.00079 J	ND	0.00065 J	0.00048 J	0.00046 J	ND	0.000043 J	0.0018 J	0.0031 J	NA	NA	4.8	250	
	11/25/2014	ND	ND	0.05	ND	ND	0.00040 J	0.0011	0.00040 J	0.00040 J	0.00028 J	ND	ND	0.00015 J	ND	0.0033 J	NA	NA	4.8	120	
	4/27/2015	ND	ND	0.048	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.012	NA	NA	4.8	130	
11/17/2015	ND	0.00030 J	0.026	ND	0.000078 J	0.00090 J	0.00049 J	ND	0.00085 J	0.0019 J	0.00083 J	ND	0.00029 J	ND	0.0013 J	NA	NA	4.7	150		
4/5/2016	0.00015 J	ND	0.033	0.000078 J	0.00036 J	0.0016 J, B	0.00062 J	0.0012 J	0.0022	0.00038 J	ND	0.000023 J	0.000057 J	ND	0.0056 J	NA	NA	4.8	110		
11/7/2016	0.00016 J	0.00044 J	0.042	0.000093 J	0.00011 J	0.00057 J, B	0.00093 J	0.00070 J	0.00037 J	0.00074 J	0.00047 J	0.000024 J	0.000067 J	ND	0.015	NA	NA	3.8	200		
4/18/2017	ND	ND	0.04 B	0.00018 J	0.000075 J	0.00017 J, B	0.001	ND	0.000073 J	0.00048 J	ND	ND	0.00017 J	ND	0.013	NA	NA	4.8	110		
11/7/2017	ND	0.00021 J	0.033	0.000081 J	0.000079 J	0.00041 J, B	0.00073 J	0.00035 J	0.00016 J	ND	ND	ND	ND	ND	0.01	NA	NA	4.9	120		
4/16/2018	0.00026 J	0.00073 J	0.036	0.00024 J	0.00018 J	0.00026 J	0.00065 J	0.00094 J	0.00037 J	ND	ND	ND	0.00012 J	0.00017 J	0.013	NA	NA	5.1	100		
11/12/2018	ND	0.00089 J	0.038	0.000088 J	ND	0.00036 J	0.00082 J	0.00071 J	0.00081 J	ND	ND	ND	0.00032 J	ND	0.013	NA	NA	5.3	130		
4/15/2019	ND	0.00036 J	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.011 J	NA	NA	5.2	97		
11/21/2019	ND	ND	0.033	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.1	120		
4/20/2020	ND	0.00061 J	0.035	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	4.8	110		
11/17/2020	ND	0.00021 J	0.036	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	4.9	110		
11/16/2021	<0.000490	0.000296 J	0.0316	<0.000190	<0.000160	<0.000790	0.000522 J	<0.00380	<0.000260	<0.000510	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	4.95	NA		
4/20/2022	<0.000680	<0.000490	0.0487	<0.000240	<0.000150	<0.00100	0.000588 J	<0.000890	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	4.68	NA		
11/28/2022	<0.000680	<0.000490	0.0592	<0.000240	<0.000150	<0.00100	0.000966 J	<0.000890	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	4.8 H	NA		

Table 3B
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Horizontal Expansion)

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)	
MCL/RBC/DWS		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE	
MW-9HR	5/21/1997	NA	ND	0.8	NA	0.002	0.27	ND	0.11	0.107	0.1	NA	NA	NA	NA	0.31	16	ND	4.90	72	
	11/5/1997	NA	ND	0.4	0.005	ND	ND	ND	ND	0.026	ND	NA	NA	NA	NA	0.04	99	ND	6.20	419	
	5/27/1998	NA	ND	0.1	NA	ND	0.09	ND	ND	0.014	ND	NA	NA	NA	NA	0.05	82	ND	5.60	438	
	11/11/1998	NA	ND	0.3	NA	ND	0.27	ND	ND	0.014	ND	NA	NA	NA	NA	0.07	71	ND	6.40	368	
	6/4/1999	NA	ND	0.172	NA	0.001	0.034	0.014	0.01	0.013	ND	NA	NA	NA	NA	0.05	71	ND	5.80	628	
	11/16/1999	NA	0.011	0.17	NA	0.001	0.045	0.013	ND	0.015	ND	NA	NA	NA	NA	0.47	59	ND	5.80	632	
	6/13/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.002	ND	ND	65	ND	5.50	511	
	11/28/2000	ND	ND	0.179	0.003	0.002	0.032	0.015	ND	0.01	ND	ND	ND	ND	0.006	0.031	0.028	62.4	ND	5.80	645
	8/21/2001	ND	0.008	0.19	ND	ND	0.022	ND	0.0082	0.015	ND	ND	ND	ND	ND	0.023	79	0.02	5.70	731	
	12/10/2001	ND	0.0073	0.24	ND	ND	0.049	ND	0.012	0.028	ND	ND	ND	ND	0.0022	0.054	0.038	88	0.052	5.65	638
	6/13/2002	ND	ND	0.081	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	86	ND	5.72	480
	11/7/2002	ND	0.0076	0.15	ND	ND	0.016	ND	0.0054	ND	ND	ND	ND	ND	ND	ND	92	0.028	6.00	887	
	5/22/2003	ND	ND	0.081	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.073	95	ND	5.74	634
	11/13/2003	ND	ND	0.091	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	91	ND	5.78	763
	5/21/2004	ND	ND	0.073	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	54	0.027	5.96	740
	11/16/2004	ND	0.005	0.08	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	66	0.27	6.04	828
	5/18/2005	ND	ND	0.07	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	47	ND	6.16	709
	11/8/2005	ND	ND	0.072	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	49	ND	6.05	751
	5/23/2006	ND	ND	0.078	ND	ND	0.014	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	55	ND	6.58	717
	11/2/2006	ND	ND	0.066	ND	ND	ND	0.0113	ND	ND	ND	ND	ND	ND	ND	ND	ND	31.6	0.228	6.10	744
	5/16/2007	ND	ND	0.054	ND	ND	ND	0.0131	ND	ND	ND	ND	0.017	ND	ND	ND	ND	25	0.15	6.41	700
	11/8/2007	ND	ND	0.0466	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	32	ND	6.00	611
	5/22/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	30.6	ND	5.92	702
	11/12/2008	ND	ND	0.0624	ND	ND	0.003	ND	0.0037	ND	ND	ND	ND	ND	ND	0.00452	0.00882	25.5	ND	5.93	701
	5/13/2009	ND	ND	0.0466	ND	ND	0.00199	ND	0.00642	ND	ND	ND	ND	0.00107	ND	ND	0.00506	27	ND	6.11	634
	12/10/2009	0.00728	ND	0.0525	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.05	602
	5/18/2010	ND	ND	0.04	ND	ND	ND	0.0019	0.0014	ND	ND	ND	ND	ND	0.0022	ND	0.0084	NA	NA	6.00	626
	11/2/2010	ND	0.00066 J	0.034	ND	ND	ND	0.0011	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.20	544
	5/3/2011	0.00016	0.0011	0.046	ND	ND	0.00044	0.0022	ND	ND	0.00084	0.00082	ND	0.00077	ND	0.003	NA	NA	6.20	NA	
	11/9/2011	ND	0.001	0.032	ND	ND	ND	0.0017	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.10	440
	4/25/2012	ND	0.0015	0.052	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.50	680
	10/10/2012	ND	0.0012	0.039	ND	ND	ND	0.017	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.70	570
	5/22/2013	ND	0.0015	0.067	ND	ND	ND	ND	0.0038	ND	ND	0.0013	ND	ND	ND	ND	ND	NA	NA	7.10	1200
	11/20/2013	ND	0.0032	0.032	0.00012 J	0.0008 J	ND	0.0021	ND	0.00027 J	ND	ND	ND	ND	0.00011 J	0.0095 J B	0.0039 J	NA	NA	6.80	450
	4/30/2014	0.00011 J	0.0025	0.075	0.000039 J	0.00039 J	ND	0.0029	ND	0.00024 J	0.00035 J	0.00096 J	0.00096 J	ND	0.000054 J	0.0023 J	0.0035 J	NA	NA	6.9	ND
11/25/2014	ND	0.0015	0.058	ND	ND	0.00044 J	0.0012	0.00086 J	0.00031 J	0.0035	ND	ND	ND	0.00017 J	ND	0.0019 J	NA	NA	6.5	1000	
4/28/2015	ND	0.004	0.085	ND	ND	ND	0.0022	ND	ND	ND	ND	ND	ND	ND	ND	0.012	NA	NA	6.6	1600	
11/17/2015	ND	0.0015	0.097	0.000060 J	0.000077 J	0.0023 B	0.00029 J	0.0064	0.00065 J, B	0.0024	0.0013	0.000016 J	0.000093 J	ND	0.0021 J	NA	NA	7.2	2600		
4/5/2016	0.00013 J	0.0029	0.087	0.000088 J	0.00027 J	0.0027 J, B	0.00099 J	0.0017 J	0.0013	0.00069 J	ND	0.00028 J	0.00021 J	ND	0.0063 J	NA	NA	6.9	2000		
11/7/2016	0.00029 J	0.0019	0.043	ND	0.00013 J	0.00058 J, B	0.0011	0.00060 J	0.00033 J	0.0096	0.00051 J	0.000038 J	0.000083 J	ND	0.014	NA	NA	6.3	750		
4/18/2017	ND	0.0022	0.068 B	0.00011 J	0.00054 J	0.00023 J, B	0.0043	ND	0.000089 J	0.0016 J	ND	0.00012 J	0.00018 J	ND	0.018	NA	NA	6.3	1000		
11/7/2017	0.00038 J, B	0.0016	0.064	0.00012 J	0.00095 J	0.00011 J	0.001	0.0024 J	0.00068 J	0.0010 J	ND	0.00025 J	ND	0.0012	0.016	NA	NA	6.5	1100		
4/17/2018	ND	0.0013	0.078	ND	ND	0.00062 J	0.0040	0.00042 J	0.00015 J	0.0015 J	ND	0.000097 J	ND	0.00018 J	0.014 J	NA	NA	6.6	1400		
11/12/2018	0.00021 J	0.0017	0.1	ND	ND	0.00038 J	0.00060 J	0.00060 J	0.00036 J	0.0010 J	ND	ND	ND	0.00030 J	0.014	NA	NA	7.0	2000		
4/16/2019	ND	0.0033	0.072	ND	ND	ND	0.0011 J	ND	ND	0.0010 J	ND	ND	ND	ND	0.015 J	NA	NA	7.2	1700		
11/20/2019	ND	0.0013	0.063	ND	ND	ND	0.0015 J	ND	ND	0.00091 J	ND	ND	ND	ND	ND	NA	NA	6.3	850		
4/20/2020	ND	0.0030	0.079	ND	ND	ND	0.0017 J	0.021	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.3	1100		
11/17/2020	ND	0.0010	0.066	ND	ND	ND	0.0014 J	ND	ND	0.0010 J	0.0010 J	ND	ND	ND	ND	NA	NA	6.4	870		
11/16/2021	<0.000490	0.000621 J	0.0384	<0.000190	<0.000160	<0.000790	<0.000520	<0.00380	<0.000260	0.000654 J	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	6.48	NA		
4/20/2022	<0.000680	0.00145	0.0851	<0.000240	<0.000150	<0.00100	0.00115	<0.000890	<0.000500	0.000778 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.79	NA		
11/29/2022	<0.000680	0.000809 J	0.0607	<0.000240	<0.000150	<0.00100	0.000952 J	<0.000890	<0.000500	0.000944 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.1 H	NA		

Table 3B
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Horizontal Expansion)

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)	
MCL/RBC/DWS		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE	
MW-10H	11/5/1997	NA	ND	0.2	NA	ND	0.1	ND	ND	0.019	ND	NA	NA	NA	NA	0.04	24.0	ND	4.80	63	
	5/27/1998	NA	ND	0.1	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	0.05	9.0	ND	4.50	59	
	11/12/1998	NA	0.011	0.3	NA	ND	0.3	ND	ND	0.066	ND	NA	NA	NA	NA	0.09	18.0	ND	4.50	115	
	6/4/1999	NA	ND	0.125	NA	ND	0.024	ND	ND	0.02	ND	NA	NA	NA	NA	0.034	14.0	ND	4.80	81	
	11/16/1999	NA	ND	0.051	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	0.011	9.0	ND	4.80	61	
	6/13/2000	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18.0	ND	4.40	113	
	11/28/2000	ND	ND	0.05	0.001	0.001	ND	ND	ND	ND	ND	ND	ND	ND	0.008	ND	11.5	0.02	5.10	69	
	8/21/2001	ND	0.0099	0.09		ND	0.026	ND	0.0053	0.027	ND	ND	ND	ND	ND	0.026	9.5	ND	4.80	60.2	
	12/10/2001	ND	0.024	0.24	0.0051	0.0067	0.1		0.019	0.069	ND	0.0053	ND	0.0027	0.13	0.073	15.0		5.21	84.9	
	6/27/2002	ND	ND	0.041	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	14.0	ND	4.78	122
	11/7/2002	ND	0.015	0.15	ND	ND	0.045	ND	0.0054	0.023	ND	ND	ND	ND	ND	0.062	0.02	9.2	ND	4.33	64.9
	5/22/2003	ND	ND	0.029	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.3	0.075	5.01	51.5
	11/13/2003	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.052	11.0	0.049	5.14	56.6
	5/21/2004	ND	ND	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.3	0.049	4.88	42.1
	11/17/2004	ND	ND	0.044	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	9.1	ND	5.10	54.6
	5/18/2005	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.4	0.02	5.19	43.9
	11/7/2005	ND	ND	0.032	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.9	0.034	4.90	48.1
	5/24/2006	ND	ND	0.034	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	12.6	ND	5.52	58
	11/2/2006	ND	ND	0.025	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	7.1	0.08	5.37	52
	5/17/2007	ND	ND	0.032	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.11	5.16	69
	11/7/2007	ND	ND	0.0368	ND	ND	0.0093	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	10.1	ND	5.12	54.8
	5/21/2008	ND	ND	ND	0.00451	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	8.44	ND	4.79	55.1
	11/12/2008	ND	ND	0.0419	ND	ND	0.00288	ND	0.00396	0.00557	ND	ND	ND	ND	ND	0.00288	0.00676	8.47	ND	4.40	54
	5/13/2009	ND	ND	0.0341	ND	ND	0.00229	ND	0.00478	ND	ND	ND	0.00136	ND	0.000375	0.00516	9.70	ND	5.12	56.1	
	12/10/2009	ND	ND	0.0348	ND	ND	ND	ND	ND	ND	0.00274	ND	ND	ND	ND	ND	NA	NA	5.02	43.3	
	5/18/2010	0.0015	ND	0.034	ND	ND	0.001	0.00043	ND	0.00068	ND	ND	ND	ND	ND	0.0015	0.027	NA	NA	4.60	55
	11/2/2010	ND	0.0004 J	0.031	0.00032 J	ND	0.00073 J	0.00044 J	ND	0.00095 J	ND	ND	ND	ND	ND	0.0013 J	0.0023 J	NA	NA	4.90	60.9
	5/3/2011	0.00016	0.00038	0.031	ND	ND	0.0011	0.00048	ND	0.00083	0.00078	0.00059	ND	ND	0.0011	0.0025	NA	NA	5.50	NA	
	11/9/2011	ND	0.0014	0.036	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	4.70	55	
	4/25/2012	ND	ND	0.028	ND	ND	ND	ND	ND	0.0011	ND	ND	ND	ND	ND	ND	0.01	NA	NA	5.40	47
	10/9/2012	ND	0.0018	0.026	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.50	50	
	5/22/2013	ND	ND	0.032	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.70	52	
11/20/2013	ND	0.0011	0.036	0.00027 J	0.00091 J	ND	0.00043 J	ND	0.00032 J	0.00046 J	ND	ND	0.000074 J	0.0069 J B	0.0069 J	NA	NA	4.60	52		
4/29/2014	ND	ND	0.022	0.00020 J	0.00071 J	0.00021 J	0.00036 J	0.0010 J	0.0014	0.00066 J	ND	ND	0.000018 J	0.0033 J	0.0028 J	NA	NA	5.3	46		
11/25/2014	ND	ND	0.026	0.00024 J	0.00071 J	0.0013 B	0.00044 J	0.0013 J	0.00078 J	0.00083 J, B	ND	ND	ND	ND	0.0043 J	NA	NA	4.7	47		
4/28/2015	ND	0.0016	0.019	ND	ND	0.0023	ND	ND	0.0023 B	ND	ND	ND	ND	ND	0.014	NA	NA	5.3	47		
11/17/2015	ND	0.0012	0.0085	0.00028 J	0.00041 J	0.0018 B	0.00031 J	0.0022 J	0.00090 J, B	0.00074 J	ND	0.000015 J	0.000092 J	ND	0.0021 J	NA	NA	5.2	43		
4/6/2016	0.000072 J	0.002	0.018	0.000086 J	0.00020 J	0.00037 J, B	0.00038 J	0.0016 J	0.0014	0.0010 J	ND	0.000029 J	0.000045 J	ND	0.0048 J	NA	NA	5.6	50		
11/7/2016	0.000086 J	0.0016	0.02	0.00022 J	0.00015 J	0.00098 J, B	0.00040 J	0.00098 J	0.00055 J	0.00054 J	ND	0.000018 J	0.000047 J	ND	0.018	NA	NA	4.2	64		
4/18/2017	ND	0.00061 J	0.021 B	0.00031 J	0.00028 J	0.00063 J, B	0.00048 J	0.0012 J	0.00061 J	0.00072 J	0.00073 J	ND	0.0002 J	0.00091 J	0.019	NA	NA	5.2	45		
11/6/2017	ND	0.00069 J	0.02	0.00019 J	0.00024 J	0.00073 J, B	0.00035 J	0.00082 J	0.00039 J	ND	ND	ND	ND	0.00080 J	0.012	NA	NA	5.2	570		
4/17/2018	ND	0.00064 J	0.026	0.00030 J	0.00064 J	0.00055 J	0.00040 J	0.0018 J	0.00094 J	ND	ND	ND	ND	ND	0.017	0.023	NA	NA	5.2	47	

**Table 3B
SUMMARY OF WATER-QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Horizontal Expansion)**

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (umhos/cm)
MCL/RBC/DWS		0.006	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 to 8	NE
MW-11H	4/27/2015	ND	0.002	0.026	ND	ND	0.0042 B	0.0073	ND	0.0019	0.0021	ND	ND	ND	0.0055	0.016	NA	NA	5.7	140
	11/17/2015	ND	0.0015	0.021	0.000057 J	0.000058 J	0.0022	0.0018	0.00051 J	0.00085 J	0.0016 J	ND	ND	0.00044 J	0.0031 J	0.0034 J	NA	NA	5.7	140
	4/5/2016	0.00021 J	ND	0.019	0.000074 J	0.00028 J	0.0020 J, B	0.001	0.0011 J	0.00064 J	0.0011 J	ND	0.000023 J	0.000068 J	ND	0.0076 J	NA	NA	5.6	1400
	11/8/2016	0.00028 J, B	0.00099 J	0.019	0.000058 J	0.00013 J	0.00058 J	0.0013	0.00076 J	0.00052 J, B	0.0015 J	ND	0.00075 J	0.000084 J	ND	0.021	NA	NA	5.6	140
	4/18/2017	ND	0.0012	0.021 B	0.00012 J	0.000061 J	0.00094 J, B	0.0016	0.00058 J	0.00046 J	0.0014 J	ND	0.000077 J	0.00024 J	0.0014	0.0058 J	NA	NA	5.5	160
	11/7/2017	ND	0.00035 J	0.02	ND	ND	0.00038 J, B	0.0013	0.00033 J	0.00013 J	0.0012 J	ND	ND	ND	0.00023 J	0.013	NA	NA	5.6	170
	4/16/2018	ND	0.00043 J	0.021	ND	ND	0.00034 J	0.0010	0.00074 J	0.00030 J	0.0011 J	ND	ND	ND	0.00037 J	0.018	NA	NA	5.8	170
	11/12/2018	ND	0.00055 J	0.019	ND	ND	0.00033 J	0.00086 J	0.00053 J	0.00027 J	0.0014 J	ND	ND	ND	ND	0.017	NA	NA	5.6	170
	4/16/2019	ND	0.00042 J	0.02	ND	ND	ND	ND	ND	0.0012 J	ND	ND	ND	ND	0.0016 J	0.018 J	NA	NA	5.8	170
	11/21/2019	ND	ND	0.02	ND	ND	ND	0.001 J	ND	ND	0.0014 J	ND	ND	ND	ND	ND	NA	NA	6.1	190
	4/20/2020	ND	0.00043 J	0.021	ND	ND	ND	0.00088 J	ND	ND	0.0012 J	ND	ND	ND	ND	ND	NA	NA	5.6	190
	11/17/2020	ND	0.00034 J	0.024	ND	ND	ND	0.00094 J	ND	ND	0.0012 J	ND	ND	ND	ND	ND	NA	NA	5.6	190
	11/16/2021	<0.000490	0.000292 J	0.0253	<0.000190	<0.000160	<0.000790	0.00115 J	<0.00380	<0.000260	0.00126 J	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	5.73	NA
	4/20/2022	<0.000680	<0.000490	0.0233	<0.000240	<0.000150	<0.00100	0.000958 J	<0.000890	<0.000500	0.00106 J	<0.00230	<0.000130	<0.000280	<0.00210	0.00447 J	NA	NA	5.68	NA
11/28/2022	<0.000680	<0.000490	0.0244	<0.000240	<0.000150	<0.00100	0.00114	<0.000890	<0.000500	0.00138 J	<0.00230	<0.000130	<0.000280	<0.00210	0.00637 J	NA	NA	5.5 H	NA	
MW-25H	4/21/2020	ND	0.0022	0.17	ND	ND	0.00092 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	7	470
	11/16/2020	ND	0.0021	0.18	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	7.0	550
	11/16/2021	<0.000490	0.00212	0.2	<0.000190	<0.000160	<0.000790	<0.000520	<0.00380	<0.000260	<0.000510	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	7.08	NA
	4/19/2022	<0.000680	0.00187	0.19	<0.000240	<0.000150	<0.00100	<0.000080	<0.000890	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.96	NA
	11/29/2022	<0.000680	0.00223	0.199	<0.000240	<0.000150	<0.00100	<0.000080	<0.000890	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.9 H	NA
MW-26H	4/21/2020	ND	0.0036	0.19	ND	ND	ND	0.0018 J	ND	ND	0.0016 J	ND	ND	ND	ND	ND	ND	NA	6.5	460
	11/16/2020	ND	0.0038	0.19	ND	ND	ND	ND	ND	ND	0.00067 J	ND	ND	ND	ND	ND	ND	NA	6.7	590
	4/19/2022	<0.000680	0.00226	0.252	<0.000240	<0.000150	<0.00100	0.000643 J	<0.000890	<0.000500	0.00107 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.42	NA
	11/29/2022	<0.000680	0.00332	0.281	<0.000240	<0.000150	<0.00100	0.000446 J	<0.000890	<0.000500	0.000867 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.3 H	NA
MW-27H	4/21/2020	ND	0.00070 J	0.052	ND	ND	ND	0.0015 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	6.3	370
	11/16/2020	ND	0.00019 J	0.024	ND	ND	ND	0.00067 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	5.9	140
	11/16/2021	<0.000490	0.00178	0.0417	<0.000190	<0.000160	<0.000790	<0.000520	<0.00380	<0.000260	<0.000510	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	6.60	NA
	4/20/2022	<0.000680	<0.000490	0.0296	<0.000240	<0.000150	<0.00100	0.000306 J	<0.000890	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.04	NA
	11/29/2022	<0.000680	0.00159	0.0443	<0.000240	<0.000150	<0.00100	<0.000080	<0.000890	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	7.4 H	NA
MW-28H	4/21/2020	ND	0.0012	0.085	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	6.8	450
	11/16/2020	ND	0.0018	0.079	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	6.8	510
	11/16/2021	<0.000490	0.00227	0.0769	<0.000190	<0.000160	<0.000790	<0.000520	<0.00380	<0.000260	<0.000510	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	6.84	NA
	4/20/2022	<0.000680	0.00248	0.0732	<0.000240	<0.000150	<0.00100	0.000110 J	0.00212	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	0.0173 J	NA	NA	6.62	NA
	11/29/2022	<0.000680	0.00216	0.0785	<0.000240	<0.000150	<0.00100	<0.000080	<0.000890	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	7.0 H	NA

Notes: MCL/RBC/DWS = Maximum Contaminant Level/Risk-Based Standard or Drinking Water Standard as appropriate

* The Maximum Contaminant Level (MCL) for Arsenic was lowered from 0.05 mg/L to 0.01 mg/L in 2006.

N/S = No Sample Exists

All values reported are mg/L or parts per million (ppm)

Sp. Cond - Specific Conductance; values reported in umhos/cm

pH values reported in Standard Units (su)

ND = Not Detected; see laboratory certificates for individual compound detection limits

NA = Not analyzed for parameter on given date

**TABLE 3C. SUMMARY OF HISTORICAL SURFACE WATER MONITORING
ANALYTICAL DATA – INORGANIC & INDICATOR PARAMETERS**

**Table 3C
SUMMARY OF SURFACE WATER ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill**

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)	
MCL/RBC/DWS		0.005	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 TO 8	NE	
SW/SMC-1	5/18/1993	NA	NA	NA	NA	ND	ND	NA	ND	ND	ND	NA	NA	NA	NA	0.12	17	0.4	6.1	104	
	8/31/1993	NA	ND	0.3	NA	ND	ND	ND	ND	0.007	ND	NA	NA	NA	NA	0.04	23	ND	6	177	
	6/7/1994	NA	ND	1	NA	ND	ND	ND	0.15	ND	0.05	NA	NA	NA	NA	0.04	43.5	0.4	5.9	186	
	12/12/1994	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	0.02	12.4	ND	5.7	86	
	6/6/1995	NA	ND	0.2	NA	ND	ND	ND	0.05	ND	ND	NA	NA	NA	NA	0.1	7.5	10.1	5.8	74	
	12/1/1995	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	13	ND	6.4	104	
	5/29/1996	NA	ND	ND	NA	ND	ND	ND	ND	ND	0.06	NA	NA	NA	NA	ND	ND	ND	6.1	127	
	12/5/1996	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	11	ND	6	97	
	5/21/1997	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	0.01	14	ND	6	103	
	11/5/1997	NA	ND	ND	NA	ND	ND	ND	ND	0.007	ND	NA	NA	NA	NA	0.01	ND	ND	5.7	73	
	5/27/1998	NA	ND	0.4	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	0.02	12	ND	5.8	79	
	11/12/1998	NA	ND	0.2	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	22	ND	5.9	130	
	6/4/1999	NA	ND	0.041	NA	ND	ND	ND	ND	0.01	ND	NA	NA	NA	NA	0.016	12	ND	5.9	94	
	11/16/1999	NA	ND	0.03	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	0.011	7	ND	5.3	77	
	6/13/2000	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	36	ND	6.2	177
	11/28/2000	0.005	ND	0.045	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.004	ND	ND	11.0	ND	5.5	149
	8/21/2001	ND	0.0051	0.0043	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	5.5	ND	5.6	64.8
	12/11/2001	ND	ND	0.16	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	610	ND	6.22	2170
	6/27/2002	ND	ND	0.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	710	ND	5.62	2410
	5/22/2003	ND	ND	0.053	ND	ND	ND	ND	ND	0.0046	ND	ND	ND	ND	ND	ND	ND	10	ND	6.25	84.3
	11/13/2003	ND	ND	0.034	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	ND	6.13	99.2
	5/24/2004	ND	ND	0.044	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	0.18	6.74	132
	11/17/2004	ND	ND	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	ND	6.12	106
	5/19/2005	ND	ND	0.037	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	0.031	6.41	98.3
	11/8/2005	ND	ND	0.041	ND	ND	ND	ND	ND	0.0094	ND	ND	ND	ND	ND	ND	ND	14	0.026	6.18	106
	5/25/2006	ND	ND	0.028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	11	ND	6.98	104
	11/2/2006	ND	ND	0.039	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	17.3	0.06	5.77	154
	5/17/2007	ND	ND	0.044	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	0.12	6.49	160
	11/8/2007	ND	ND	0.188	ND	ND	0.0068	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	349	ND	5.1	1690
	5/21/2008	ND	ND	ND	0.00102	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26.5	ND	5.83	160
	11/12/2008	ND	ND	0.0384	0.00114	ND	0.00379	ND	0.00423	0.00417	ND	ND	ND	ND	ND	0.00661	0.00501	11.4	0.391	6.63	152
	5/12/2009	ND	ND	0.048	ND	ND	0.00191	0.01	0.00241	ND	ND	ND	ND	0.00112	ND	ND	0.00296	59	ND	6.4	270
	12/10/2009	ND	ND	0.0417	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.86	70.8
	5/17/2010	0.0013	ND	0.085	0.00028	0.0011	0.0011	0.0032	0.0075	0.022	0.0039	0.0032	ND	ND	ND	0.0065	0.076	NA	NA	6.3	NA
11/2/2010	ND	0.00063 J	0.037	ND	ND	0.0011	0.0018	ND	0.00049 J	0.0008 J	ND	ND	ND	ND	0.0005 J	0.01	NA	NA	6.3	NA	
5/3/2011	0.00014	0.001	0.04	ND	ND	0.0016	0.0015	ND	0.00088	0.0016	0.00041	ND	0.00012	0.00058	0.0075	NA	NA	6.3	NA		
11/9/2011	ND	ND	0.045	ND	ND	ND	0.0012	0.0021	ND	ND	0.0014	ND	ND	ND	ND	ND	NA	NA	6.6	320	
4/26/2012	ND	ND	0.03	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.2	120	
10/11/2012	ND	ND	0.029	ND	ND	ND	ND	ND	0.001	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.9	130	
5/23/2013	ND	ND	0.037	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	7.2	110	
11/19/2013	ND	0.00091 J B	0.025	0.000049 J	0.0012	ND	0.00043 J	0.0012 J	0.00019 J	0.00051 J	ND	ND	ND	0.0074 J B	0.0043 J	NA	NA	5.6	230		
4/29/2014	ND	0.00069 J	0.047	0.00022 J	ND	0.00028 J	0.0019	ND	0.00044 J	0.0019 J	0.00050 J	ND	0.000056 J	0.0028 J	0.0063 J	NA	NA	6.1	ND		
11/25/2014	ND	ND	0.022	ND	ND	0.0013	0.00091 J	0.00089 J	0.00039 J	0.00082 J	ND	ND	0.000092 J	ND	0.0081 J	NA	NA	6.3	300		
4/27/2015	ND	ND	0.043	ND	ND	ND	0.0022 B	0.0015	ND	ND	0.0027	ND	ND	ND	ND	0.017	NA	NA	6.2	110	
11/18/2015	ND	0.00085 J	0.033	0.00017 J	0.00010 J	0.0031	0.002	0.00047 J	0.00057 J	0.0018 J	ND	ND	0.00026 J	0.0028 J	0.0060 J	NA	NA	6.1	84		
4/5/2016	0.00010 J	ND	0.034	0.00018 J	0.00016 J	0.0035 J B	0.00089 J	0.00081 J	0.00080 J	0.0017 J	ND	0.000034 J	0.000040 J	ND	0.0057 J	NA	NA	6.4	110		
4/17/2017	ND	0.00075 J	0.032	ND	ND	0.001	0.0015	0.00093 J	0.00074 J	0.0011 J	ND	ND	0.00013 J	0.0015	0.019	NA	NA	6.2	110		
11/7/2017	0.00039 J	0.00083 J	0.03	0.00016 J	ND	0.0013	0.0023	0.0016 J	0.00063 J	0.0027	ND	ND	ND	0.0015	0.014	NA	NA	6.5	120		
4/17/2018	ND	0.00050 J	0.03	ND	ND	0.00078 J	0.00038 J	0.0015 J	0.00028 J	0.0012 J	ND	ND	ND	0.00055 J	0.016	NA	NA	6.8	150		
11/12/2018	0.00020 J	0.00065 J	0.03	0.00016 J	ND	0.0012 J	0.0011	0.00094 J	0.00061 J	0.0017 J	ND	ND	ND	ND	0.017	NA	NA	5.7	130		
4/15/2019	ND	0.00079 J	0.035	ND	ND	0.0016 J	0.0012 J	ND	0.00057 J	0.0025 J	ND	ND	ND	0.00084 J	0.013 J	NA	NA	6.4	140		
11/20/2019	ND	0.00043 J	0.035	ND	ND	0.002 J	0.0014 J	ND	0.00079 J	0.0017 J	ND	ND	ND	0.0017 J	ND	NA	NA	6.4	130		
4/20/2020	ND	0.00063 J	0.027	ND	ND	0.0010 J	0.00078 J	ND	0.00046 J	0.0024 J	ND	ND	ND	ND	0.016 J	ND	NA	6.1	100		
11/16/2020	ND	0.00068 J	0.022	ND	ND	0.0017 J	0.0013 J	ND	0.00058 J	0.0012 J	0.0011 J	ND	ND	0.0016 J	ND	ND	NA	6.3	790		
11/16/2021	<0.000490	0.000537 J	0.0234	<0.000190	<0.000160	0.00130 J	0.00129 J	<0.00380	0.000314 J	0.00148 J	<0.000740	<0.000110	<0.000570	0.00166 J	0.0102 J	NA	NA	6.76	NA		
4/19/2022	<0.000680	0.000626 J	0.0248	<0.000240	<0.000150	0.00106 J	0.00132	<0.000890	<0.000500	0.00135 J	<0.00230	<0.000130	<0.000280	<0.00210	0.00472 J	NA	NA	6.12	NA		
11/28/2022	<0.000680	0.000566 J	0.0288	<0.000240	<0.000150	<0.00100	0.00165	<0.000890	<0.000500	0.00105 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.1 H	NA		

**Table 3C
SUMMARY OF SURFACE WATER ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill**

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)	
MCL/RBC/DWS		0.005	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 TO 8	NE	
SW/SMC-2	6/7/1994	NA	ND	1.5	NA	ND	ND	ND	0.14	ND	0.06	NA	NA	NA	NA	ND	91.1	0.4	5.9	336	
	12/12/1994	NA	ND	ND	NA	0.001	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	12.1	ND	5.6	84	
	6/6/1995	NA	ND	0.1	NA	0.001	ND	ND	0.05	ND	ND	NA	NA	NA	NA	ND	9.1	ND	6.4	102	
	12/1/1995	NA	ND	ND	NA	0.001	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	13	ND	6.3	106	
	5/29/1996	NA	ND	ND	NA	ND	ND	ND	ND	ND	0.05	NA	NA	NA	NA	0.01	18	ND	6.2	117	
	12/5/1996	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	13	ND	6.3	132	
	5/21/1997	NA	ND	ND	NA	ND	0.06	ND	ND	ND	ND	NA	NA	NA	NA	ND	15	0.1	6.2	111	
	11/5/1997	NA	ND	ND	NA	ND	ND	ND	ND	0.005	ND	NA	NA	NA	NA	0.03	ND	ND	5.8	73	
	5/27/1998	NA	ND	ND	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	15	ND	5.4	80	
	11/11/1998	NA	ND	0.1	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	55	ND	5.9	199	
	6/4/1999	NA	ND	0.029	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	10	ND	5.9	86	
	11/16/1999	NA	ND	0.027	NA	ND	ND	ND	ND	ND	ND	NA	NA	NA	NA	ND	10	ND	5.8	94	
	6/13/2000	ND	0.038	ND	ND	ND	ND	0.013	ND	0.009	ND	ND	ND	ND	0.003	ND	0.131	67	ND	6.2	281
	11/28/2000	0.007	ND	0.028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.001	ND	ND	13	ND	6.5	131
	8/21/2001	ND	ND	0.037	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	6	ND	6.3	73.1	
	12/10/2001	ND	ND	0.22	ND	ND	0.0066	ND	ND	0.01	ND	ND	ND	ND	ND	ND	0.02	460	ND	5.47	ND
	6/12/2002	ND	ND	0.26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	1300	0.042	5.95	3310	
	5/22/2003	ND	ND	0.034	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	13	0.038	6.32	97.8	
	11/13/2003	ND	ND	0.033	ND	ND	ND	ND	0.005	0.004	ND	ND	ND	ND	ND	0.023	14	ND	6.27	109	
	5/24/2004	ND	ND	0.033	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	26	0.17	6.59	149	
	11/17/2004	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	ND	6.32	115	
	5/19/2005	ND	ND	0.034	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	19	0.091	6.66	147	
	11/8/2005	ND	ND	0.036	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	16	0.025	6.25	119	
	5/25/2006	ND	ND	0.029	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15	0.1	6.61	120	
	11/2/2006	ND	ND	0.035	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	22	0.07	6.08	186	
	5/17/2007	ND	ND	0.036	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	18	0.12	6.45	170	
	11/8/2007	ND	ND	0.215	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0132	1430	ND	5.6	1740	
	5/21/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	102	ND	6	430	
	11/12/2008	ND	ND	0.0447	0.00764	ND	0.00419	ND	0.00389	0.00586	ND	ND	ND	ND	0.00541	0.0119	14.6	ND	5.48	127	
	5/12/2009	ND	ND	0.0342	ND	ND	ND	ND	0.00221	ND	ND	ND	0.00156	ND	ND	0.00463	70	ND	6.63	313	
	12/10/2009	ND	ND	0.0458	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0284	NA	NA	6.43	127	
	5/17/2010	ND	ND	0.046	ND	ND	0.0021	ND	ND	ND	ND	ND	ND	ND	0.00087	0.0082	NA	NA	6.4	NA	
	11/2/2010	ND	0.0017	0.038	ND	ND	0.003	0.0011	ND	0.0025	0.00067 J	0.00034 J	ND	ND	0.0048 J	0.02	NA	NA	6	NA	
	5/3/2011	0.00015	0.00086	0.037	ND	ND	0.0015	0.00083	ND	0.00069	0.0015	0.00062	ND	0.00059	ND	0.0056	NA	NA	6.8	NA	
11/9/2011	ND	0.002	0.072	ND	ND	ND	ND	ND	ND	ND	0.0064	ND	ND	ND	0.0014	NA	NA	6.1	1500		
4/26/2012	ND	0.0042	0.068	ND	ND	ND	ND	ND	0.0028	ND	ND	ND	ND	ND	0.021	NA	NA	7.2	400		
10/11/2012	ND	0.0018	0.039	ND	ND	ND	ND	ND	0.0081	ND	ND	ND	ND	ND	ND	NA	NA	6.8	260		
5/23/2013	ND	ND	0.032	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.9	170		
11/19/2013	ND	0.00083 J B	0.023	ND	ND	ND	0.00021 J	ND	0.00019 J	0.00031 J	ND	ND	0.000014 J	0.008 J B	0.0041 J	NA	NA	6.0	540		
4/29/2014	ND	0.0038	0.06	0.00013 J	0.000048 J	0.00093 J	0.0015	0.0015 J	0.0011	0.0016 J	0.00028 J	ND	0.00011 J	0.0037 J	0.017	NA	NA	6.9	230		
11/25/2014	0.00013 J	0.00096 J	0.019	ND	0.00010 J	0.0037 B	0.0040 J	0.0042 J	0.0018	0.0017 J, B	ND	ND	0.00010 J	0.0031 J	0.012	NA	NA	6.3	97		
4/27/2015	ND	ND	0.04	ND	ND	0.0019 B	ND	ND	ND	0.0041	ND	ND	ND	ND	0.014	NA	NA	6.5	130		
11/18/2015	ND	0.00059 J	0.031	0.00017 J	0.000051 J	0.0029	0.0018	0.005	0.00073 J	0.0024	0.00041 J	ND	0.00026 J	ND	0.0088 J	NA	NA	6.3	87		
4/5/2016	0.000089 J	ND	0.028	0.00016 J	0.00021 J	ND+F109	0.00048 J	0.0014 J	0.001	0.0014 J	ND	0.000025 J	0.000029 J	ND	0.011	NA	NA	6.5	110		
4/17/2017	ND	0.00081 J	0.033	ND	ND	0.0058	0.00093 J	0.00097 J	0.00061 J	0.0053	ND	ND	0.00026 J	0.0013	0.021	NA	NA	6.2	120		
11/7/2017	ND	0.00072 J	0.029	0.00014 J	0.00013 J	0.001	0.00093 J	0.0012 J	0.00043 J	0.0015 J	ND	ND	ND	0.00083 J	0.02	NA	NA	6.4	140		
4/17/2018	ND	0.00053 J	0.028	0.00011 J	ND	0.00057 J	0.00039 J	0.0012 J	0.00030 J	ND	ND	ND	ND	0.00052 J	0.014	NA	NA	6.5	180		
11/12/2018	ND	0.00068 J	0.028	0.00010 J	ND	0.0011 J	0.00057 J	0.00063 J	0.00035 J	0.0018 J	ND	ND	ND	ND	0.027	NA	NA	6.6	140		
4/15/2019	ND	0.00096 J	0.035	ND	ND	0.0015 J	0.0015 J	ND	0.00065 J	0.0021 J	ND	ND	ND	0.0024 J	0.045	NA	NA	6.8	130		
11/20/2019	ND	0.0013	0.027	ND	ND	0.0016 J	ND	ND	0.00049 J	0.0011 J	ND	ND	ND	ND	ND	NA	NA	6.8	210		
4/20/2020	ND	0.00085 J	0.026	ND	ND	0.00098 J	ND	ND	0.00048 J	0.0014 J	ND	ND	ND	ND	ND	NA	NA	6.2	120		

**Table 3C
SUMMARY OF SURFACE WATER ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill**

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)
MCL/RBC/DWS		0.005	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 TO 8	NE
SW/SMC-2	11/16/2020	ND	0.0025	0.022	ND	ND	0.0017 J	ND	ND	0.00055 J	0.0010 J	ND	ND	ND	0.0016 J	0.0071 J	ND	NA	5.6	140
	11/16/2021	<0.000490	0.000561 J	0.0378	<0.000190	<0.000160	0.00482	0.000537 J	<0.00380	<0.000260	0.00291 J	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	6.30	NA
	4/19/2022	<0.000680	0.000890 J	0.0236	<0.000240	<0.000150	0.00102 J	0.000984 J	<0.000890	<0.000500	0.00131 J	<0.00230	<0.000130	<0.000280	<0.00210	0.00797 J	NA	NA	6.46	NA
	11/28/2022	<0.000680	0.000708 J	0.0329	<0.000240	<0.000150	<0.00100	0.00157	<0.000890	<0.000500	0.00130 J	<0.00230	<0.000130	<0.000280	<0.00210	0.00631 J	NA	NA	6.2 H	NA
SW/TW-1	8/28/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.60	540
	11/7/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.84	94
	5/22/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8	ND	6.79	108
	11/13/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	17	ND	6.84	140
	5/24/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	11	0.04	6.58	155
	11/17/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16	0.026	6.89	149
	5/19/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21	0.029	7.27	222
	11/8/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	12	0.043	6.72	133
	5/25/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	10	0.1	6.70	124
	11/2/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	16.8	0.09	6.33	235
	5/17/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	15	0.11	6.93	200
	11/7/2007	ND	ND	0.0332	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	15.4	ND	7.24	220
	5/21/2008	ND	ND	ND	0.00286	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0181	18.5	ND	6.51	235
	11/12/2008	ND	ND	0.0425	ND	ND	0.00458	ND	0.00378	0.00653	ND	ND	ND	ND	0.00494	0.0113	9.82	ND	5.99	100
	5/12/2009	ND	ND	0.044	ND	ND	0.00358	ND	0.00285	ND	ND	ND	0.00166	ND	ND	0.00976	17	ND	7.09	191
	12/10/2009	ND	ND	0.0328	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.68	71.4
	5/17/2010	0.0021	0.015	0.14	0.0019	ND	0.064	0.0061	0.027	0.025	0.0063	0.015	ND	ND	0.073	0.18	NA	NA	7.50	NA
	11/2/2010	ND	0.0052	0.089	ND	ND	0.005	0.0066	0.011	0.0021	0.00075 J	0.00034 J	ND	ND	0.0056	0.026	NA	NA	6.60	NA
	5/4/2011	0.00036	0.0025	0.049	ND	ND	0.0023	0.0025	0.0012	0.0013	0.0012	0.00089	ND	0.00032	0.002	0.011	16	ND	7.40	160
	11/9/2011	ND	0.008	0.14	ND	ND	0.0057	0.0062	0.0034	0.0045	0.0026	ND	ND	ND	0.037	0.037	NA	NA	7.40	470
	4/26/2012	ND	0.0016	0.035	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.80	150
	10/10/2012	ND	0.0076	0.068	ND	ND	0.032	ND	ND	0.0029	ND	ND	ND	ND	ND	0.03	NA	NA	7.50	920
	5/23/2013	ND	0.0056	0.110	ND	ND	ND	ND	0.0069	0.0056	ND	ND	ND	ND	ND	0.046	NA	NA	7.50	460
	11/19/2013	ND	0.005 B	0.077	ND	0.00013 J	ND	0.0052	0.0012 J	0.00017 J	0.00052 J	ND	ND	ND	0.0083 J B	0.0044 J	NA	NA	6.50	660
	4/29/2014	ND	0.0018	0.04	0.000053 J	ND	0.00050 J	0.0028	ND	0.00067 J	0.00099 J	0.00020 J	ND	0.000046 J	0.0038 J	0.0048 J	NA	NA	6.7	130
	11/25/2014	0.00020 J	0.003	0.054	0.00023 J	0.00045 J	0.018	0.0022	0.0067	0.0075	0.0073	ND	ND	0.00013 J	0.013	0.052	NA	NA	7.4	290
	4/27/2015	ND	0.0023	0.049	ND	ND	0.0020 B	0.0022	ND	ND	ND	ND	ND	ND	ND	0.014	NA	NA	6.9	220
	11/18/2015	ND	0.00093 J	0.025	0.00011 J	0.00039 J	0.0033	0.00071 J	0.0011 J	0.00085 J	0.0018 J	0.00041 J	ND	0.00021 J	ND	0.017	NA	NA	6.9	130
	4/5/2016	0.000078 J	0.0012	0.028	0.000088 J	0.000087 J	0.0038 J, B	0.00055 J	0.0010 J	0.00090 J	0.0010 J	ND	0.000027 J	0.000056 J	ND	0.0057 J	NA	NA	6.6	140
	11/8/2016	0.00016 J	0.00060 J	0.055	0.000050 J	0.000090 J	0.00082 J, B	0.00098 J	0.0035 J, B	0.0025 J, B	0.00082 J	0.00043 J	0.000050 J	0.00024 J	ND	0.023	NA	NA	6.5	440
	4/17/2017	ND	0.0014	0.039	ND	ND	0.0023	0.00086 J	0.0011 J	0.00056 J	0.0015 J	ND	0.00011 J	0.00014 J	0.0016	0.015	NA	NA	6.7	160
	11/7/2017	0.00024 J, B	0.0011	0.03	0.00012 J	0.000084 J	0.0016	0.00065 J	0.0018 J	0.00051 J	0.0011 J	ND	0.00010 J	ND	0.0012	0.014	NA	NA	6.6	180
	4/17/2018	ND	0.00055 J	0.047	ND	ND	ND	0.00013 J	0.0014 J	0.00025 J	ND	ND	ND	ND	0.00026 J	0.011	NA	NA	7.0	330
	11/12/2018	0.00028 J	0.0011	0.026	0.000065 J	ND	0.0020	0.00043 J	0.00070 J	0.00051 J	0.0013 J	ND	ND	ND	0.0011	0.016	NA	NA	6.7	140
	4/15/2019	ND	0.0012	0.028	ND	ND	0.0016 J	ND	ND	0.00074 J	0.00090 J	ND	ND	ND	0.0023 J	0.011 J	NA	NA	6.1	160
	11/20/2019	ND	0.00093 J	0.031	ND	ND	0.0027 J	ND	ND	0.001	0.0011 J	ND	ND	ND	0.0022 J	ND	NA	NA	7.1	140
	4/20/2020	ND	0.0016	0.032	ND	ND	0.0017 J	ND	ND	0.00067 J	0.00091 J	ND	ND	ND	0.0018 J	0.011 J	NA	NA	6.8	160
	11/16/2020	ND	0.0012	0.024	ND	ND	0.0019 J	ND	ND	0.00054 J	0.00082 J	ND	ND	ND	0.0015 J	ND	ND	NA	6.4	130
	11/16/2021	<0.000490	0.00123	0.0326	<0.000190	<0.000160	0.00153 J	<0.000520	<0.00380	<0.000260	0.00162 J	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	6.51	NA
	4/19/2022	<0.000680	0.00139	0.0305	<0.000240	<0.000150	<0.00100	0.000472 J	<0.000890	<0.000500	0.00110 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.94	NA
	11/28/2022	<0.000680	0.00432	0.0553	<0.000240	<0.000150	0.00165 J	0.00292	<0.000890	<0.000500	0.000909 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.4 H	NA

**Table 3C
SUMMARY OF SURFACE WATER ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill**

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)	
MCL/RBC/DWS		0.005	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 TO 8	NE	
SW/TW-2	8/28/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	7.0	570	
	11/17/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.72	189	
	5/22/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	71	0.55	7.9	722	
	11/13/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	44	0.16	7.68	566	
	5/24/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	36	0.074	7.4	501	
	11/17/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39	0.15	7.53	520	
	5/19/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	21	0.093	7.67	331	
	11/8/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	61	0.035	6.95	886	
	5/25/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	31	0.01	7.08	334	
	11/2/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	37.2	0.3	7.17	960	
	5/17/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	41	0.15	7.76	850	
	11/8/2007	ND	0.006	0.106	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0169	76.3	ND	6.8	716	
	5/21/2008	ND	ND	0.121	0.00364	ND	0.145	ND	ND	0.0169	ND	0.0107	ND	ND	ND	0.042	33.7	ND	6.68	476	
	11/12/2008	ND	0.00372	0.0673	ND	ND	0.0134	ND	0.00673	0.0116	ND	0.00842	ND	ND	0.0182	0.0479	17.1	ND	6.18	180	
	5/12/2009	ND	ND	0.0915	ND	ND	0.0109	ND	0.00413	ND	ND	ND	ND	0.0017	ND	0.0417	31	ND	6.79	374	
	12/10/2009	ND	ND	0.0661	ND	ND	0.00583	ND	0.00174	ND	ND	ND	ND	ND	ND	0.0277	NA	NA	6.79	91.8	
	5/17/2010	0.0046	0.069	0.93	0.0098	0.00075	0.19	0.077	0.074	0.23	0.029	0.027	ND	ND	0.31	1.9	NA	NA	6.5	NA	
	11/2/2010	ND	0.0042	0.11	ND	ND	0.0041	0.0036	ND	0.00015 J	0.00098 J	0.00086 J	ND	ND	0.002 J	0.0077 J	NA	NA	6.8	NA	
	5/4/2011	0.00043	0.0024	0.068	ND	ND	0.0016	0.0017	ND	0.00039	0.0011	0.00098	ND	0.00019	ND	0.0062	22	ND	7.2	360	
	11/9/2011	ND	0.016	0.24	ND	ND	0.042	0.013	0.012	0.029	0.02	ND	ND	ND	0.099	0.24	NA	NA	6.00	560	
	4/26/2012	ND	ND	0.028	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	6.50	180	
	10/9/2012	ND	0.031	0.42	0.002	0.00085	0.11	0.015	0.012	0.057	ND	ND	ND	ND	0.12	0.39	NA	NA	6.90	520	
	5/23/2013	ND	0.0031	0.10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	7.40	540	
	11/19/2013	ND	0.005 B	0.077	ND	0.0012	0.00046 J	0.0049	0.0012 J	0.00041 J	0.0025	ND	ND	0.000025 J	0.0086 J B	0.0074 J	NA	NA	7.00	720	
	4/29/2014	0.00018 J	0.007	0.13	0.00015 J	0.000035 J	0.0035	0.0059	0.0025 J	0.0035	0.003	0.00091 J	ND	ND	0.000083 J	0.011	0.022	NA	NA	7	460
	11/25/2014	ND	0.0021	0.021	0.00016 J	0.00016 J	0.0086 B	0.00076 J	0.0037 J	0.0028	0.0039	ND	ND	ND	0.01	0.022	NA	NA	6.2	170	
	4/27/2015	ND	0.0019	0.086	ND	ND	0.0017 B	0.0076	ND	ND	0.0029	ND	ND	ND	ND	0.013	NA	NA	7.1	500	
	11/18/2015	ND	0.0032	0.086	0.000049 J	0.00020 J	0.0017	0.005	0.0022 J	0.00049 J	0.0037	0.0011	ND	0.00024 J	ND	0.01	NA	NA	6.9	460	
4/5/2016	ND	0.002	0.04	ND	0.000091 J	0.0028 J, B	0.00064 J	0.00071 J	0.00034 J	0.00080 J	ND	0.000020 J	0.000046 J	ND	0.0045 J	NA	NA	7	340		
11/8/2016	0.00014 J	0.0012	0.054	ND	0.000064 J	0.00078 J, B	0.00087 J	0.0035 J, B	0.0011 J, B	0.00082 J	0.00011 J	0.000039 J	0.00011 J	ND	0.014	NA	NA	6.9	520		
4/17/2017	ND	0.0014	0.038	ND	ND	0.0015	0.00042 J	0.00089 J	0.00035 J	0.0025	ND	ND	0.0002 J	0.00082 J	0.019	NA	NA	7.5	530		
11/7/2017	0.00075 J	0.007	0.12	0.00017 J	0.00026 J	0.0066	0.0039	0.0042 J	0.0040	0.0043	0.00084 J	0.000073 J	ND	0.0072	0.076	NA	NA	7	610		
4/17/2018	0.00024 J	0.0019	0.049	0.00010 J	ND	0.0037	0.00069 J	0.0020 J	0.0017	0.0021	ND	ND	ND	0.0034	0.022	NA	NA	7.0	470		
11/12/2018	0.00048 J	0.0017	0.055	ND	ND	0.0015 J	0.0013	0.00034 J	0.00020 J	0.0018 J	ND	ND	ND	0.00046 J	0.013	NA	NA	6.9	530		
4/15/2019	ND	0.0030	0.054	ND	ND	0.0037	ND	ND	0.0011	0.0023 J	ND	ND	ND	0.0026 J	0.018 J	NA	NA	6.5	390		
11/20/2019	ND	0.0022	0.036	ND	ND	0.0017 J	ND	ND	0.00046 J	0.0016 J	ND	ND	ND	ND	ND	NA	NA	6.9	270		
4/20/2020	ND	0.0043	0.05	ND	ND	0.0017 J	ND	ND	0.0011	0.0019 J	ND	ND	ND	0.0022 J	ND	NA	NA	4.8	310		
11/16/2020	ND	0.0031	0.027	ND	ND	0.0017 J	ND	ND	0.00062 J	0.0011 J	ND	ND	ND	ND	0.0078 J	ND	NA	NA	6.6	190	
11/16/2021	<0.000490	0.00504	0.0598	<0.000190	<0.000160	0.00126 J	0.00198 J	<0.00380	<0.000260	0.00228 J	<0.000740	<0.000110	<0.000570	0.00138 J	<0.00690	NA	NA	6.53	NA		
4/19/2022	<0.000680	0.00150	0.0356	<0.000240	<0.000150	<0.00100	0.000327 J	<0.000890	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.97	NA		
11/28/2022	<0.000680	0.00462	0.0763	<0.000240	<0.000150	0.00112 J	0.00220	<0.000890	<0.000500	0.00170 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.8 H	NA		

Table 3C
SUMMARY OF SURFACE WATER ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)	
MCL/RBC/DWS		0.005	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 TO 8	NE	
SW/TW-3	8/28/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.9	580	
	11/17/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8	222	
	5/22/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	92	0.045	7.76	675	
	11/13/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	34	0.29	7.02	242	
	5/24/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	54	0.15	7.84	553	
	11/17/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	52	0.23	7.03	337	
	5/19/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	28	0.38	7.33	192	
	11/8/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	60	0.15	6.77	413	
	5/25/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	32	ND	7.24	327	
	11/2/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39.7	0.1	6.64	515	
	5/17/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	19	0.13	7.29	280	
	11/8/2007	ND	ND	0.0942	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0364	47.7	ND	6.70	562	
	5/21/2008	ND	0.0398	0.508	0.00906	0.00124	0.156	0.0477	0.0501	0.110	ND	0.0615	ND	0.00859	ND	0.641	26.4	ND	6.17	383	
	11/12/2008	ND	ND	0.0469	0.00863	ND	0.00445	ND	0.00397	0.005	ND	ND	ND	ND	0.0055	0.0118	16.3	ND	6.13	199	
	5/12/2009	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	12/10/2009	ND	ND	0.0455	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0125	NA	NA	6.76	112
	5/17/2010	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	11/2/2010	ND	0.0059	0.11	ND	0.0011	0.0036	0.0069	0.0015 J	0.00091 J	0.0019 J	0.00077 J	ND	ND	0.0035 J	0.014	NA	NA	NA	6.60	NA
	5/3/2011	0.00066	0.014	0.22	ND	ND	0.0054	0.0094	0.0023	0.0024	0.0024	0.0011	ND	0.000062	0.0071	0.028	NA	NA	7.30	NA	
	11/9/2011	ND	0.009	0.15	ND	ND	0.027	0.005	0.0069	0.017	0.0078	0.0012	ND	ND	0.077	0.087	NA	NA	6.50	390	
	4/28/2012	ND	ND	0.013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	NA	NA	5.80	79	
	10/9/2012	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	5/23/2013	ND	ND	0.02	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.016	NA	NA	6.40	81
	11/19/2013	ND	0.0063 B	0.062	0.000044 J	ND	0.00028 J	0.0033	ND	0.00026 J	0.0019 J	ND	ND	0.000024 J	0.0086 JB	0.0045 J	NA	NA	6.80	800	
	4/29/2014	0.00014 J	0.01	0.11	0.00030 J	0.00032 J	0.0084	0.0043	0.0047 J	0.0066	0.0032	0.0011	ND	0.000088 J	0.019	0.042	NA	NA	6.6	240	
	11/25/2014	0.00018 J	0.0016	0.017	ND	0.00033 J	0.0041 B	0.0011	0.0040 J	0.0015	0.0031	ND	0.000043 J	0.00010 J	0.0041 J	0.02	NA	NA	6.2	230	
	4/27/2015	ND	0.0019	0.054	ND	ND	0.0017 B	0.0026	ND	ND	ND	ND	ND	ND	ND	0.015	NA	NA	7	290	
	11/18/2015	ND	0.0014	0.036	0.00011 J	0.00021 J	0.0024	0.0021	ND	0.00052 J	0.0014 J	ND	ND	0.00033 J	ND	0.0041 J	NA	NA	6.8	220	
4/5/2016	0.000075 J	0.0011	0.04	ND	0.000096 J	0.0026 J, B	0.00063 J	0.00067 J	0.00049 J	0.00061 J	ND	0.000018 J	0.000032 J	ND	0.0085 J	NA	NA	6.9	280		
11/8/2016	0.000079 J	0.0015	0.056	0.000079 J	0.000075 J	0.0018 J, B	0.00087 J	0.0036 J, B	0.0015 J, B	0.00065 J	0.00048 J	0.000073 J	0.000096 J	ND	0.016	NA	NA	6.8	470		
4/17/2017	ND	0.0011	0.032	ND	0.00017 J	0.0013	0.00036 J	0.00089 J	0.00053 J	0.0008 J	ND	ND	0.00044 J	0.0012	0.025	NA	NA	7.2	320		
11/7/2017	ND	0.002	0.046	0.000096 J	0.000090 J	0.002	0.00077 J	0.0014 J	0.00069 J	0.0014 J	ND	0.000064 J	ND	0.0013	0.03	NA	NA	7.1	330		
4/17/2018	0.00021 J	0.0012	0.043	ND	ND	0.0013	0.00034 J	0.0010 J	0.00040 J	0.0017 J	ND	ND	ND	0.00090 J	0.017	NA	NA	7.0	440		
11/12/2018	ND	0.0018	0.048	ND	ND	0.0020	0.00089 J	0.00057 J	0.00029 J	0.0014 J	ND	ND	ND	0.00060 J	0.014	NA	NA	6.8	410		
4/15/2019	ND	0.0028	0.042	ND	ND	0.0019 J	ND	ND	0.00049 J	0.00098 J	ND	ND	ND	0.0021 J	0.012 J	NA	NA	6.6	340		
11/20/2019	ND	0.0013	0.031	ND	ND	0.0019 J	ND	ND	0.00062 J	0.0009 J	ND	ND	ND	0.0016 J	ND	NA	NA	6.9	190		
4/20/2020	ND	0.0037	0.041	ND	ND	0.0017 J	ND	ND	0.0010	0.0012 J	ND	ND	ND	0.0022 J	ND	NA	NA	6.9	200		
11/16/2020	ND	0.0030	0.024	ND	ND	0.0017 J	ND	ND	0.00057 J	0.0010 J	ND	ND	ND	0.0014 J	0.0074 J	ND	NA	6.4	140		
11/16/2021	<0.000490	0.00676	0.0773	<0.000190	<0.000160	0.00304	0.00424	0.00680 J	0.000575 J	0.00949	<0.000740	<0.000110	<0.000570	0.00156 J	0.0112 J	NA	NA	6.60	NA		
4/19/2022	<0.000680	0.00187	0.0382	<0.000240	<0.000150	<0.00100	0.000511 J	<0.000890	<0.000500	<0.000720	<0.00230	<0.000130	<0.000280	<0.00390	<0.00390	NA	NA	6.89	NA		
11/28/2022	<0.000680	0.00402	0.0659	<0.000240	<0.000150	0.00129 J	0.00201	<0.000890	<0.000500	0.00152 J	<0.00230	<0.000130	<0.000280	<0.00390	<0.00390	NA	NA	6.6 H	NA		

Table 3C
SUMMARY OF SURFACE WATER ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductance (µmhos/cm)
MCL/RBC/DWS		0.005	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 TO 8	NE
SW/TW-4	8/28/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	6.8	690
	11/17/2002	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	8.8	420
	5/22/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	55	0.069	6.94	646
	11/13/2003	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	58	ND	6.57	408
	5/24/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	95	ND	6.21	751
	11/17/2004	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	68	ND	6.46	451
	5/19/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	65	ND	7.47	525
	11/8/2005	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	56	0.032	6.74	710
	5/25/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	20	ND	6.93	188
	11/2/2006	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	35.7	0.1	6.56	287
	5/17/2007	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	39	0.12	7.03	420
	11/8/2007	ND	0.0124	0.335	ND	ND	ND	ND	ND	ND	ND	0.0259	ND	ND	0.0233	0.0761	983	ND	4.5	2610
	5/22/2008	ND	0.0242	0.266	0.0012	ND	0.0244	ND	0.0164	0.0248	ND	0.0637	ND	ND	0.0277	0.0892	95.8	ND	5.97	445
	11/12/2008	ND	0.00276	0.0415	0.0042	ND	0.00445	ND	0.00463	0.00432	ND	ND	ND	ND	0.00645	0.00982	15.1	ND	6.2	207
	5/12/2009	ND	ND	0.0446	ND	ND	0.00153	ND	0.0024	ND	ND	ND	0.00135	ND	ND	0.02	68	ND	6.74	292
	12/10/2009	ND	ND	0.0382	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.0131	NA	NA	6.86	119
	5/17/2010	ND	ND	0.052	ND	ND	0.0013	0.00043	0.0012	ND	ND	0.0029	ND	ND	0.0011	0.015	NA	NA	6.4	NA
	11/2/2010	ND	0.0024	0.043	ND	ND	0.0018	0.0016	ND	0.0009 J	ND	0.00032 J	ND	ND	0.0033 J	0.015	NA	NA	6.3	NA
	5/3/2011	0.00043	0.0028	0.062	ND	ND	0.002	0.0027	ND	0.00061	0.0014	0.001	ND	0.00027	0.0023	0.008	NA	NA	7.2	NA
	11/9/2011	ND	0.018	0.34	0.0013	ND	0.052	0.053	0.021	0.056	0.016	0.0071	ND	ND	0.089	0.29	NA	NA	6.5	1200
	4/26/2012	ND	0.018	0.42	0.0022	ND	0.064	0.069	0.029	0.069	ND	ND	ND	ND	0.087	0.37	NA	NA	6.4	420
	10/9/2012	ND	0.023	0.2	ND	ND	0.032	0.014	0.0091	0.014	ND	0.0015	ND	ND	0.034	0.11	NA	NA	7	680
	5/23/2013	ND	0.015	0.077	ND	ND	ND	0.0012	ND	0.0012	ND	ND	ND	ND	ND	0.013	NA	NA	6.6	450
	11/19/2013	ND	0.0007 J B	0.023	ND	0.00007 J	ND	0.00029 J	ND	0.00019 J	0.00029 J	ND	ND	0.000018 J	0.016 B	0.0043 J	NA	NA	6.1	510
	4/29/2014	0.00015 J	0.0029	0.056	0.000042 J	ND	ND	0.0024	ND	0.00035 J	0.0010 J	0.00059 J	ND	0.00022 J	0.0028 J	0.0070 J	NA	NA	7.1	350
	11/25/2014	0.00012 J	0.0014	0.022	ND	0.00019 J	0.0024 B	0.0011	0.0055	0.00081 J	0.0021	ND	0.00011 J	0.00016 J	0.0024 J	0.0096 J	NA	NA	6.5	290
	4/27/2015	ND	0.0018	0.037	ND	ND	0.0016 B	0.0012	ND	ND	ND	ND	ND	ND	ND	0.015	NA	NA	7	250
	11/18/2015	ND	0.0017	0.035	0.00011 J	0.00032 J	0.0021	0.0017	0.0028 J	0.00033 J	0.0014 J	0.00046 J	0.000036 J	0.00050 J	ND	0.0072 J	NA	NA	6.8	240
	4/5/2016	0.000079 J	0.00099 J	0.035	0.000066 J	0.000072 J	0.0039 J, B	0.00041 J	0.00058 J	0.00035 J	0.00080 J	ND	0.000018 J	0.000031 J	ND	0.0050 J	NA	NA	6.9	300
	11/8/2016	0.000076 J	0.0017	0.032	0.000055 J	0.00018 J	0.0013 J, B	0.0011	0.0034 J, B	0.0025 J, B	0.00089 J	0.00049 J	0.000036 J	0.000071 J	ND	0.017	NA	NA	6.6	200
4/17/2017	ND	0.00096 J	0.037	ND	ND	0.0021	0.00085 J	0.00068 J	0.00034 J	0.0022	ND	ND	0.00034 J	0.0011	0.021	NA	NA	6.6	240	
11/7/2017	ND	0.0013	0.047	0.000067 J	ND	0.0013	0.0011	0.0012 J	0.00035 J	0.00099 J	ND	ND	ND	0.00057 J	0.017	NA	NA	6.8	340	
4/17/2018	ND	0.0010	0.04	ND	ND	0.0012	0.00036 J	0.00076 J	0.00031 J	0.0014 J	ND	ND	ND	0.00073 J	0.013	NA	NA	7.2	470	
11/12/2018	0.00023 J	0.0012	0.04	ND	ND	0.0016 J	0.00081 J	0.00088 J	0.00020 J	0.0014 J	ND	ND	ND	ND	0.027	NA	NA	6.8	400	
4/15/2019	ND	0.0021	0.042	ND	ND	0.0017 J	ND	ND	0.00062 J	0.0011 J	ND	ND	ND	0.0017 J	0.012 J	NA	NA	6.7	350	
11/20/2019	ND	0.0013	0.024	ND	ND	0.0015 J	ND	ND	ND	0.0012 J	ND	ND	ND	ND	ND	NA	NA	6.8	220	
4/20/2020	ND	0.0026	0.032	ND	ND	0.0010 J	ND	ND	0.00050 J	0.00095 J	ND	ND	ND	ND	ND	NA	NA	7.0	210	
11/16/2020	ND	0.0027	0.023	ND	ND	0.0018 J	0.00062 J	ND	0.00062 J	0.0010 J	ND	ND	ND	0.0016 J	0.0094 J	ND	NA	6.5	140	
11/16/2021	<0.000490	0.000491 J	0.0363	<0.000190	<0.000160	<0.000790	0.000809 J	<0.00380	<0.000260	0.00161 J	<0.000740	<0.000110	<0.000570	<0.00130	0.0125 J	NA	NA	6.40	NA	
4/19/2022	<0.000680	0.00173	0.0356	<0.000240	<0.000150	<0.00100	0.000435 J	<0.000890	<0.000500	0.000821 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	7.10	NA	
11/28/2022	<0.000680	0.00264	0.0533	<0.000240	0.000281 J	<0.00100	0.00255	<0.000890	<0.000500	0.00137 J	<0.00230	<0.000130	<0.000280	<0.00210	<0.00390	NA	NA	6.4 H	NA	

**Table 3C
SUMMARY OF SURFACE WATER ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill**

Well No.	SAMPLE DATE	Sb Antimony (mg/L)	As Arsenic (mg/L)	Ba Barium (mg/L)	Be Beryllium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Co Cobalt (mg/L)	Cu Copper (mg/L)	Pb Lead (mg/L)	Ni Nickel (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Tl Thallium (mg/L)	V Vanadium (mg/L)	Zn Zinc (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	pH	Specific Conductanc e (µmhos/cm)
MCL/RBC/DWS		0.005	0.01*	2.0	0.004	0.005	0.1	0.73	1.3	0.015	0.61	0.05	0.1	0.002	0.26	5.0	250	10	6 TO 8	NE
SW/TW-5	11/12/2018	0.00035 J	0.0042	0.078	0.000057	0.000078	0.0057	0.0009 J	0.0019 J	0.00063 J	0.0026	0.00063	0.000063	0.000099	0.00079 J	0.014	NA	NA	7.6	990
	4/15/2019	ND	0.0065	0.05	ND	ND	0.007	0.00071 J	ND	0.0019	0.0020 J	ND	ND	ND	0.0067	0.015 J	NA	NA	7.5	950
	11/20/2019	ND	0.0019	0.075	ND	ND	0.0033	ND	ND	ND	0.0018 J	ND	ND	ND	ND	ND	NA	NA	7.4	730
	4/20/2020	ND	0.0078	0.11	ND	ND	0.0074	0.0013 J	ND	0.0026	0.0035	0.0011 J	ND	ND	0.0071	0.018 J	NA	NA	7.5	770
	11/16/2020	ND	0.0071	0.058	ND	ND	0.0027	0.00076 J	ND	0.00053 J	0.0014 J	ND	ND	ND	ND	ND	NA	NA	7.2	600
	11/16/2021	<0.000490	0.00323	0.0823	<0.000190	<0.000160	0.00194 J	0.000699 J	<0.00380	<0.000260	0.00136 J	<0.000740	<0.000110	<0.000570	<0.00130	<0.00690	NA	NA	7.40	NA
	4/19/2022	<0.000680	0.00265	0.0666	<0.000240	<0.000150	0.00255	0.000411 J	0.0652	0.000572 J	0.00320	<0.00230	<0.000130	<0.000280	<0.00210	0.0370	NA	NA	7.66	NA
11/28/2022	<0.000680	0.00236	0.0923	<0.000240	<0.000150	0.00142 J	0.000499 J	<0.000890	<0.000500	0.00140 J	<0.00230	<0.000130	<0.000280	<0.00210	0.00733 J	NA	NA	7.1 H	NA	

Notes:

MCL/RBC/DWS = Maximum Contaminant Level/Risk-Based Standard or Drinking Water Standard as appropriate

NA = Not analyzed for parameter on given date

* The Maximum Contaminant Level (MCL) for Arsenic was lowered from 0.05 mg/L to 0.01 mg/L in 2006.

All concentrations are mg/L or parts per million (ppm)

Sp. Cond - Specific Conductance; values reported in umhos/cm

pH values reported in Standard Units (su)

ND = Not Detected; see laboratory certificates for individual compound detection limits

Sampling events between and including 11/2011 and 5/2013 performed by Smith + Gardner

**TABLE 3D. SUMMARY OF HISTORICAL WATER QUALITY MONITORING
ANALYTICAL DATA – INORGANIC & INDICATOR PARAMETERS
(CLASS II FACILITY)**

Table 3D
SUMMARY OF WATER QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Class 2 Facility)

Well No.	SAMPLE DATE	As Arsenic (mg/L)	Ba Barium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Pb Lead (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Hg Mercury (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	Sulfate (mg/L)	pH	Specific Conductanc e (µmhos/cm)
<i>MCL/RBC/DWS</i>		0.01*	2.0	0.005	0.1	0.015	0.05	0.1	0.0002	250	10	250**	6 TO 8	NE
MW-1CD	12/10/2009	0.00898	0.135	ND	ND	ND	ND	ND	ND	18	ND	3.9	6.92	117
	5/17/2010	ND	0.12	ND	ND	ND	ND	ND	ND	NA	NA	NA	6.80	720
	11/3/2010	0.003	0.11	ND	ND	ND	ND	ND	ND	19	0.1 J	17	6.80	720
	5/4/2011	0.002	0.11	ND	0.00046	ND	0.00038	ND	ND	14	0.072	14	7.80	680
	11/10/2011	0.032	0.19	ND	0.0071	0.0038	0.0017	ND	ND	117	ND	5.9	6.60	580
	4/26/2012	ND	0.097	ND	0.011	ND	0.053	ND	ND	18	ND	5.6	6.90	540
	10/11/2012	ND	0.093	ND	ND	ND	ND	ND	ND	12	ND	ND	7.00	490
	5/23/2013	0.0014	0.094	ND	ND	ND	ND	ND	ND	11	ND	ND	7.20	520
	11/19/2013	0.0015 J B	0.068	0.000059 J	0.0001 J	0.0001 J	ND	ND	ND	13	ND	3	7.10	760
	4/30/2014	0.005	0.076	0.000064 J	ND	0.00027 J	0.00021 J	ND	ND	4.8	0.09 J	6.9	7	380
	11/25/2014	0.0015	0.095	0.00012 J	0.00099 J, B	0.00065 J	ND	ND	ND	7.8	0.12	13	7	350
	4/28/2015	0.0021	0.11	ND	ND	ND	ND	ND	ND	5.9	ND	1	7.1	470
	11/18/2015	0.0082	0.086	0.000060 J	0.0015	0.00042 J	ND	ND	ND	2.9	0.18	0.94 J	6.8	270
	4/6/2016	0.0033	0.086	0.00016 J	0.0043 J, B	0.00043 J	ND	0.000016 J	ND	4.4	0.03 J	ND	6.8	350
	11/8/2016	0.00091 J	0.12	0.000068 J	ND	0.00050 J, B	0.00059 J	0.000036 J	ND	8.2	0.082 J	1.4	6.9	560
	4/18/2017	0.0015	0.14 B	ND	0.00065 J, B	0.00022 J	0.00049 J	0.00016 J	ND	5.9	0.11	1.3	6.7	460
	11/7/2017	0.0013	0.13	ND	0.00070 J, B	0.00014 J	ND	ND	ND	11	0.11	2	6.8	620
	4/17/2018	0.0017	0.15	ND	0.00023 J	0.00031 J	ND	ND	ND	8.1	0.031 J	6.9	6.9	630
	11/13/2018	0.0013	0.11 A	ND	0.00080 J	0.00053 J	ND	0.000082 J	ND	12	0.087 J	7.1	6.8	390
	4/16/2019	0.0060	0.097	ND	ND	ND	ND	ND	ND	7.2	ND	1.5 J	6.6	460
11/21/2019	0.0013	0.13	ND	ND	ND	ND	ND	ND	9.5	0.094 J	9.3	6.7	410	
4/20/2020	0.0033	0.15	ND	0.0013 J	ND	ND	ND	ND	18	ND	1.4 J	6.9	460	
11/17/2020	0.0038	0.098	ND	0.0011 J	0.00033 J	ND	ND	ND	ND	0.074 J	ND	6.7	340	
11/17/2021	0.00352	0.14	<0.000160	<0.000790	<0.000260	<0.000740	<0.000110	<0.0000700	10.6	<0.76	4.42	6.71	NA	
4/20/2022	<0.000490	0.0897	<0.000150	<0.00100	<0.000500	<0.00230	<0.000130	<0.0000700	4.8	<0.0760	<0.65	6.93	NA	
11/30/2022	0.00112	0.134	<0.000150	<0.00100	<0.000500	<0.00230	<0.000130	<0.0000700	14.1	<0.0760	0.958 J	6.7 H	NA	

Table 3D
SUMMARY OF WATER QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Class 2 Facility)

Well No.	SAMPLE DATE	As Arsenic (mg/L)	Ba Barium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Pb Lead (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Hg Mercury (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	Sulfate (mg/L)	pH	Specific Conductanc e (µmhos/cm)
<i>MCL/RBC/DWS</i>		<i>0.01*</i>	<i>2.0</i>	<i>0.005</i>	<i>0.1</i>	<i>0.015</i>	<i>0.05</i>	<i>0.1</i>	<i>0.0002</i>	<i>250</i>	<i>10</i>	<i>250**</i>	<i>6 TO 8</i>	<i>NE</i>
MW-2CD	12/10/2009	0.0102	0.0948	ND	ND	ND	ND	ND	ND	30	ND	3.4	7.03	114
	5/18/2010	0.012	0.12	ND	ND	ND	0.0047	ND	ND	23	0.28	14	6.80	920
	11/3/2010	0.014	0.11	ND	ND	0.00026 J	0.00037 J	ND	ND	34	ND	0.62 J	7.00	800
	5/4/2011	0.0031	0.096	ND	0.00044	0.00027 J	0.0006	ND	ND	28	ND	ND	7.90	770
	11/10/2011	0.027	0.15	ND	0.014	0.015	0.0017	ND	ND	32	ND	ND	6.80	760
	4/26/2012	ND	0.11	ND	ND	0.014	0.05	ND	ND	27	ND	7.6	7.20	690
	10/11/2012	0.034	0.21	ND	0.016	0.01	ND	ND	ND	26	ND	ND	7.00	690
	5/23/2013	0.0054	0.091	ND	ND	ND	ND	ND	ND	26	ND	ND	7.30	750
	11/19/2013	0.0041 B	0.088	0.000061 J	ND	0.00015 J	ND	ND	ND	26	ND	0.760 J	6.90	1000
	4/30/2014	0.01	0.099	0.000053 J	ND	0.00020 J	ND	ND	ND	26	0.051 J	0.39 J	7.1	700
	11/25/2014	0.0026	0.085	0.00011 J	0.00084 J, B	0.00019 J	ND	ND	ND	26	0.077 J	0.32 J	7	720
	4/28/2015	0.0022	0.087	ND	ND	ND	ND	ND	ND	25	ND	ND	7	710
	11/18/2015	0.027	0.18	0.00066 J	0.009	0.0068	0.00069 J	0.000027 J	0.000055 J	14	0.26	58	6.7	610
	4/6/2016	0.0031	0.093	0.00012 J	0.00053 J, B	0.00040 J	ND	0.000017 J	ND	26	0.065 J	ND	6.9	720
	11/8/2016	0.024	0.17	0.000079 J	ND	0.00079 J, B	0.00084 J	0.000045 J	ND	18	0.06 J	61	6.9	910
4/18/2017	0.035	0.32 B	0.000060 J	0.00054 J	0.000086 J	ND	0.00017 J	ND	24	0.18	85	6.5	980	
MW-2CD	11/7/2017	0.016	0.13	ND	0.00065 J, B	0.00017 J	ND	ND	ND	21	0.075 J	82	6.6	770
	4/17/2018	0.0075	0.099	ND	ND	0.00017 J	ND	ND	ND	22	ND	51	6.8	830
	11/13/2018	0.012	0.091 A	ND	0.00074 J	0.00047 J	ND	ND	ND	18	0.29	62	6.7	630
	4/16/2019	0.0042	0.08	ND	ND	ND	ND	ND	ND	23	ND	2.4	7.0	620
	11/21/2019	0.016	0.14	ND	0.00096 J	ND	ND	ND	ND	22	0.64	390	7.2	1100
	4/20/2020	0.0099	0.087	ND	ND	ND	ND	ND	ND	22	0.069 J	7.5	6.9	630
	11/17/2020	0.0027	0.085	ND	ND	ND	ND	ND	ND	ND	1.1	39	6.8	670
	11/17/2021	0.00620	0.1	<0.000160	<0.000790	<0.000260	<0.000740	<0.000110	<0.0000700	15.1	0.855 J	100	6.67	NA
	4/20/2022	0.00274	0.0886	<0.000150	<0.00100	<0.000500	<0.00230	<0.000130	<0.0000700	19.7	<0.0760	19.8	6.83	NA
	11/30/2022	0.00459	0.0867	<0.000150	<0.00100	<0.000500	<0.00230	<0.000130	<0.0000700	157	<0.0760	12	6.1 H	NA

Table 3D
SUMMARY OF WATER QUALITY MONITORING ANALYTICAL DATA
INORGANIC AND INDICATOR PARAMETERS
Georgetown County Sanitary Landfill (Class 2 Facility)

Well No.	SAMPLE DATE	As Arsenic (mg/L)	Ba Barium (mg/L)	Cd Cadmium (mg/L)	Cr Chromium (mg/L)	Pb Lead (mg/L)	Se Selenium (mg/L)	Ag Silver (mg/L)	Hg Mercury (mg/L)	Cl Chloride (mg/L)	N Nitrate (mg/L)	Sulfate (mg/L)	pH	Specific Conductanc e (µmhos/cm)
<i>MCL/RBC/DWS</i>		0.01*	2.0	0.005	0.1	0.015	0.05	0.1	0.0002	250	10	250**	6 TO 8	NE
MW-3CD	12/10/2009	ND	0.0473	ND	ND	ND	ND	ND	ND	10	NA	120	5.90	85.5
	5/18/2010	0.0064	0.044	ND	0.00055	ND	ND	ND	ND	35	0.56	30	5.80	340
	11/3/2010	0.01	0.072	ND	0.00039 J	0.00016 J	0.00094 J	ND	ND	56	ND	110	5.80	520
	5/4/2011	0.0062	0.062	ND	0.00072	ND	0.00096	ND	ND	44	ND	98	5.90	490
	11/10/2011	0.018	0.09	ND	0.011	0.0034	0.0024	0.0011	ND	88	ND	30	6.70	490
	4/26/2012	ND	0.04	ND	ND	ND	ND	ND	ND	23	ND	78	6.20	280
	10/11/2012	ND	0.085	ND	ND	ND	ND	ND	ND	92	ND	40	5.70	550
	5/23/2013	0.0046	0.062	ND	ND	ND	0.0012	ND	ND	75	ND	39	5.80	470
	11/19/2013	0.013 B	0.14	0.000065 J	ND	0.00025 J	ND	ND	ND	170	0.015	2.1	5.90	1000
	4/30/2014	0.0017	0.049	0.00015 J	ND	0.00018 J	0.0011	ND	ND	34	ND	23	6	350
	11/25/2014	0.0025	0.051	0.00010 J	0.0018 B	0.00027 J	0.0013	ND	ND	54	0.12	15	5.9	410
	4/28/2015	0.0012	0.015	ND	0.0021	ND	0.0013	ND	ND	14	0.14	19	5.7	180
	11/18/2015	0.002	0.041	0.00010 J	0.0015	0.00041 J	0.00092 J	ND	0.000013 J	23	0.21	7	6.3	330
	4/6/2016	0.0018	0.017	0.00013 J	0.0027 J, B	0.00034 J	ND	0.000019 J	ND	11	0.052 J	7.9	5.9	230
	11/8/2016	0.021	0.084	0.000060 J	0.001	0.00050 J, B	0.0035	0.000025 J	ND	69	0.098 J	13	6	570
	4/18/2017	0.0027	0.17 B	0.000068 J	0.00042 J, B	0.000062 J	ND	0.00018 J	ND	17	0.15	130	5.8	500
	11/7/2017	0.02	0.073	ND	0.0013 J,B	0.00023 J	ND	ND	ND	150	ND	13	6.1	1100
	4/17/2018	0.024	0.11	ND	0.00071 J	0.00020 J	ND	ND	ND	190	ND	6.4	6.0	1300
	11/13/2018	0.013	0.1	ND	0.0010	0.00033 J	ND	ND	ND	150	ND	6.1	6.0	880
	4/16/2019	0.011	0.096	ND	0.0010 J	ND	ND	ND	ND	140	ND	10	6.1	850
11/21/2019	0.0053	0.028	ND	0.0014 J	ND	0.0013 J	ND	ND	29	0.11 J	20	6.1	300	
4/20/2020	0.0052	0.053	ND	ND	ND	ND	ND	ND	62	0.098 J	38	6.0	560	
11/17/2020	0.0033	0.024	ND	0.0010 J	ND	0.0025 J	ND	ND	ND	0.65	15	6.3	380	
11/17/2021	0.00709	0.137	<0.000160	0.0134	<0.000260	<0.000740	<0.000110	<0.0000700	251	<0.76	6.71 J	5.80	NA	
4/20/2022	0.00193	0.0190	<0.000150	<0.00100	<0.000500	<0.00230	<0.000130	<0.0000700	17.6	<0.0760	13.1	5.28	NA	
11/30/2022	0.0153	0.105	<0.000150	<0.00100	<0.000500	<0.00230	<0.000130	<0.0000700	20.4	<0.0760	46.8	6.6 H	NA	

Notes:

MCL/RBC/DWS = Maximum Contaminant Level/Risk-Based Standard or Drinking Water Standard as appropriate

* The Maximum Contaminant Level (MCL) for Arsenic was lowered from 0.05 mg/L to 0.01 mg/L in 2006.

**Secondary Standard

All concentrations are mg/L or parts per million (ppm)

Sp. Cond - Specific Conductance; values reported in umhos/cm

pH values reported in Standard Units (su)

ND = Not Detected; see laboratory certificates for individual compound detection limits

NA = Not analyzed for parameter on given date

Sampling events between and including 11/2011 and 5/2013 performed by Smith + Gardner

**TABLE 4. SUMMARY OF HISTORICAL WATER QUALITY MONITORING
ANALYTICAL DATA – VOLATILE ORGANIC COMPOUNDS**

Well ID	Sampling Date	Acetone	Volatile Organic Compounds by SW 846 8260 (µg/L)													
			Benzene	Carbon Disulfide	Chloro benzene	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2-Dibromo-3-chloropropane	Methylene Chloride	Methyl Ethyl Ketone	Styrene	Toluene	Vinyl Chloride	Total Xylenes	
Level (µg/L)		22,000*	5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000	
Vertical Expansion																
MW-2VR	5/21/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/13/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/12/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/17/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/2/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/3/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/8/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/24/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/9/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/21/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/19/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/28/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/27/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/17/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/6/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/16/2018	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2018	5.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/2019	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20/2019	6.7	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/20/2020	3.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/18/2020	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/15/2021	<1.80	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	NA
	4/19/2022	2.29 J	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00416	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	NA
	11/28/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00408	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	NA
MW-4V	5/21/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/13/2008	ND	ND	ND	ND	ND	ND	ND	ND	0.34	ND	ND	ND	ND	ND	ND
	5/12/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/17/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/3/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/3/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/8/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/24/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/9/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/21/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/19/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/29/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/28/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/17/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/6/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/16/2018	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2018	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/21/2019	3.4 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/20/2020	4.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/18/2020	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/15/2021	<1.80	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	NA	<0.330	<0.710	<0.220	0.255 J	<0.170	<0.210	NA
	4/19/2022	1.98 J	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00414	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	NA
	11/28/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00408	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	NA

Well ID	Sampling Date	Acetone	Volatile Organic Compounds by SW 846 8260 (µg/L)														
			Benzene	Carbon Disulfide	Chloro benzene	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2-Dibromo-3-chloropropane	Methylene Chloride	Methyl Ethyl Ketone	Styrene	Toluene	Vinyl Chloride	Total Xylenes		
			5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000		
MW-5V	5/21/2008	ND	ND	ND	1.22	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2008	ND	ND	ND	0.55	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/12/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/17/2010	ND	ND	ND	0.85	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/2/2010	ND	ND	ND	1.4	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/3/2011	ND	ND	ND	2.0	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/8/2011	ND	ND	ND	5.1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/24/2012	ND	ND	ND	3.4	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/9/2012	ND	ND	ND	11	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/21/2013	ND	ND	ND	4	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/19/2013	ND	ND	ND	9.5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/29/2014	ND	ND	ND	1.6	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	1.5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/28/2015	ND	ND	ND	0.66	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/18/2015	ND	ND	ND	0.51	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2016	ND	ND	ND	0.94	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2017	ND	ND	ND	3.9	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2017	6.8	ND	ND	1.1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2018	8.6	ND	ND	4.4	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2018	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/2019	7.5	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/20/2019	13	ND	ND	0.71	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4/20/2020	4.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/18/2020	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2021	<1.80	<0.180	<0.150	4.67	<0.220	<0.220	<0.210	NA	<0.330	<0.710	<0.220	0.411 J	<0.170	<0.210			
4/19/2022	16.3	<0.180	<0.150	4.79	<0.220	NA	<0.210	<0.00408	<0.330	<0.710	<0.220	<0.220	<0.170	NA			
11/28/2022	<1.80	<0.180	<0.150	3.37	<0.220	NA	<0.210	<0.00412	<0.330	<0.710	<0.220	<0.220	<0.170	NA			
MW-6VR	5/22/2008	ND	6.33	ND	17	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2008	4.2	5.91	ND	21.9	ND	0.31	0.92	0.0284	ND	ND	ND	0.53	ND	ND	1.26	
	5/13/2009	ND	5.2	ND	26	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.1	
	12/10/2009	ND	5	ND	21	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	5/17/2010	ND	3.2	ND	19	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/2/2010	13	3.4	ND	13	ND	NA	ND	ND	ND	4.2 J	ND	0.99 J	ND	ND	1.2 J	
	5/3/2011	ND	0.75	ND	7.1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/8/2011	ND	3.7	ND	32	ND	NA	1.9	ND	ND	ND	ND	ND	ND	ND	ND	
	4/24/2012	ND	1.1	ND	12	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	10/9/2012	ND	1.6	ND	18	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	5/21/2013	ND	2.4	ND	21	ND	NA	1.4	0.027	ND	ND	ND	ND	ND	ND	ND	
	11/19/2013	ND	0.83	ND	7.4	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	1.4 J	
	4/29/2014	ND	ND	ND	2.3	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/25/2014	4.6 J	0.8	ND	10	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	1.4 J	
	4/28/2015	ND	ND	ND	1.7	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/17/2015	ND	ND	ND	1.3	ND	NA	0.53	ND	ND	ND	ND	ND	ND	ND	ND	
	4/5/2016	7.7	ND	ND	0.53	ND	NA	ND	ND	ND	ND	ND	0.69	ND	ND	ND	
	11/7/2016	6.4	ND	ND	5.3	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	4/17/2017	8.1	ND	ND	1.4	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/7/2017	ND	ND	ND	6.6	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	4/16/2018	5.2	ND	ND	2.6	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/12/2018	ND	0.76	ND	3.6	ND	ND	0.52	ND	ND	ND	ND	ND	ND	ND	ND	
	4/15/2019	7.2	ND	ND	0.60	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/20/2019	14	0.52	ND	1.5	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND		
4/21/2020	6.6	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
11/18/2020	2.9 J	ND	ND	3.9	ND	NA	0.45 J	ND	ND	ND	ND	ND	ND	ND	ND		
11/15/2021	3.40 J	0.472 J	<0.150	7.89	<0.220	<0.220	0.676	NA	<0.330	<0.710	<0.220	<0.220	<0.170	0.420 J			
4/20/2022	4.06 J	<0.180	<0.150	2.66	<0.220	NA	0.270 J	<0.00412	<0.330	<0.710	<0.220	1.06	<0.170	NA			
11/28/2022	<1.80	0.308 J	<0.150	6.37	<0.220	NA	0.533	<0.00408	<0.330	<0.710	<0.220	<0.220	<0.170	NA			

Well ID	Sampling Date	Acetone	Volatile Organic Compounds by SW 846 8260 (µg/L)												
			Benzene	Carbon Disulfide	Chloro benzene	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2-Dibromo-3-chloropropane	Methylene Chloride	Methyl Ethyl Ketone	Styrene	Toluene	Vinyl Chloride	Total Xylenes
Level (µg/L)		22,000*	5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000
MW-7VR	5/22/2008	ND	ND	ND	1.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2008	ND	0.16	ND	3.68	ND	ND	0.49	0.0274	0.25	ND	ND	ND	ND	ND
	5/13/2009	ND	ND	ND	1.4	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	5/17/2010	ND	ND	ND	1.8	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/2/2010	ND	0.82	ND	4.8	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	5/3/2011	ND	ND	ND	1.8	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/8/2011	ND	ND	ND	2.8	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/24/2012	ND	ND	ND	1.4	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	10/9/2012	ND	ND	ND	1.9	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	5/21/2013	ND	ND	ND	1.4	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/19/2013	ND	ND	ND	2.6	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/28/2014	ND	ND	ND	1.9	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	1.4	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/28/2015	ND	ND	ND	1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/17/2015	ND	ND	ND	2	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	1.7	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2016	ND	ND	ND	1.8	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2017	ND	ND	ND	0.7	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/6/2017	ND	ND	ND	1.1	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2018	ND	ND	ND	0.87	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2018	22	ND	ND	0.72	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/16/2019	7.0	ND	ND	0.86	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20/2019	4.2 J	ND	ND	0.98	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/20/2020	4.8 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/19/2020	2.5 J	ND	ND	1.5	ND	NA	ND	ND	ND	ND	ND	ND	ND	0.24 J
	11/15/2021	<1.80	<0.180	<0.150	1.23	<0.220	<0.220	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210
	4/20/2022	<1.80	<0.180	<0.150	0.471 J	<0.220	NA	<0.210	<0.00410	<0.330	<0.710	<0.220	<0.220	<0.170	NA
	11/28/2022	<1.80	<0.180	<0.150	0.985	<0.220	NA	<0.210	<0.00408	<0.330	<0.710	<0.220	<0.220	<0.170	NA

Well ID	Sampling Date	Acetone	Volatile Organic Compounds by SW 846 8260 (µg/L)												
			Benzene	Carbon Disulfide	Chloro benzene	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2-Dibromo-3-chloropropane	Methylene Chloride	Methyl Ethyl Ketone	Styrene	Toluene	Vinyl Chloride	Total Xylenes
		22,000*	5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000
MW-8V	5/22/2008	ND	1.07	ND	12.9	ND	ND	2.11	ND	ND	ND	ND	ND	ND	ND
	11/12/2008	ND	1.19	ND	9.21	0.41	0.85	3.56	ND	ND	ND	ND	ND	ND	ND
	5/12/2009	ND	ND	ND	12	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/2009	ND	5.00	ND	31	ND	NA	8	ND	ND	ND	ND	ND	ND	ND
	5/17/2010	ND	4.10	ND	23	0.71	NA	5.7	ND	ND	ND	ND	ND	ND	ND
	11/2/2010	4.3 J	2.70	ND	14	ND	NA	3.8	ND	ND	ND	ND	ND	ND	ND
	5/3/2011	ND	2.70	ND	15	0.53	NA	4.0	ND	ND	ND	ND	ND	ND	ND
	11/8/2011	ND	2.20	ND	12	ND	NA	2.6	ND	ND	ND	ND	ND	ND	ND
	4/24/2012	ND	2.80	ND	19	ND	NA	4.1	ND	ND	ND	ND	ND	ND	ND
	10/9/2012	ND	2.60	ND	17	ND	NA	3.5	ND	ND	ND	ND	ND	ND	ND
	5/21/2013	ND	2.20	ND	15	ND	NA	3.5	0.026	ND	ND	ND	ND	ND	ND
	11/19/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/29/2014	ND	3.1	ND	17	0.6	NA	4.6	ND	ND	ND	ND	ND	ND	ND
	11/25/2014	ND	1.7	ND	9.7	0.59	NA	4.3	ND	ND	ND	ND	ND	ND	ND
	4/27/2015	ND	2.1	ND	8.3	ND	NA	2.3	ND	ND	ND	ND	ND	ND	ND
	11/18/2015	ND	3.2	ND	17	0.56	NA	4.7	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	2.8	ND	14	ND	NA	3.8	ND	ND	ND	ND	ND	ND	ND
	11/7/2016	6.5	1.4	ND	8.2	ND	NA	3.3	ND	ND	ND	ND	ND	ND	ND
	4/17/2017	ND	3.4	ND	19	0.54	NA	4.5	ND	ND	ND	ND	ND	ND	ND
	11/7/2017	11	3.3	ND	19	0.63	NA	5.3	ND	ND	ND	ND	ND	1.9	ND
	4/17/2018	6.2	2.1	ND	11	ND	NA	3.2	ND	ND	ND	ND	ND	1.1	ND
	11/12/2018	ND	1.4	ND	6.6	0.50	0.50	2.9	ND	ND	ND	ND	ND	ND	ND
	4/15/2019	6.0	1.2	ND	7.9	ND	ND	2.5	ND	ND	ND	ND	ND	ND	ND
11/20/2019	4.5 J	1.2	ND	7.2	0.38 J	NA	3	ND	ND	ND	ND	ND	ND	ND	
4/20/2020	4.9 J	1.6	ND	10	0.36 J	0.36 J	2.9	ND	ND	ND	ND	ND	ND	ND	
11/19/2020	ND	1.4	ND	10	0.40 J	NA	3.1	ND	ND	ND	ND	ND	ND	ND	
11/16/2021	<1.80	1.63	<0.150	10.2	0.473 J	0.473 J	3.99	NA	<0.330	<0.710	<0.220	<0.220	0.223 J	<0.210	
4/19/2022	<1.80	1.11	<0.150	10.4	0.319 J	NA	2.39	<0.00420	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
11/28/2022	<1.80	2.32	<0.150	14.4	0.593	NA	4.34	<0.00412	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
MW-AM-4	4/17/2017	ND	2.8	ND	2	ND	NA	1.4	ND	ND	ND	ND	ND	ND	
	11/6/2017	ND	2.6	ND	4.2	ND	NA	1.5	ND	ND	ND	ND	ND	ND	
	4/17/2018	ND	2.4	ND	2	ND	NA	1.2	ND	ND	ND	ND	ND	ND	
	11/13/2018	ND	2.5	ND	5.6	ND	ND	1.1	ND	ND	ND	ND	ND	ND	
	4/16/2019	ND	3.1	ND	2.3	ND	ND	1.4	ND	ND	ND	ND	ND	ND	
MW-AM-4R	11/20/2019	4.6 J	1.6	ND	4.7	ND	NA	1	ND	ND	ND	ND	ND	ND	
	4/20/2020	13	2.2	ND	ND	ND	ND	ND	ND	ND	3.7 J	ND	ND	ND	
	11/16/2020	4.0 J	6.1	ND	0.77	ND	NA	0.38 J	ND	ND	ND	ND	ND	ND	
	11/15/2021	<1.80	2.33	<0.150	4.08	<0.220	<0.220	1.21	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210
	4/19/2022	<1.80	1.96	<0.150	0.797	<0.220	NA	0.718	<0.00416	0.363 J	<0.710	<0.220	<0.220	<0.170	NA
11/28/2022	<1.80	2.02	<0.150	1.50	<0.220	NA	0.922	<0.00410	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
MW-AM-6	4/17/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
	11/7/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
	4/17/2018	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
	11/12/2018	6.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	4/15/2019	5.2	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/20/2019	8.4	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
	4/20/2020	3.1 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/19/2020	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	
	11/15/2021	<1.80	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210
	4/20/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00414	<0.330	<0.710	<0.220	<0.220	<0.170	NA
11/29/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00412	<0.330	<0.710	<0.220	0.501	<0.170	NA	

Well ID	Sampling Date	Acetone	Volatile Organic Compounds by SW 846 8260 (µg/L)													
			Benzene	Carbon Disulfide	Chloro benzene	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2-Dibromo-3-chloropropane	Methylene Chloride	Methyl Ethyl Ketone	Styrene	Toluene	Vinyl Chloride	Total Xylenes	
Level (µg/L)		22,000*	5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000	
Horizontal Expansion																
MW-1HR	5/21/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2008	ND	ND	ND	ND	ND	ND	ND	ND	1.07	ND	ND	0.12	ND	ND	ND
	5/13/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/17/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/2/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/3/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/8/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/24/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/10/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/22/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/30/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/27/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/17/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/8/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/18/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/6/2017	2.2 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/16/2018	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/13/2018	69	ND	ND	ND	ND	ND	ND	ND	0.054	ND	ND	ND	ND	ND	ND
	4/16/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20/2019	5.5	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/21/2020	4.6 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/18/2020	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2021	<1.80	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	
4/19/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.210	<0.00412	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
11/29/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.210	<0.00410	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
MW-3H	5/22/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/12/2008	ND	ND	ND	ND	ND	ND	ND	ND	1.71	ND	ND	0.14	ND	ND	
	5/13/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	0.0698	ND	ND	ND	ND	ND	ND	
	5/17/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	11/3/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	5/4/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	11/10/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	4/26/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	10/10/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	5/23/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	11/19/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	4/30/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	11/25/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	4/28/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	11/18/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	4/6/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	11/8/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	4/18/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	11/7/2017	5.1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	4/17/2018	4.0 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	11/13/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	4/16/2019	8.5	ND	ND	ND	ND	ND	ND	ND	0.037	ND	ND	ND	ND	ND	
	11/21/2019	15	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
4/20/2020	4.2 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
11/17/2020	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND		
11/17/2021	<1.80	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	
4/20/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.210	<0.00412	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
11/30/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.210	<0.00414	<0.330	<0.710	<0.220	<0.220	<0.170	NA	

Well ID	Sampling Date	Acetone	Volatile Organic Compounds by SW 846 8260 (µg/L)														
			Benzene	Carbon Disulfide	Chloro benzene	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2-Dibromo-3-chloropropane	Methylene Chloride	Methyl Ethyl Ketone	Styrene	Toluene	Vinyl Chloride	Total Xylenes		
Level (µg/L)		22,000*	5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000		
MW-4H	5/21/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/12/2008	ND	ND	ND	ND	ND	ND	ND	ND	0.37	ND	ND	ND	ND	ND	ND	
	5/13/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	0.0832	ND	ND	ND	ND	ND	ND	ND	
	5/17/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/2/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	5/3/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/9/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	4/25/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/10/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/22/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/29/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/28/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/17/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/18/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/6/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4/16/2018	5.1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
MW-5HR	5/22/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/12/2008	ND	ND	ND	ND	ND	ND	ND	0.009	ND	ND	ND	ND	ND	ND	ND	
	5/13/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	5/18/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/2/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	5/3/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/9/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/25/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/10/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/22/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/29/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/28/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/17/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/6/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
4/18/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/7/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4/17/2018	4.9 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/13/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4/16/2019	6.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/20/2019	9	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4/21/2020	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2020	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2021	<1.80	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	NA	
4/20/2022	1.96 J	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.210	<0.00412	<0.330	<0.710	<0.220	<0.220	<0.170	NA	NA	
11/28/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.210	<0.00414	<0.330	<0.710	<0.220	<0.220	<0.170	NA	NA	

Well ID	Sampling Date	Acetone	Volatile Organic Compounds by SW 846 8260 (µg/L)														
			Benzene	Carbon Disulfide	Chloro benzene	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2-Dibromo-3-chloropropane	Methylene Chloride	Methyl Ethyl Ketone	Styrene	Toluene	Vinyl Chloride	Total Xylenes		
			5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000		
MW-6H	5/22/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/13/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	1.41	ND	ND	0.13	ND	ND	ND
	5/13/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/18/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/2/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/3/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/9/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/25/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/10/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/22/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/29/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/28/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/17/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/6/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/18/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2018	6.0	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2018	6.4	ND	ND	ND	0.31 J	0.31 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/16/2019	8.5	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/20/2019	4.8 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4/20/2020	5.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/18/2020	3.4 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2021	<1.80	<0.180	<0.150	<0.190	0.306 J	0.306 J	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	<0.210	<0.210	
4/20/2022	<1.80	<0.180	<0.150	<0.190	0.234 J	NA	<0.210	<0.00416	<0.330	<0.710	<0.220	<0.220	<0.170	NA	<0.170	NA	
11/28/2022	<1.80	<0.180	<0.150	<0.190	0.279 J	NA	<0.210	<0.00410	<0.330	<0.710	<0.220	<0.220	<0.170	NA	<0.170	NA	
MW-8H	5/22/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/13/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/17/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/3/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/3/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/9/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/25/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/10/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/22/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/30/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/25/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/27/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/17/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/18/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/16/2018	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/21/2019	5.1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4/20/2020	4.9 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/17/2020	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2021	<1.80	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	<0.170	<0.210	
4/20/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00406	<0.330	<0.710	<0.220	<0.220	<0.170	NA	<0.170	NA	
11/28/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00410	<0.330	<0.710	<0.220	<0.220	<0.170	NA	<0.170	NA	

Well ID	Sampling Date	Acetone	Volatile Organic Compounds by SW 846 8260 (µg/L)													
			Benzene	Carbon Disulfide	Chloro benzene	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2-Dibromo-3-chloropropane	Methylene Chloride	Methyl Ethyl Ketone	Styrene	Toluene	Vinyl Chloride	Total Xylenes	
			5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000	
MW-9HR	12/10/2009	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/18/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/2/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/3/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/9/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/25/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/10/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/22/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/30/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.5
	11/25/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/28/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/17/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/18/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2018	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/16/2019	13	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/20/2019	6.7	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4/20/2020	4.4 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/17/2020	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2021	<1.80	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210		
4/20/2022	<1.80	<0.180	<0.150	0.250 J	<0.220	NA	<0.210	<0.00414	<0.330	<0.710	<0.220	<0.220	<0.170	NA		
11/29/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00412	<0.330	<0.710	<0.220	<0.220	<0.170	NA		
MW-11H	4/27/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	11/17/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	11/8/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	4/18/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	11/7/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	4/16/2018	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	11/12/2018	10	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	4/16/2019	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/21/2019	5.1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
4/20/2020	4.0 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		
11/28/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00410	<0.330	<0.710	<0.220	<0.220	<0.170	NA		
MW-25H	4/21/2020	6.6	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4/19/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00414	<0.330	<0.710	<0.220	<0.220	<0.170	NA		
11/29/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00412	<0.330	<0.710	<0.220	<0.220	<0.170	NA		
MW-26H	4/21/2020	4.0 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	4/19/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00416	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
	11/29/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00416	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
MW-27H	4/21/2020	9.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	4/20/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00410	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
	11/29/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00410	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
MW-28H	4/21/2020	5.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
	11/17/2020	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
	11/16/2021	<1.80	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	
	4/20/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00410	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
11/29/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00412	<0.330	<0.710	<0.220	<0.220	<0.170	NA		

Well ID	Sampling Date	Acetone	Volatile Organic Compounds by SW 846 8260 (µg/L)													
			Benzene	Carbon Disulfide	Chloro benzene	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2-Dibromo-3-chloropropane	Methylene Chloride	Methyl Ethyl Ketone	Styrene	Toluene	Vinyl Chloride	Total Xylenes	
Level (µg/L)		22,000*	5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000	
Surface Water																
SW/SMC-1																
	5/17/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/2/2010	4.8 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/3/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/9/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/26/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/11/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/23/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/19/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/29/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	0.5
	11/25/2014	5.9	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/27/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/18/2015	3.8 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2018	9.6	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2018	5.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/2019	9.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20/2019	10	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/20/2020	3.7 J	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/16/2020	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/16/2021	1.81 J	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	<0.210
	4/19/2022	5.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00410	<0.330	<0.710	<0.220	<0.220	<0.170	NA	NA
	11/28/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00418	<0.330	<0.710	<0.220	<0.220	<0.170	NA	NA
SW/SMC-2																
	5/3/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/9/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/26/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/11/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/23/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/19/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/29/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/25/2014	4.7 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/27/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/18/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2017	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2018	5.2	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/2019	6.0	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20/2019	9.6	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/20/2020	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/16/2020	4.1 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/16/2021	<1.80	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	NA	<0.330	<0.710	<0.220	0.418 J	<0.170	<0.210	<0.210
	4/19/2022	2.35 J	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00418	<0.330	<0.710	<0.220	<0.220	<0.170	NA	NA
	11/28/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00410	<0.330	<0.710	<0.220	<0.220	<0.170	NA	NA

Well ID	Sampling Date	Acetone	Volatile Organic Compounds by SW 846 8260 (µg/L)														
			Benzene	Carbon Disulfide	Chloro benzene	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2-Dibromo-3-chloropropane	Methylene Chloride	Methyl Ethyl Ketone	Styrene	Toluene	Vinyl Chloride	Total Xylenes		
			22,000*	5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000	
SW/TW-1	5/21/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/12/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/17/2010	5	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	7.3	ND	ND	ND	ND
	11/2/2010	10	ND	ND	ND	ND	NA	ND	ND	ND	ND	2.9 J	ND	0.56	ND	ND	ND
	5/4/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/9/2011	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/26/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/10/2012	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/23/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/19/2013	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	2.3	ND	ND	ND
	4/29/2014	5	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	0.53	ND	ND	ND
	11/25/2014	6.4	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/27/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/18/2015	5.2	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/8/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2017	4.9 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2017	5.5	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2018	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2018	5.1	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/2019	9.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/20/2019	14	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4/20/2020	7.3	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2020	3.8 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2021	3.89 J	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	NA	NA	
4/19/2022	2.47 J	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00410	<0.330	<0.710	<0.220	<0.220	<0.170	NA	NA	NA	
11/28/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00416	<0.330	<0.710	<0.220	1.22	<0.170	NA	NA	NA	
SW/TW-2	5/21/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2008	ND	ND	ND	ND	ND	ND	ND	ND	0.22	ND	ND	0.1	ND	ND	ND	ND
	5/12/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/17/2010	12	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/2/2010	42	ND	ND	ND	ND	NA	ND	ND	ND	ND	7.1	ND	ND	ND	ND	ND
	5/4/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/9/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/26/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	10/10/2012	ND	ND	1.20	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	5/23/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/19/2013	7.6	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	0.91	ND	ND	ND	ND
	4/29/2014	12	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	2.8	0.5	ND	ND	ND
	11/25/2014	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/27/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/18/2015	8.9	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/8/2016	4.8 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2017	6.3	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2017	32	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	2.9	ND	ND	ND	ND
	4/17/2018	13	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2018	9.8	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.78	ND	ND	ND	ND
	4/15/2019	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
11/20/2019	13	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4/20/2020	7.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2020	5.4	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2021	5.34	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	NA	<0.330	1.92 J	<0.220	0.268 J	<0.170	<0.210	NA	NA	
4/19/2022	8.38	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00418	<0.330	<0.710	<0.220	<0.220	<0.170	NA	NA	NA	
11/28/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00412	<0.330	<0.710	<0.220	12.5	<0.170	NA	NA	NA	

Well ID	Sampling Date	Acetone	Volatile Organic Compounds by SW 846 8260 (µg/L)												
			Benzene	Carbon Disulfide	Chloro benzene	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2-Dibromo-3-chloropropane	Methylene Chloride	Methyl Ethyl Ketone	Styrene	Toluene	Vinyl Chloride	Total Xylenes
Level (µg/L)		22,800*	5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000
SW/TW-3	5/21/2008	ND	ND	1.74	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.14	ND	ND
	5/12/2009	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	5/17/2010	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	11/2/2010	12	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	5/3/2011	10	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/9/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/26/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	10/9/2012	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY	DRY
	5/23/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/19/2013	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/29/2014	6.9	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	2.7	ND
	11/25/2014	9.7	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/27/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/18/2015	6	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/8/2016	5.4	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2017	5.6	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	0.51	ND
	11/7/2017	8.4	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	0.87	ND
4/17/2018	9.0	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
11/12/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	0.64	ND	
4/15/2019	8.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/20/2019	16	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
4/20/2020	6.7	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2020	5.1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2021	7.46	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	NA	<0.330	<0.710	0.221 J	0.352 J	<0.170	<0.210	
4/19/2022	2.19 J	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00420	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
11/28/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00410	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
SW/TW-4	5/22/2008	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/12/2008	ND	ND	ND	ND	ND	ND	ND	ND	0.27	ND	ND	0.12	ND	ND
	5/12/2009	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	12/10/2009	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	5/17/2010	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/2/2010	4.3 J	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	5/3/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/9/2011	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/26/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	10/9/2012	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	5/23/2013	ND	ND	1.2	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/19/2013	ND	3.1	ND	18	0.56	NA	4.2	ND	ND	ND	ND	ND	0.55	ND
	4/29/2014	6.7	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/25/2014	8.2	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/27/2015	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/18/2015	5.4	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/5/2016	ND	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/8/2016	5.2	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/17/2017	5.9	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/7/2017	8.1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
4/17/2018	59	ND	ND	ND	ND	NA	ND	0.045	ND	ND	ND	ND	ND	ND	
11/12/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
4/20/2020	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2020	5.1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND	
11/16/2021	2.76 J	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210	
4/19/2022	2.05 J	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00412	<0.330	<0.710	<0.220	<0.220	<0.170	NA	
11/28/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00412	<0.330	<0.710	<0.220	0.580	<0.170	NA	
SW/TW-5	11/12/2018	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	4/15/2019	11	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/20/2019	15	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	4/20/2020	7.9	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND
	11/16/2020	9.1	ND	ND	ND	ND	NA	ND	ND	ND	ND	ND	ND	ND	ND
	11/16/2021	2.72 J	<0.180	<0.150	<0.190	<0.220	<0.220	<0.210	NA	<0.330	<0.710	<0.220	<0.220	<0.170	<0.210
	4/19/2022	3.17 J	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00414	<0.330	<0.710	<0.220	<0.220	<0.170	NA
	11/28/2022	<1.80	<0.180	<0.150	<0.190	<0.220	NA	<0.210	<0.00412	<0.330	<0.710	<0.220	<0.220	<0.170	NA

Well ID	Sampling Date	Acetone	Volatile Organic Compounds by SW 846 8260 (µg/L)													
			Benzene	Carbon Disulfide	Chloro benzene	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2-Dibromo-3-chloropropane	Methylene Chloride	Methyl Ethyl Ketone	Styrene	Toluene	Vinyl Chloride	Total Xylenes	
Level (µg/L)		22,000*	5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000	
Class 2 Landfill																
MW-1CD	12/10/2009	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	5/17/2010	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/3/2010	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	5/4/2011	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/10/2011	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/26/2012	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	10/11/2012	NA	ND	1.20	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	5/23/2013	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/19/2013	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/30/2014	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/25/2014	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/28/2015	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/18/2015	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	0.91	ND	ND	
	4/6/2016	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/8/2016	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/18/2017	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/7/2017	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/17/2018	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/13/2018	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/16/2019	NA	ND	NA	ND	NA	NA	NA	0.051	ND	NA	NA	ND	ND	ND	
	11/21/2019	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/20/2020	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/17/2020	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	0.29 J	ND	ND	
	11/17/2021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4/20/2022	NA	<0.180	NA	<0.190	NA	NA	<0.210	<0.00412	<0.330	NA	NA	0.373 J	<0.170	NA	
	11/30/2022	NA	<0.180	NA	<0.190	NA	NA	<0.210	NA	<0.330	NA	NA	<0.220	<0.170	NA	
MW-2CD	12/10/2009	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	5/18/2010	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/3/2010	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	5/4/2011	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/10/2011	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/26/2012	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	10/11/2012	NA	ND	1.20	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	5/23/2013	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/19/2013	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/30/2014	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/25/2014	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/28/2015	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/18/2015	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/6/2016	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/8/2016	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/18/2017	NA	ND	NA	0.56	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/7/2017	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/17/2018	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/13/2018	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/16/2019	NA	ND	NA	ND	NA	NA	NA	0.021	ND	NA	NA	ND	ND	ND	
	11/21/2019	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	4/20/2020	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/17/2020	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND	
	11/17/2021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	
	4/20/2022	NA	<0.180	NA	<0.190	NA	NA	<0.210	<0.00412	<0.330	NA	NA	<0.220	<0.170	NA	
	11/30/2022	NA	<0.180	NA	<0.190	NA	NA	<0.210	NA	<0.330	NA	NA	<0.220	<0.170	NA	

Well ID	Sampling Date	Acetone	Volatile Organic Compounds by SW 846 8260 (µg/L)												
			Benzene	Carbon Disulfide	Chloro benzene	1,2-Dichloro benzene	1,3-Dichloro benzene	1,4-Dichloro benzene	1,2-Dibromo-3-chloropropane	Methylene Chloride	Methyl Ethyl Ketone	Styrene	Toluene	Vinyl Chloride	Total Xylenes
Level (µg/L)		22,000*	5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000
MW-3CD	12/10/2009	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	5/18/2010	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	11/3/2010	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	5/4/2011	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	11/10/2011	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	4/26/2012	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	10/11/2012	NA	ND	1.20	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	5/23/2013	NA	ND	ND	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	11/19/2013	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	4/30/2014	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	11/25/2014	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	4/28/2015	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	11/18/2015	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	4/6/2016	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	11/8/2016	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	4/18/2017	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	11/7/2017	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	4/17/2018	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	11/13/2018	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	4/16/2019	NA	ND	NA	ND	NA	NA	NA	0.065	ND	NA	NA	ND	ND	ND
	11/21/2019	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	4/20/2020	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	11/17/2020	NA	ND	NA	ND	NA	NA	NA	NA	ND	NA	NA	ND	ND	ND
	11/17/2021	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA
	4/20/2022	NA	<0.180	NA	<0.190	NA	NA	<0.210	<0.00418	<0.330	NA	NA	<0.220	<0.170	NA
	11/30/2022	NA	<0.180	NA	<0.190	NA	NA	<0.210	NA	<0.330	NA	NA	<0.220	<0.170	NA
Level (µg/L)		22,000*	5.0	1,000*	100	600	NS	75	0.2	5	7,100*	100	1000	2	10000

ND = None detected above reporting limit

NS = No standard established

* USEPA Risk-based Screening Level for Tap Water

Maximum Contaminant Levels as stipulated under SC R.61-58.

N/A - Not analyzed

Sampling events between and including 11/2011 and 5/2013 performed by Smith + Gardner

Values in boldface exceed the associated Maximum Contaminant Level

APPENDIX A. GROUNDWATER SAMPLE COLLECTION FORMS

Georgetown SWF
GFM

11/28/11

Weather: Sunny 50s-70s
Personnel: A.H.P. D.Hill
Objectives: GW samples

11/28/2011

0600 Arrive at site

- Tailgate safety

- Calibrate meters

log water levels

<u>well</u>	<u>DTW</u>	<u>UHS</u>	<u>well</u>	<u>DTW</u>	<u>Notes</u>
MW-2VR	8.39	-	MW-6H	10.52	no lock
4V	8.51	Broken 4mgs	8H	13.31	-
5V	5.50	-	9HR	5.16	no lock
6VR	6.51	-	11H	14.59	-
7VR	7.78	-	25H	8.47	no lock
8V	4.31	-	26H	9.99	no lock
AM4R	11.81	-	27H	13.08	no lock
AM6	8.38	-	28H	12.71	no lock
1HR	8.88	-	1CD	10.87	-
5HR	4.41	over 910 no lock broken 4mgs	2CD	7.61	-
3HR	7.66	-	3CD	8.18	-

- Surface water samples w/ 1 set of water
quality readings

OT31 collect Field Blank (FB 01) next to
SW/TW-1

Location Georgetown SWF

Date 11/28/22

Project / Client GEM

- 11/30/22

0742 Find new Fenced in Cell changing
 access to MW-8V, SUTW-4, SMC-2, MW-AM-4, etc.
 - able to drive around but could be
 problematic in muddy conditions
 1830 Done for the day
 Depart site

11/28/22 A.H.

11/29/22 A.H.I., D.H.I., clear, 40's-70's

0600 Arrive at site

- Tailgate safety
- Calibrate meters
- Resume Samples

1330 D.H.I. departs site

1530 Done for the day

- will sample shot + hold wells tomorrow
 and send via FedEx

11/29/22 A.H.

11/30/22 A.H.I. Cloudy, 50's-60's

0600 Arrive at site; Calibrate meters

- Resume Samples

- Rain heavy at 12

1250 Done w/ samples - on ice

- flight and take to FedEx this
 afternoon

11/30/22 A.H.

EFM EQUIPMENT CALIBRATION FORM

Client: GARRETT & MOORE Project #: GEORGETOWN COUNTY SWF

INSTRUMENT: YSI Prot / HACH 2100 Q

SERIAL NO.: 19H106177 / 19092226

RECORDED BY: D. Hill

Date	Time	Parameter	Calibration Reading	Calibration Standards
11/28/22	0605	pH	4.00	Lot# 26C933 Exp: 3/24
			7.00	Lot# 26C1263 Exp:
			10.00	Lot# 26C371 Exp: ↓
		Sp. Conductivity 1.413mS	1.415	Lot# 26D120 Exp: 8/23
		ORP	239 mV	Lot# 8009333 Exp: 6/23
		Dissolved Oxygen Initial	99 %	
		Dissolved Oxygen Final	100 %	
		Turbidity 20/100/800	19.6 / 106 / 1795 NTU	
		Temperature	45°F	
		PH Verification Check 7.0	7.00	Lot# 26C1374 Exp: 3/24

INSTRUMENT: YSI Prot / HACH 2100 Q

SERIAL NO.: 19H106177 / 19092226

Date	Time	Parameter	Calibration Reading	Calibration Standards	
11/29/22	0608	pH	4.00	SAME AS ABOVE	
			7.00	Lot#	Exp:
			10.00	Lot#	Exp:
		Sp. Conductivity 1.413mS	1.414	Lot#	Exp:
		ORP	240		
		Dissolved Oxygen Initial	99.2 %		
		Dissolved Oxygen Final	99.9 %		
		Turbidity 20/100/800	20.1 / 101 / 799	1	NTU
		Temperature	48°F		
		PH Verification Check 7.0	7.00	Lot#	Exp:

EFM EQUIPMENT CALIBRATION FORM

Client: GARRETT & MOORE Project #: GEORGETOWN COUNTY SWF

INSTRUMENT: YSI PRO+ / HACH 2100Q

SERIAL NO.: 18J103081 / 73945

RECORDED BY: Aaron Hill

Date	Time	Parameter	Calibration Reading	Calibration Standards
11/28/22	0610	pH	4.00	Lot# 26C933 Exp: 3/24
			7.00	Lot# 26C1263 Exp:
			10.00	Lot# 26C371 Exp: ↓
		Sp. Conductivity 1.413mS	1.413	Lot# 26D120 Exp: 8/23
		ORP	241	Lot# 8009333 Exp: 6/23
		Dissolved Oxygen Initial	99.4 %	
		Dissolved Oxygen Final	100 %	
		Turbidity 20/100/800	200 / 998 / 801	NTU
		Temperature	45°F	
↓	↓	PH Verification Check 7.0	7.0	Lot# 26C1374 Exp: 3/24

INSTRUMENT: YSI PRO+ / HACH 2100Q

SERIAL NO.: _____

Date	Time	Parameter	Calibration Reading	Calibration Standards
11/29/22	0605	pH	4.00	Lot# Exp:
			7.00	Lot# Exp:
			10.00	Lot# Exp:
		Sp. Conductivity 1.413mS	1.414	Lot# Exp:
		ORP	239	
		Dissolved Oxygen Initial	99.8 %	
		Dissolved Oxygen Final	100. %	
		Turbidity 20/100/800	20.1 / 101 / 801	NTU
		Temperature	48°F	
↓	↓	PH Verification Check 7.0	7.0	Lot# , Exp:

EFM EQUIPMENT CALIBRATION FORM

Client: GARRETT & MOORE Project #: GEORGETOWN COUNTY SWF

INSTRUMENT: YSI PRO+ / HACH 2100Q

SERIAL NO.: 18J103061 / 73945 RECORDED BY: Aam 4/11

Date	Time	Parameter	Calibration Reading	Calibration Standards	
11/30/22	0608	pH	4.00	4.00	Lot# 26C933 Exp: 3/24
			7.00	6.99	Lot# 26C1263 Exp: ↓
			10.00	(0.0)	Lot# 26C371 Exp: ↓
		Sp. Conductivity 1.413mS	1.414	Lot# 26D120 Exp: 8/23	
		ORP	240	Lot# 8009333 Exp: 6/23	
		Dissolved Oxygen Initial	99.2	%	
		Dissolved Oxygen Final	99.9	%	
		Turbidity 20/100/800	20.1 / 100 / 1800	NTU	
		Temperature	49°F		
↓	↓	PH Verification Check 7.0	7.00	Lot# 26C1378 Exp: 3/24	

INSTRUMENT: YSI PRO+ / HACH 2100Q

SERIAL NO.: _____

Date	Time	Parameter	Calibration Reading	Calibration Standards
		pH	4.00	Lot# Exp:
			7.00	Lot# Exp:
			10.00	Lot# Exp:
		Sp. Conductivity 1.413mS		Lot# Exp:
		ORP		
		Dissolved Oxygen Initial		%
		Dissolved Oxygen Final		%
		Turbidity 20/100/800	/ / /	NTU
		Temperature		
↓		PH Verification Check 7.0		Lot# , Exp:

Well/Piezo ID:
Surface Water

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date: 11/28/22
Project No:	Georgetown Co. SWF	Time: Start 0620 am/pm
Site Location:	Georgetown, SC	Finish _____ am/pm
Weather Conds:	clear, 58-70°	Collector(s) <u>ADH</u>

WATER LEVEL DATA: (measured from Top of Casing)

Well Piezometer

a. Total Well Length n/a c. Casing Material n/a e. Length of Water Column n/a

b. Water Table Depth n/a d. Casing Diameter n/a f. Calculated _____

WELL PURGING DATA

a. Purge Method _____ Grab

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ n/a well volumes) _____ n/a
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	16J103081
HACH	2100	73245

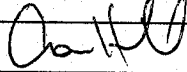
1033

Time	Sample Location	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	D.O. mg/l	ORP mV	Odor	Color
0628	SW/SMC-1	14.4	6.37	138.9	16.9	1.26	215.9	No	Clear
0657	SW/SMC-2	14.4	6.20	282.3	22.8	2.40	161.2	No	Clear
0722	SW/TW-1	14.5	6.76	371.8	36.9	0.69	-16.6	No	Clear
1327	SW/TW-2	16.1	6.91	482.1	20.4	0.73	117.0	No	Clear
1054	SW/TW-3	16.0	6.80	483.2	19.6	0.51	-5.3	No	Clear
0808	SW/TW-4	16.2	6.57	418.5	21.6	0.47	8.7	No	Clear
0657	SW/TW-5	15.1	7.20	895.6	38.9	2.53	244.8	No	Clear

Analyze for: APP IV VOCs, App IV Metals, pH/Sp Cond, EDB/DBCP

SAMPLE COLLECTION: Method: Grab

Comments _____

Signature  Date 11/28/22

Well/Piezo ID: MW- 4V

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/20/22
Project No:	Georgetown Co. SWF	Time: Start:	0621 am/pm
Site Location:	Georgetown, SC	Finish:	0900 am/pm
Weather Conds:	Sunny 60s Collector(s) <u>D. Hill</u>		

WATER LEVEL DATA: (measured from Top of Casing) Well Piezometer

a. Total Well Length 17.09 c. Casing Material PVC e. Length of Water Column 8.58 (a-b)

b. Water Table Depth 8.51 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.40 ^{DH 11/28/22}

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 200 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ 4.2 well volumes) 4.2 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	<u>19111060177</u>
HACH	2100Q	<u>19092226</u>

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
0626	INITIAL	20.2	7.49	676	139	1.4	1.01	NO	8.53
0635	0.5	20.4	7.28	681	27.5	-55.6	1.71		8.56
0644	1.0	20.8	7.26	699	55.1	-71.5	0.99		8.62
0702	2.0	21.2	7.24	712	49.7	-101.2	0.72		8.64
0720	3.0	21.4	7.24	735	31.2	-95.8	0.69		8.66
0738	4.0	21.3	7.24	733	44.5	-93.7	0.67		8.67
0747	4.5	21.3	7.24	732	45.4	-94.7	0.65		8.67

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW- <u>4V</u>	VOA	3	HCL	APP.4 VOC'S	<u>0750</u>
↓	250ml(pl)	1	HN03	APP.4 METALS	↓
↓	250ml (pl)	1	NONE	PH, SP.COND.	↓
↓	VOA	3	HCL	EDB/DBCP	↓

Comments: Hinge Broken

Signature: [Signature]

Date: 11/18/22

Well/Piezo ID: MW- 2VR

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/28/22
Project No:	Georgetown Co. SWF	Time: Start:	0803 am/pm
Site Location:	Georgetown, SC	Finish:	1013 am/pm
Weather Conds:	Sunny 60s	Collector(s):	

WATER LEVEL DATA: (measured from Top of Casing) Well Piezometer

a. Total Well Length 17.55 c. Casing Material PVC e. Length of Water Column 9.16 (a-b)

b. Water Table Depth 8.39 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.5

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 150 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ 4.5 well volumes) 4.5 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	191106177
HACH	2100Q	19092226

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
0808	INITIAL	18.9	5.87	166.3	41.6	60.6	1.41	no	8.46
0829	1.0	18.9	5.87	166.5	31.5	40.1	1.47	↓	8.50
0855	2.0	18.9	5.88	167.5	18.5	44.2	2.15	↓	8.57
0921	3.0	18.9	5.87	169.7	15.2	47.8	3.99	↓	8.62
0947	4.0	18.9	5.87	167.5	17.1	45.5	4.03	↓	8.63
1000	4.5	18.9	5.87	167.9	17.0	44.9	4.02	↓	8.69

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Have parameters stabilized	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW- 2VR	VOA	3	HCL	APP.4 VOC'S	1003
↓	250ml(pl)	1	HN03	APP.4 METALS	↓
↓	250ml (pl)	1	NONE	PH, SP.COND.	↓
↓	VOA	3	HCL	EDB/DBCP	↓

Comments _____

Signature

Date 11/28/22

Well/Piezo ID: MW-8V

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/28/22
Project No:	Georgetown Co. SWF	Time: Start	0821 am/pm
Site Location:	Georgetown, SC	Finish	1023 am/pm
Weather Conds:	Sunny 50's	Collector(s):	Sunny 10's A.H.I.

WATER LEVEL DATA: (measured from Top of Casing) Well Piezometer

a. Total Well Length 15.20 c. Casing Material PVC e. Length of Water Column 10.89 (a-b)

b. Water Table Depth 4.31 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.8

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 200 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ well volumes) 5.4 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	18J103001
HACH	2100Q	73945

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed(gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
0826	INITIAL	18.8	6.77	1171	169.0	201.0	0.58	NO	4.33
0845	1.0	18.7	6.71	1210	39.4	-26.7	0.17	NO	4.34
0904	2.0	18.8	6.71	1222	13.5	-26.9	0.17	NO	4.35
0924	3.0	18.8	6.70	1231	13.4	-27.2	0.16	NO	4.35
0945	4.0	18.9	6.69	1237	13.4	-27.8	0.17	NO	4.36
1005	5.0	18.9	6.69	1240	13.1	-28.1	0.18	NO	4.36
1014	5.5	19.0	6.69	1241	12.8	-29.5	0.18	NO	4.37
11/28/22 (1)									

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-8V	VOA	3	HCL	APP.4 VOC'S	1016
↓	250ml(pl)	1	HN03	APP.4 METALS	↓
↓	250ml (pl)	1	NONE	PH, SP.COND.	↓
↓	VOA	3	HCL	EDB/DBCP	↓

Comments _____

Signature

Date 11/28/22

Well/Piezo ID: MWV- 6VR

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/28/22
Project No:	Georgetown Co. SWF	Time: Start	1020 am/pm
Site Location:	Georgetown, SC	Finish	1148 am/pm
Weather Conds:	Sunny 60s Collector(s) <u>D Hill</u>		

WATER LEVEL DATA: (measured from Top of Casing) Well Piezometer

a. Total Well Length 16.89 c. Casing Material PVC e. Length of Water Column 10.38 (a-b)

b. Water Table Depth 6.51 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.7

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 250 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ 5 well volumes) 5 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	19H106177
HACH	2100Q	19092226

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed(gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
1025	INITIAL	19.8	6.90	2500	9.76	-86.3	0.81	NO	6.57
1035	1.0	19.8	6.95	2599	8.15	-98.7	0.51		6.59
1050	2.0	19.8	6.94	2684	7.77	-101.2	0.20		6.59
1105	3.0	19.8	6.90	2669	6.42	-110.3	0.18		6.59
1120	4.0	19.8	6.90	2655	7.79	-111.5	0.17		6.60
1135	5.0	19.8	6.91	2652	7.62	-111.6	0.17	✓	6.60

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW- <u>6VR</u>	VOA	3	HCL	APP.4 VOC'S	<u>1138</u>
↓	250ml(pl)	1	HN03	APP.4 METALS	
↓	250ml (pl)	1	NONE	PH, SP.COND.	
↓	VOA	3	HCL	EDB/DBCP	

Comments

Signature D Hill

Date 11/28/22

Well/Piezo ID: MW-5V

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/28/22
Project No:	Georgetown Co. SWF	Time: Start	1103 am/pm
Site Location:	Georgetown, SC	Finish	1310 am/pm
Weather Conds:	Sunny, 60°s	Collector(s)	AH/1

WATER LEVEL DATA: (measured from Top of Casing) Well Piezometer

a. Total Well Length 16.77 c. Casing Material PVC e. Length of Water Column 11.27 (a-b)

b. Water Table Depth 5.50 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.8

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 200 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ 3 well volumes) 5.4 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	10J103081
HACH	2100Q	73945

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
1108	INITIAL	19.0	6.28	676.4	12.8	108.9	0.77	No	5.54
1124	1.0	19.4	6.40	617.3	9.2	-1.7	0.12	No	5.55
1144	2.0	19.4	6.40	601.3	8.7	-2.8	0.12	No	5.56
1205	3.0	19.4	6.39	593.4	8.5	-6.9	0.12	No	5.56
1224	4.0	19.4	6.37	586.9	8.1	-9.6	0.11	No	5.56
1245	5.0	19.4	6.37	584.2	8.4	-10.4	0.11	No	5.57
1256	5.5	19.4	6.36	583.8	8.3	-11.3	0.11	No	5.57
11/28/22 AH									

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
↓	VOA	3	HCL	APP.4 VOC'S	↓
	250ml(pl)	1	HN03	APP.4 METALS	
	250ml (pl)	1	NONE	PH, SP.COND.	
	VOA	3	HCL	EDB/DBCP	

Comments _____

Signature *CAH*

Date 11/28/22

Well/Piezo ID: MW- 7VR

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/28/22
Project No:	Georgetown Co. SWF	Time: Start	1200 am/pm
Site Location:	Georgetown, SC	Finish	1320 am/pm
Weather Conds:	Sunny 60s	Collector(s):	D.H.U.

WATER LEVEL DATA: (measured from Top of Casing) Well Piezometer

a. Total Well Length 16.74 c. Casing Material PVC e. Length of Water Column 8.96 (a-b)

b. Water Table Depth 7.78 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.5

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 250 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ 4.5 well volumes) 4.5 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	194106177
HACH	2100Q	19092226

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
1205	INITIAL	18.9	6.98	1142	84.3	-44.6	0.49	NO	7.80
1215	1.0	18.8	6.90	1135	31.6	-69.1	0.34	↓	7.82
1230	2.0	18.8	6.80	1131	18.7	-71.2	0.20		7.82
1245	3.0	18.8	6.81	1131	10.1	-75.1	0.19		7.82
1300	4.0	18.8	6.80	1130	9.89	-75.9	0.19		7.82
1308	4.5	18.9	6.80	1131	9.86	-76.1	0.19		7.82

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW- <u>7VR</u>	VOA	3	HCL	APP.4 VOC'S	1310
↓	250ml(pl)	1	HNO3	APP.4 METALS	↓
	250ml (pl)	1	NONE	PH, SP.COND.	
	VOA	3	HCL	EDB/DBCP	

Comments

Signature 

Date 11/28/22

Well/Piezo ID:
MW- AM4R

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/28/22
Project No:	Georgetown Co. SWF	Time: Start	1325 am/pm
Site Location:	Georgetown, SC	Finish	1445 am/pm
Weather Conds:	Sunny 60's Collector(s) D.H.H.		

WATER LEVEL DATA: (measured from Top of Casing)

Well Piezometer

a. Total Well Length 19.10 c. Casing Material PVC e. Length of Water Column 7.29 (a-b)

b. Water Table Depth 11.81 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.19

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 200 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ well volumes) 3.6 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	19H106179
HACH	2100Q	19092226

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed(gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
1330	INITIAL	20.5	6.47	655	2.16	-62.6	0.27	no	11.83
1344	1.0	20.4	6.38	628	2.01	-67.9	0.18	↓	11.83
1403	2.0	20.5	6.39	671	1.71	-79.1	0.17	↓	11.85
1422	3.0	20.5	6.42	675	1.69	-78.0	0.16	↓	11.87
1432	3.6	20.5	6.42	676	1.40	-79.4	0.17	↓	11.88

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW- AM4R	VOA	3	HCL	APP.4 VOC'S	1435
↓	250ml(pl)	1	HN03	APP.4 METALS	↓
↓	250ml (pl)	1	NONE	PH, SP.COND.	↓
↓	VOA	3	HCL	EDB/DBCP	↓

Comments _____

Signature _____

Date 11/28/22

Well/Piezo ID: MW- 11H

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/28/22
Project No:	Georgetown Co. SWF	Time: Start	1455 am/pm
Site Location:	Georgetown, SC	Finish	1608 am/pm
Weather Conds:	Sunny 60s Collector(s) D.H.M.		

WATER LEVEL DATA: (measured from Top of Casing) Well Piezometer

a. Total Well Length 21.97 c. Casing Material PVC e. Length of Water Column 7.38 (a-b)

b. Water Table Depth 14.59 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.2

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 250 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ well volumes) 3.6 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	19H106177
HACH	2100Q	19092226

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
1500	INITIAL	20.4	5.63	230.3	8.49	82.4	0.53	no	14.66
1510	1.0	20.3	5.60	221.5	6.17	99.8	0.41	↓	14.69
1525	2.0	20.3	5.61	218.3	7.81	120.1	0.35	↓	14.69
1540	3.0	20.3	5.61	217.9	6.00	122.3	0.34	↓	14.69
1555	4.0	20.3	5.61	217.6	4.27	121.1	0.34	↓	14.69

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW- 11H	VOA	3	HCL	APP.4 VOC'S	1558
↓	250ml(pl)	1	HN03	APP.4 METALS	↓
↓	250ml (pl)	1	NONE	PH, SP.COND.	↓
↓	VOA	3	HCL	EDB/DBCP	↓

Comments _____

Signature 

Date 11/28/22

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/28/22
Project No:	Georgetown Co. SWF	Time: Start	1343 am/pm
Site Location:	Georgetown, SC	Finish	1625 am/pm
Weather Conds:	Sunny 70's	Collector(s)	A.H.H.

WATER LEVEL DATA: (measured from Top of Casing) Well Piezometer

a. Total Well Length 17.25 c. Casing Material PVC e. Length of Water Column 1284 (a-b)

b. Water Table Depth 4.41 d. Casing Diameter 2" f. Calculated Well Volume (see back) 2.1

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 150 ml/min.

b. Acceptance Criteria defined (from workplan):
 - Minimum Required Purge Volume (@ 3 well volumes) 6.3 GALLONS
 - Maximum Allowable Turbidity N/A NTUs
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	10J103081
HACH	2100Q	13945

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
1343	INITIAL	20.6	6.78	585.2	81	85.7	0.45	NO	4.44
1406	1.0	20.4	6.74	558.9	72	25.8	0.26	NO	4.48
1433	2.0	20.3	6.73	558.6	69	25.1	0.26	NO	4.53
1458	3.0	20.3	6.71	556.3	58	23.5	0.25	NO	4.60
1523	4.0	20.3	6.70	556.1	41	22.9	0.23	NO	4.64
1548	5.0	20.2	6.69	557.8	40	21.6	0.21	NO	4.69
1553	6.0	20.2	6.69	557.4	37	20.4	0.19	NO	4.73
1615	6.5	20.2	6.69	557.2	38	19.3	0.17	NO	4.82

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW- 54R	VOA	3	HCL	APP.4 VOC'S	1617
↓	250ml(pl)	1	HN03	APP.4 METALS	↓
	250ml (pl)	1	NONE	PH, SP.COND.	
	VOA	3	HCL	EDB/DBCP	

Comments Broken pump. No leak, overgrown

Signature A.H.H. Date 11/28/22

Well/Piezo ID:
MW- 84

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/28/22
Project No:	Georgetown Co. SWF	Time: Start	1610 am/pm
Site Location:	Georgetown, SC	Finish	1715 am/pm
Weather Conds:	Sunny 60s	Collector(s)	D Hill

WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length	<u>19.98</u>	c. Casing Material	<u>PVC</u>	e. Length of Water Column	<u>6.17</u> (a-b)
b. Water Table Depth	<u>13.81</u>	d. Casing Diameter	<u>2"</u>	f. Calculated Well Volume (see back)	<u>1.00</u>

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: ^{DR 11/28/22} 220 ml/min.
220

b. Acceptance Criteria defined (from workplan)
 - Minimum Required Purge Volume (@ 3 well volumes) 3 GALLONS
 - Maximum Allowable Turbidity N/A NTUs
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	191106177
HACH	2100Q	19092226

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed(gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
1615	INITIAL	20.5	5.21	110.7	7.98	164.3	1.37	NO	13.85
1627	1.0	20.3	4.80	139.8	6.01	218.7	0.64	↓	13.87
1644	2.0	20.1	4.79	144.7	3.02	219.9	0.60	↓	13.87
1702	3.0	20.1	4.79	145.7	2.24	220.4	0.60	↓	13.87

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW- 84	VOA	3	HCL	APP.4 VOC'S	1705
↓	250ml(pl)	1	HN03	APP.4 METALS	↓
↓	250ml (pl)	1	NONE	PH, SP.COND.	↓
↓	VOA	3	HCL	EDB/DBCP	↓

Comments

Signature D Hill

Date 11/28/22

Well/Piezo ID: MW-64

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/28/22
Project No:	Georgetown Co. SWF	Time: Start	1632 am/pm
Site Location:	Georgetown, SC	Finish	1823 am/pm
Weather Conds:	Sunny; 70°	Collector(s)	AJH

WATER LEVEL DATA: (measured from Top of Casing)

Well Piezometer

a. Total Well Length 20.40 c. Casing Material PVC e. Length of Water Column 9.88 (a-b)
 b. Water Table Depth 10.52 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.6

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 200 ml/min.

b. Acceptance Criteria defined (from workplan)
 - Minimum Required Purge Volume (@ 3 well volumes) 4.8 GALLONS
 - Maximum Allowable Turbidity N/A NTUs
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	18J103081
HACH	2100Q	73945

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
1637	INITIAL	20.7	5.62	479.7	38.9	146.7	0.55	ND	10.55
1652	1.0	20.6	5.58	458.8	20.6	112.1	0.41	N/A	10.56
1712	2.0	20.5	5.56	456.9	9.3	111.8	0.41	ND	10.56
1732	3.0	20.4	5.56	455.8	6.9	111.5	0.40	N/A	10.56
1752	4.0	20.4	5.56	454.1	6.5	110.1	0.39	NO	10.56
1812	5.0	20.4	5.56	453.9	6.1	109.9	0.37	ND	10.56
11/28/22									

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-64	VOA	3	HCL	APP.4 VOC'S	1814
↓	250ml(pl)	1	HN03	APP.4 METALS	↓
↓	250ml (pl)	1	NONE	PH, SP.COND.	↓
↓	VOA	3	HCL	EDB/DBCP	↓

Comments No leak

Signature AJH

Date 11/28/22

Well/Piezo ID:
MW-1HR

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/29/22
Project No:	Georgetown Co. SWF	Time: Start	0622 am/pm
Site Location:	Georgetown, SC	Finish	0620 am/pm
Weather Conds:	Sunny, 40's	Collector(s)	D. Hill

WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length	<u>16.37</u>	c. Casing Material	<u>PVC</u>	e. Length of Water Column	<u>9.49</u> (a-b)
b. Water Table Depth	<u>8.88</u>	d. Casing Diameter	<u>2"</u>	f. Calculated Well Volume (see back)	<u>1.6</u>

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 5.4 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ well volumes) 200 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	<u>DA18510304</u> 194106177
HACH	2100Q	<u>01173945</u> 19092226

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed(gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
0627	INITIAL	<u>17.8</u>	<u>6.46</u>	<u>669.3</u>	<u>11.9</u>	<u>289.8</u>	<u>1.14</u>	<u>NO</u>	<u>8.90</u>
0647	1.0	<u>17.0</u>	<u>6.51</u>	<u>690.4</u>	<u>12.3</u>	<u>208.9</u>	<u>0.74</u>	<u>NO</u>	<u>8.90</u>
0702	2.0	<u>17.3</u>	<u>6.51</u>	<u>690.2</u>	<u>9.9</u>	<u>192.3</u>	<u>0.71</u>	<u>NO</u>	<u>8.90</u>
0722	3.0	<u>17.6</u>	<u>6.52</u>	<u>690.1</u>	<u>9.3</u>	<u>179.6</u>	<u>0.69</u>	<u>NO</u>	<u>8.90</u>
0742	4.0	<u>17.8</u>	<u>6.52</u>	<u>690.1</u>	<u>7.8</u>	<u>175.3</u>	<u>0.64</u>	<u>NO</u>	<u>8.90</u>
0802	5.0	<u>17.9</u>	<u>6.52</u>	<u>690.0</u>	<u>7.1</u>	<u>172.8</u>	<u>0.62</u>	<u>NO</u>	<u>8.90</u>
0812	5.5	<u>17.9</u>	<u>6.52</u>	<u>690.0</u>	<u>6.9</u>	<u>171.8</u>	<u>0.60</u>	<u>NO</u>	<u>8.90</u>
<u>11/29/22</u>									

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
<u>MW-1HR</u> ↓	VOA	3	HCL	APP.4 VOC'S	<u>0814</u> ↓
	250ml(pl)	1	HN03	APP.4 METALS	
	250ml (pl)	1	NONE	PH, SP.COND.	
	VOA	3	HCL	EDB/DBCP	

Comments _____

Signature [Signature]

Date 11/29/22

Well/Piezo ID: MW- 9HR

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/29/22
Project No:	Georgetown Co. SWF	Time: Start	0615 am/pm
Site Location:	Georgetown, SC	Finish	0918 am/pm
Weather Conds:	Clear, 40's	Collector(s):	AKH

WATER LEVEL DATA: (measured from Top of Casing) Well Piezometer

a. Total Well Length 15.80 c. Casing Material PVC e. Length of Water Column 10.64 (a-b)

b. Water Table Depth 5.16 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.7

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 120 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ 3 well volumes) 5.1 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	18J103061
HACH	2100Q	73945

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
0620	INITIAL	17.2	6.32	987.1	4.8	324.4	1.47	NO	5.20
0645	1.0	16.2	6.32	870.1	3.6	320.6	1.28	NO	5.21
0715	2.0	16.3	6.32	852.3	2.4	318.9	1.25	NO	5.21
0745	3.0	17.3	6.31	844.9	3.1	312.8	1.22	NO	5.21
0815	4.0	17.5	6.31	833.5	3.3	308.6	1.19	NO	5.21
0845	5.0	17.6	6.31	826.5	3.2	299.9	1.13	NO	5.21
0900	5.5	17.6	6.31	826.4	3.8	298.3	1.10	NO	5.21

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Have parameters stabilized	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW- 9HR	VOA	3	HCL	APP.4 VOC'S	0902
↓	250ml(pl)	1	HN03	APP.4 METALS	↓
↓	250ml (pl)	1	NONE	PH, SP.COND.	↓
↓	VOA	3	HCL	EDB/DBCP	↓

Comments

No lock

Signature

[Handwritten Signature]

Date 11/29/22

Well/Piezo ID: MW-2514

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/29/22
Project No:	Georgetown Co. SWF	Time: Start	0838 am/pm
Site Location:	Georgetown, SC	Finish	1030 am/pm
Weather Conds:	Sunny 50's	Collector(s)	AH:1

WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length	<u>18.25</u>	c. Casing Material	<u>PVC</u>	e. Length of Water Column	<u>9.78</u> (a-b)
b. Water Table Depth	<u>8.47</u>	d. Casing Diameter	<u>2"</u>	f. Calculated Well Volume (see back)	<u>1.6</u>

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 200 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ well volumes) GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	194106001 194106007
HACH	2100Q	83945 1909226

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
0838	INITIAL	19.5	7.16	537.5	26.3	232.8	1.04	Nb	8.51
0848	1.0	20.7	7.15	540.5	12.2	-34.4	0.14	Nb	8.51
0908	2.0	20.7	7.15	540.7	8.6	-51.7	0.13	Nb	8.51
0928	3.0	20.7	7.15	540.9	6.9	-60.3	0.13	Nb	8.51
0948	4.0	20.7	7.14	541.0	5.8	-62.5	0.12	Nb	8.51
1008	5.0	20.7	7.14	541.4	4.7	-69.1	0.11	Nb	8.51
1018	5.5	20.7	7.14	541.6	4.2	-70.6	0.11	Nb	8.51
11/29/22 AH									

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-2514	VOA	3	HCL	APP.4 VOC'S	1020
↓	250ml(pl)	1	HN03	APP.4 METALS	↓
↓	250ml (pl)	1	NONE	PH, SP.COND.	↓
↓	VOA	3	HCL	EDB/BCP	↓

Comments

No lock

Signature

Date 11/29/22

Well/Piezo ID: MW-AM6

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/29/22
Project No:	Georgetown Co. SWF	Time: Start	0925 am/pm
Site Location:	Georgetown, SC	Finish	1007 am/pm
Weather Conds:	Sunny 50°s	Collector(s)	AKL

WATER LEVEL DATA: (measured from Top of Casing) Well Piezometer

a. Total Well Length 17.80 c. Casing Material PVC e. Length of Water Column 9.42 (a-b)

b. Water Table Depth 8.38 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.5

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 200 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ 3 well volumes) 4.5 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	18J103081
HACH	2100Q	73945

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed(gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
0930	INITIAL	19.9	6.31	292.8	10.6	3.6	0.82	NO	8.40
0945	1.0	19.7	5.65	241.2	6.4	6.0	0.05	NO	8.40
1005	2.0	19.7	5.69	228.4	22.6	12.6	0.15	NO	8.40
1025	3.0	19.7	5.73	221.6	22.7	15.1	0.14	NO	8.40
1045	4.0	19.8	5.73	220.9	22.5	17.2	0.14	NO	8.40
1055	4.5	19.8	5.74	220.3	22.4	18.3	0.14	NO	8.40
11/29/2022									

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-AM6	VOA	3	HCL	APP.4 VOC'S	1057
↓	250ml(pl)	1	HN03	APP.4 METALS	↓
↓	250ml (pl)	1	NONE	PH, SP.COND.	↓
↓	VOA	3	HCL	EDB/DBCP	↓

Comments

Signature AKL

Date 11/29/22

Well/Piezo ID: PH
MW AMG 6

MW-264

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/29/22
Project No:	Georgetown Co. SWF	Time: Start	1042 am/pm
Site Location:	Georgetown, SC	Finish	1213 am/pm
Weather Conds:	Sunny, 60°	Collector(s):	D. Hill

WATER LEVEL DATA: (measured from Top of Casing)

Well Piezometer

a. Total Well Length 18.67 c. Casing Material PVC e. Length of Water Column 8.68 (a-b)
 b. Water Table Depth 9.99 d. Casing Diameter 2" f. Calculated Well Volume (see back) 6.4

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 120 ml/min.

b. Acceptance Criteria defined (from workplan)
 - Minimum Required Purge Volume (@ 3 well volumes) 4.2 GALLONS
 - Maximum Allowable Turbidity N/A NTUs
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	<u>PH 18J1070461 194106177</u>
HACH	2100Q	<u>PH 73945 19092226</u>

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
1047	INITIAL	20.3	6.22	584.7	8.2	242.7	3.34	NO	10.05
1112	1.0	20.2	6.23	595.4	7.1	222.2	2.74	NO	10.05
1142	2.0	20.2	6.34	669.3	6.4	211.9	0.92	NO	10.05
1212	3.0	20.2	6.38	670.9	6.2	201.4	0.89	NO	10.05
1242	4.0	20.3	6.38	676.2	5.7	198.3	0.8	NO	10.05
1257	4.5	20.3	6.39	678.3	5.6	196.2	0.79	NO	10.05
11/29/22									

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW- AMG 264	VOA	3	HCL	APP.4 VOC'S	1300
<u>PH</u>	250ml(pl)	1	HN03	APP.4 METALS	↓
↓	250ml (pl)	1	NONE	PH, SP.COND.	↓
↓	VOA	3	HCL	EDB/DBCP	↓

Comments No lock

Signature D. Hill

Date 11/ / 22

Well/Piezo ID:
MW-274

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/29/22
Project No:	Georgetown Co. SWF	Time: Start	1123 am/pm
Site Location:	Georgetown, SC	Finish	1248 am/pm
Weather Conds:	Sunny 70%	Collector(s):	A Hill

WATER LEVEL DATA: (measured from Top of Casing)

Well Piezometer

a. Total Well Length 22.91 c. Casing Material PVC e. Length of Water Column 9.83 (a-b)
 b. Water Table Depth 13.08 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.6

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 250 ml/min.

b. Acceptance Criteria defined (from workplan)
 - Minimum Required Purge Volume (@ 3 well volumes) 4.8 GALLONS
 - Maximum Allowable Turbidity N/A NTUs
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	185103081
HACH	2100Q	73945

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
1128	INITIAL	20.6	7.17	500.2	22.4	124.3	0.60	NO	13.10
1136	1.0	20.6	7.16	506.7	12.6	-6.5	0.30	NO	13.10
1153	2.0	20.6	7.12	506.3	8.1	-38.7	0.30	NO	13.10
1208	3.0	20.6	7.11	505.9	7.4	-42.5	0.29	NO	13.10
1223	4.0	20.5	7.11	505.8	6.9	-49.7	0.27	NO	13.10
1238	5.0	20.5	7.10	505.3	6.3	-51.0	0.27	NO	13.10
11/29/2021									

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-274	VOA	3	HCL	APP.4 VOC'S	1240
↓	250ml(pl)	1	HN03	APP.4 METALS	↓
	250ml (pl)	1	NONE	PH, SP.COND.	
	VOA	3	HCL	EDB/DBCP	

Comments

No lock

Signature

[Handwritten Signature]

Date 11/29/22

Well/Piezo ID:
MW-26H

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/29/22
Project No:	Georgetown Co. SWF	Time: Start	1301 am/pm
Site Location:	Georgetown, SC	Finish	1528 am/pm
Weather Conds:	Sunny 70°s	Collector(s)	A Hill

WATER LEVEL DATA: (measured from Top of Casing)

Well Piezometer

a. Total Well Length 21.28 c. Casing Material PVC e. Length of Water Column 8.57 (a-b)
 b. Water Table Depth 12.71 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.4

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 120 ml/min.

b. Acceptance Criteria defined (from workplan):
 - Minimum Required Purge Volume (@ 3 well volumes) 4.2 GALLONS
 - Maximum Allowable Turbidity N/A NTUs
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	105103081
HACH	2100Q	73945

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
1306	INITIAL	22.0	7.06	463.8	369	-150.8	0.62	NO	12.72
1331	1.0	22.1	6.96	465.3	59.6	-20.5	0.14	NO	12.72
1401	2.0	22.1	6.88	459.2	28.4	19.1	0.13	NO	12.73
1431	3.0	22.1	6.84	455.7	28.0	17.3	0.13	NO	12.74
1501	4.0	22.1	6.80	451.9	28.3	16.9	0.12	NO	12.74
1516	4.5	22.1	6.78	451.8	28.1	-15.5	0.12	NO	12.74
11/29/22 N/A									

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Have parameters stabilized	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-26H	VOA	3	HCL	APP.4 VOC'S	1518
✓	250ml(pl)	1	HN03	APP.4 METALS	↓
	250ml (pl)	1	NONE	PH, SP.COND.	
	VOA	3	HCL	EDB/DBCP	

Comments

No lock

Signature

A Hill

Date 11/29/22

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/30/22
Project No:	Georgetown Co. SWF	Time: Start	0622 am/pm
Site Location:	Georgetown, SC	Finish	0750 am/pm
Weather Conds:	Cloudy 50's Collector(s) <u>AH</u>		

WATER LEVEL DATA: (measured from Top of Casing) Well Piezometer

a. Total Well Length 17.54 c. Casing Material PVC e. Length of Water Column 9.88 (a-b)

b. Water Table Depth 7.66 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.6

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 250 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ 4.8 well volumes) 4.8 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	181103061
HACH	2100Q	73945

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
0627	INITIAL	19.8	5.41	401.8	9.4	307.8	1.23	NO	7.68
0637	1.0	19.6	5.33	413.3	8.1	301.7	0.90	NO	7.69
0652	2.0	19.2	5.29	410.1	8.0	302.5	0.73	NO	7.69
0717	3.0	19.2	5.24	409.7	7.7	299.8	0.69	NO	7.69
0732	4.0	19.1	5.24	409.1	7.6	299.1	0.69	NO	7.69
0740	4.5	19.1	5.23	408.7	7.4	298.8	0.68	NO	7.69
11/30/22 AH									

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-314	VOA	3	HCL	APP.4/ APP.3 VOC'S	0742
	250ml(pl)	1	HN03	APP.4/ APP.3 METALS Hg	
	500ml(pl)	1	NONE	PH, Sp. Cond., CL, SO4, NO3	
	VOA	3	HCL	EDB/DPCP 8011	

Comments Broken hinge

Signature [Signature] Date 11/30/22

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date: 11/30/22
Project No:	Georgetown Co. SWF	Time: Start 0758 am/pm
Site Location:	Georgetown, SC	Finish 0908 am/pm
Weather Conds:	Cloudy 50's	Collector(s) A.H.H.

WATER LEVEL DATA: (measured from Top of Casing) Well Piezometer

a. Total Well Length 18.47 c. Casing Material PVC e. Length of Water Column 7.60 (a-b)

b. Water Table Depth 10.87 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.2

WELL PURGING DATA.

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 250 ml/min.

b. Acceptance Criteria defined (from workplan)
 - Minimum Required Purge Volume (@ 3 well volumes) 3.6 GALLONS
 - Maximum Allowable Turbidity N/A NTUs
 - Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	18J103081
HACH	2100Q	73945

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed(gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
0803	INITIAL	19.4	6.31	567.9	231	272.8	1.15	NO	10.90
0813	1.0	20.0	6.88	688.1	126	-47.9	0.16	NO	10.90
0828	2.0	20.1	6.82	689.5	6.9	-64.3	0.15	NO	10.90
0843	3.0	20.1	6.80	691.4	6.3	-66.1	0.14	NO	10.90
0858	4.0	20.1	6.80	692.3	6.0	-67.7	0.14	NO	10.90
11/30/22 A.H.H.									

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-1CD	VOA	3	HCL	APP.3 VOC'S	0900
↓	250ml(pl)	1	HN03	APP.3 METALS	↓
↓	500ml(pl)	1	NONE	PH, Sp. Cond., CL, SO4, NO3	↓

Comments _____

Signature A.H.H.

Date 11/30/22

Well/Piezo ID: MW- 200

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/30/22
Project No:	Georgetown Co. SWF	Time: Start	0920 am/pm
Site Location:	Georgetown, SC	Finish	1051 am/pm
Weather Conds:	p. cloudy; 60°S	Collector(s):	AJH

WATER LEVEL DATA: (measured from Top of Casing) Well Piezometer

a. Total Well Length 18.43 c. Casing Material PVC e. Length of Water Column 10.82 (a-b)

b. Water Table Depth 7.61 d. Casing Diameter 2" f. Calculated Well Volume (see back) 1.8

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE: 250 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ 3 well volumes) 5.4 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	16J103081
HACH	2100Q	73745

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed(gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
0925	INITIAL	20.4	6.42	845.5	19.8	157.4	1.97	NO	7.63
0935	1.0	20.8	6.22	922.4	20.4	130.5	0.26	NO	7.63
0950	2.0	20.9	6.21	925.9	19.6	129.1	0.26	NO	7.63
1005	3.0	20.9	6.19	928.6	19.1	125.3	0.25	NO	7.63
1020	4.0	20.9	6.19	930.4	18.8	121.4	0.24	NO	7.63
1035	5.0	20.9	6.17	932.0	18.8	119.8	0.24	NO	7.63
1043	5.5	20.9	6.16	932.6	18.9	118.1	0.23	NO	7.63
11/30/22 AJH									

e. Acceptance criteria pass/fail

	Yes	No	N/A
Has required volume been removed	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Has required turbidity been reached	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW- 200	VOA	3	HCL	APP.3 VOC'S	1044
↓	250ml(pl)	1	HN03	APP.3 METALS	↓
↓	500ml(pl)	1	NONE	PH, Sp. Cond., CL, SO4, NO3	↓

Comments _____

Signature AJH

Date 11/30/22

Well/Piezo ID: MW-3CD

Ground Water Sample Collection Record

Client:	GARRETT & MOORE, INC.	Date:	11/30/22
Project No:	Georgetown Co. SWF	Time: Start	10:57 am/pm
Site Location:	Georgetown, SC	Finish	12:36 am/pm
Weather Conds:	Rain, 50's	Collector(s)	A/H/11

WATER LEVEL DATA: (measured from Top of Casing)

a. Total Well Length	<u>19.55</u>	c. Casing Material	<u>PVC</u>	e. Length of Water Column	<u>11.37</u> (a-b)
b. Water Table Depth	<u>8.18</u>	d. Casing Diameter	<u>2"</u>	f. Calculated Well Volume (see back)	<u>1.9</u>

WELL PURGING DATA

a. Purge Method LOW FLOW / PERISTALTIC PUMP PURGE RATE 250 ml/min.

b. Acceptance Criteria defined (from workplan)

- Minimum Required Purge Volume (@ 3 well volumes) 5.7 GALLONS
- Maximum Allowable Turbidity N/A NTUs
- Stabilization of parameters 10 %

c. Field Testing Equipment Used:

Make	Model	Serial Number
YSI	PRO+	18J10308
HACH	2100Q	73945

d. Field Testing Equipment Calibration Documentation Recorded on Separate Form.

Time	Volume Removed (gal)	TEMP C	pH S.U.	Spec. Cond (umhos)	TURBIDITY NTUs	ORP	DO mg/l	Odor	DTW
1102	INITIAL	19.7	6.62	845.7	59.6	27.4	0.48	NO	8.20
1112	1.0	19.6	6.59	846.9	18.3	-21.5	0.17	NO	8.20
1127	2.0	19.6	6.59	850.3	12.9	-35.5	0.17	NO	8.20
1142	3.0	19.6	6.59	855.2	12.8	-40.2	0.16	NO	8.20
1157	4.0	19.5	6.60	861.5	12.8	-45.3	0.14	NO	8.20
1212	5.0	19.5	6.60	864.0	12.6	-47.9	0.14	NO	8.20
1227	6.0	19.5	6.60	864.4	12.7	-48.5	0.12	NO	8.20
<u>11/30/22 AH</u>									

e. Acceptance criteria pass/fail

Has required volume been removed	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
Has required turbidity been reached	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Have parameters stabilized	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

If no or N/A - Explain below.

SAMPLE COLLECTION: Method: Pump Tubing

Sample ID	Container Type	No. of Containers	Preservation	Analysis	Time
MW-3CD	VOA	3	HCL	APP 3 VOC'S	1229
↓	250ml(pl)	1	HN03	APP 3 METALS	↓
↓	250ml (pl)	1	NONE	cl, SO4, PH, SP.COND, NO3	↓
↓	VOA	3	HCL	ESB/BCP	

Comments _____

Signature [Signature]

Date 11/30 /22

APPENDIX B. LANDFILL GAS MONITORING RECORDS

Landfill Gas Monitoring Data Form

Facility Name: Georgetown County Landfill Permit Number: 221001-1102
 Sample Collector Name & Position: George Montgomery, Methane Technician
 Gas Meter Type & Serial Number: GEM 2000, GM12191 Gas Meter Calibr: [REDACTED]
 Field Calibration Date & Time: [REDACTED]
 Field Calibration Gas Type (15/15 or 35/50): 35/50 CO2&CH4 ; 50/25 CO&H2S
 Gas Meter Pump Rate: NA

5/28/2019
15 Dec 2021

Inspection Date: ##### ^{63°}
 Ambient Air Temp: [REDACTED] Barometric Pressure (in. or mm Hg): [REDACTED] 29.96
 Weather Conditions: clear Cloudy

Instructions: Under "Location or LFG Well", list monitoring well # or describe monitoring location (e.g., inside field office). Attach a test location map or drawing. Report methane readings as both % LEL and % CH4 by volume. Convert % CH4 (by volume) to % LEL as follows: % methane (by volume)X20 = % LEL. *Hydrogen Sulfide (H2S) gas monitoring may be required for Construction & Demolition Landfills (CDLFs). See individual permit conditions and/or Facility LFG monitoring plan.

LFG Well ID	Sample Tube Purge	Time of Day	Time Pumped (sec)	Initial % LEL	Stabilized % LEL	% CH4 (vol)	% O2 (vol)	% CO2 (vol)	% H2S* (vol)	NOTES
EG-W1	yes	8:08	120	001		001	21.4	0.0		
EG-W2	yes	8:12	120	001			21.2	0.0		
EG-W3	yes	8:17	120	001			20.9	0.1		
EG-W4	yes	8:30	120	001			21.0	0.0		
EG-W5	yes	8:49	120	001			21.2	0.1		
EG-W6	yes	8:53	120	001			21.4	0.0		

ACTION LEVELS: Methane: >1.25% by volume (inside structures) AND >5% by volume (at facility boundary)
 Hydrogen Sulfide: >1% by volume (inside structures) AND >4% by volume (at facility boundary)

Certification
 To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

SIGNATURE [Signature] TITLE Methane Tech DATE Mar 16 2022

Landfill Gas Monitoring Data Form

Facility Name: Georgetown County Landfill

Permit Number: 221001-1102

Page 2 of 2

Sample Collector Name & Position: George Montgomery, Methane Technician

Gas Meter Type & Serial Number: GEM 2000, GM12191

Gas Meter Calibration Date: [REDACTED]

Field Calibration Date & Time: 5/18/2017

Field Calibration Gas Type (15/15 or 35/50): 35/50 CO2&CH4 ; 50/25 CO&H2S

Gas Meter Pump Rate: NA

Ambient Air Temp: [REDACTED]

[REDACTED] Barometric Pressure (in. or mm Hg): [REDACTED] 29.96

Weather Conditions: [REDACTED] Cloudy

Instructions:

Under "Location or LFG Well", list monitoring well # or describe monitoring location (e.g., inside field office).

Attach a test location map or drawing. Report methane readings as both % LEL and % CH4 by volume.

Convert % CH4 (by volume) to % LEL as follows: % methane (by volume)/20 = % LEL.

*Hydrogen Sulfide (H2S) gas monitoring may be required for Construction & Demolition Landfills (CDLFs). See

Structure Location ID	Sample Tube Purge	Time of Day	Time Pumped (sec)	Initial % LEL	Stabilized % LEL	% CH4 (vol)	% O2 (vol)	% CO2 (vol)	% H2S* (vol)	NOTES
S1 - compost										
S2- MRF	yes	10:17	60			0.0	20.6	0.3		
S3 - LFG trailer	yes	10:00	60			0.0	19.3	0.1		
S4- Scalehouse	yes	10:40	60			0.0	20.0	0.3		
S5- Paint Shop	yes	10:45	60			0.0	21	0.2		
S6-Swap Shop	yes	10:47	60			0.0	19	0.3		
S7 - Admin	yes	10:50	60			0.0	19.4	0.1		
S7.1 - Admin Crawlspace	yes	10:31	60			0.0	21.1	0.3		
S8- EEC	yes	10:27	60			0.0	20.8	0.1		
S9- Nature Center	na									
S10 -Breakroom	yes	11:00	60			0.0	20.3	0.1		
S11- Maintenance	yes	11:15	60			0.0	20	0.3		

ACTION LEVELS: Methane: >1.25% by volume (inside structures) AND >5% by volume (at facility boundary)

Hydrogen Sulfide: >1% by volume (inside structures) AND >4% by volume (at facility boundary)

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

SIGNATURE [Signature] TITLE Methane Tech DATE _____

Landfill Gas Monitoring Data Form

Facility Name: Georgetown County Landfill

Permit Number: 221001-1102

Page 2 of 2

Sample Collector Name & Position: George Montgomery, Methane Technician

Gas Meter Type & Serial Number: GEM 2000, GM12191

Gas Meter Calibration Date:

Field Calibration Date & Time:

Field Calibration Gas Type (15/15 or 35/50): 35/50 CO2&CH4 ; 50/25 CO&H2S

Gas Meter Pump Rate: NA

Inspection Date: 1/19/2021

Ambient Air Temp: 90° Barometric Pressure (in. or mm Hg): 29.98

Weather Conditions: Sunny

Instructions:

Under "Location or LFG Well", list monitoring well # or describe monitoring location (e.g., inside field office).

Attach a test location map or drawing. Report methane readings as both % LEL and % CH4 by volume. Convert %

CH4 (by volume) to % LEL as follows: % methane (by volume)X20 = % LEL.

*Hydrogen Sulfide (H2S) gas monitoring may be required for Construction & Demolition Landfills (CDLFs). See individual

Structure Location ID	Sample Tube Purge	Time of Day	Time Pumped (sec)	Initial % LEL	Stabilized % LEL	% CH4 (vol)	% O2 (vol)	% CO2 (vol)	% H2S* (vol)	NOTES
S1 - compost	yes	13:32	60			0.2	20.7	0		New machine in budget for July
S2- MRF	yes	13:24	60			0.1	20.8	0.1		
S3 - LFG trailer	yes	13:42	60			0.2	20	0.1		
S4- Scalehouse	yes	12:57	60			0	20.2	0		
S5- Paint Shop	yes	12:43	60			0	19.2	0		
S6-Swap Shop	yes	12:50	60			0	19.6	0		
S7 - Admin	yes	13:07	60			0	21	0.2		
S7.1 - Admin Crawlspace	yes									
S8- EEC	yes	1:17pm	60			0	20.8	0		
S9- Nature Center	yes	13:19	60			0		0.3		
S10 - Breakroom	yes	13:42 pm	60			0	0	0		
S11- Maintenance	yes									

ACTION LEVEL Methane: >1.25% by volume (inside structures) AND >5% by volume (at facility boundary)

Hydrogen Sulfide: >1% by volume (inside structures) AND >4% by volume (at facility boundary)

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

SIGNATURE *George Montgomery*

TITLE Methane Tech

DATE 6-22-22

Landfill Gas Monitoring Data Form

Facility Name: Georgetown County Landfill

Permit Number: 221001-1102

Page 1 of 2

Sample Collector Name & Position: George Montgomery, Methane Technician

Gas Meter Type & Serial Number: GEM 2000, GM12191

Gas Meter Calibration Date:

Field Calibration Date & Time:

Field Calibration Gas Type (15/15 or 35/50): 35/50 CO2&CH4 ; 50/25 CO&H2S

Gas Meter Pump Rate: NA

Inspection Date: 1/19/2021

Ambient Air Temp: 90 Barometric Pressure (in. or mm Hg): 29.96

Weather Conditions: Sunny

Instructions:

Under "Location or LFG Well", list monitoring well # or describe monitoring location (e.g., inside field office).

Attach a test location map or drawing. Report methane readings as both % LEL and % CH4 by volume. Convert %

CH4 (by volume) to % LEL as follows: % methane (by volume)X20 = % LEL.

*Hydrogen Sulfide (H2S) gas monitoring may be required for Construction & Demolition Landfills (CDLFs). See individual permit conditions and/or Facility LFG monitoring plan.

LFG Well ID	Sample Tube Purge	Time of Day	Time Pumped (sec)	Initial % LEL	Stabil % LEL	% CH4 (vol)	% O2 (vol)	% CO2 (vol)	% H2S* (vol)	NOTES
EG-W1	yes	13:46	120			0.5	20	1.9		
EG-W2	yes	1:52	120			0	19.2	1.2		
EG-W3	yes	2:10	120			0.3	19	1.7		
EG-W4	yes	2:26	120			0	19.1	1.2		
EG-W5	yes	2:36	120			0	18.8	1.6		
EG-W6	yes	2:48	120			0	18.4	2.4		

ACTION LEVEL Methane: >1.25% by volume (inside structures) AND >5% by volume (at facility boundary)
 Hydrogen Sulfide: >1% by volume (inside structures) AND >4% by volume (at facility boundary)

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

SIGNATURE  TITLE Methane Tech DATE 6-22-2002

Landfill Gas Monitoring Data Form

Facility Name: Georgetown County Landfill

Permit Number: 221001-1102

Page 1 of 2

Sample Collector Name & Position: George Montgomery, Methane Technician

Gas Meter Type & Serial Number: GEM 2000, GM12191

Gas Meter Calibration Date:

Field Calibration Date & Time:

Field Calibration Gas Type (15/15 or 35/50): 35/50 CO2&CH4 ; 50/25 CO&H2S

Gas Meter Pump Rate: NA

Inspection Date:

Ambient Air Temp: 69 Barometric Pressure (in. or mm Hg):

Weather Conditions: cloudy, 50-65

Instructions:

Under "Location or LFG Well", list monitoring well # or describe monitoring location (e.g., inside field office). Attach a test location map or drawing. Report methane readings as both % LEL and % CH4 by volume. Convert % CH4 (by volume) to % LEL as follows: % methane (by volume)X20 = % LEL. *Hydrogen Sulfide (H2S) gas monitoring may be required for Construction & Demolition Landfills (CDLFs). See individual permit conditions and/or Facility LFG monitoring plan.

LFG Well ID	Sample Tube Purge	Time of Day	Time Pumped (sec)	Initial % LEL	Stabilized % LEL	% CH4 (vol)	% O2 (vol)	% CO2 (vol)	% H2S* (vol)	NOTES
EG-W1	Yes	8:10	120			0.5	19	1.9		
EG-W2	Yes	8:13	120			0	19.1	1.2		
EG-W3	Yes	8:23	120			0.1	19	1.7		
EG-W4	Yes	8:42	120			0.1	20	1.2		
EG-W5	Yes	9:00	120			0	18.8	1.6		
EG-W6	Yes	9:15	120			0	15.5	2.4		

ACTION LEVELS: Methane: >1.25% by volume (inside structures) AND >5% by volume (at facility boundary)
 Hydrogen Sulfide: >1% by volume (inside structures) AND >4% by volume (at facility boundary)

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

SIGNATURE *George Montgomery* TITLE Methane Tech DATE 11-28-22

Landfill Gas Monitoring Data Form

Facility Name: Georgetown County Landfill

Permit Number: 221001-1102

Page 2 of 2

Sample Collector Name & Position: George Montgomery, Methane Technician

Gas Meter Type & Serial Number: GEM 2000, GM12191

Gas Meter Calibration Date: 4/13/2018

Field Calibration Date & Time:

Field Calibration Gas Type (15/15 or 35/50): 35/50 CO2&CH4 ; 50/25 CO&H2S

Gas Meter Pump Rate: NA

Inspection Date:

Ambient Air Temp: 69 Barometric Pressure (in. or mm Hg): 29.87

Weather Conditions: Clear Skies

Instructions:

Under "Location or LFG Well", list monitoring well # or describe monitoring location (e.g., inside field office). Attach a test location map or drawing. Report methane readings as both % LEL and % CH4 by volume. Convert % CH4 (by volume) to % LEL as follows: % methane (by volume)X20 = % LEL.
*Hydrogen Sulfide (H2S) gas monitoring may be required for Construction & Demolition Landfills (CDLFs). See

Structure Location ID	Sample Tube Purge	Time of Day	Time Pumped (sec)	Initial % LEL	Stabilized % LEL	% CH4 (vol)	% O2 (vol)	% CO2 (vol)	% H2S* (vol)	NOTES
S1 - compost	yes	9:50	60			.1	20.6	0		New machine was in July subject
S2- MRF	yes	9:55	60			.1	20.8	0.1		
S3 - LFG trailer	yes	10:03	60			.3	20	0.1		
S4- Scalehouse	yes	10:08	60			0	20.2	0		
S5- Paint Shop	yes	10:12	60			0	19.2	0		
S6-Swap Shop	yes	10:17	60			0	19.4	0		
S7 - Admin	yes	10:23	60			0	21	.2		
S7.1 - Admin Crawlspace	Yes	10:31	60			20	0	.1		
S8- EEC	yes	10:40	60			0	20	0.2		
S9- Nature Center	Yes	10:44	60			0	0.3	0		
S10 -Breakroom	yes	10:53	60			0		.3		
S11- Maintenance										

ACTION LEVELS: Methane: >1.25% by volume (inside structures) AND >5% by volume (at facility boundary)
Hydrogen Sulfide: >1% by volume (inside structures) AND >4% by volume (at facility boundary)

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

SIGNATURE  TITLE Methane Tech DATE 11-28-22

Landfill Gas Monitoring Data Form

Facility Name: Georgetown County Landfill

Permit Number: 221001-1102

Page 1 of 2

Sample Collector Name & Position: George Montgomery, Methane Technician

Gas Meter Type & Serial Number: GEM 2000, GM12191

Gas Meter Calibration Date:

Field Calibration Date & Time:

Field Calibration Gas Type (15/15 or 35/50): 35/50 CO2&CH4 ; 50/25 CO&H2S

Gas Meter Pump Rate: NA

Inspection Date: 1/19/2021

Ambient Air Temp: 57° Barometric Pressure (in. or mm Hg): 30.18

Weather Conditions:

Instructions:

Under "Location or LFG Well", list monitoring well # or describe monitoring location (e.g., inside field office).

Attach a test location map or drawing. Report methane readings as both % LEL and % CH4 by volume.

Convert %

CH4 (by volume) to % LEL as follows: % methane (by volume)X20 = % LEL.

*Hydrogen Sulfide (H2S) gas monitoring may be required for Construction & Demolition Landfills (CDLFs). See individual permit conditions and/or Facility LFG monitoring plan.

LFG Well ID	Sample Tube Purge	Time of Day	Time Pumped (sec)	Initial % LEL	Stabil % LEL	% CH4 (vol)	% O2 (vol)	% CO2 (vol)	% H2S* (vol)	NOTES
										<i>NOV GEM</i>
EG-W1	yes	8:20	120	001		71.4	0			<i>Pricing</i>
EG-W2	yes	8:29	120	001		21.3	0			
EG-W3	yes	8:34	120	001		21	0			
EG-W4	yes	8:39	120	001		21	0			
EG-W5	yes	8:44	120	001		21.2	0			
EG-W6	yes	8:57	120	001		20.8	0			

ACTION LEVEL Methane: >1.25% by volume (inside structures) AND >5% by volume (at facility boundary)

Hydrogen Sulfide: >1% by volume (inside structures) AND >4% by volume (at facility boundary)

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

SIGNATURE 

TITLE Methane Tech

DATE 29-Dec-20
Dec

Landfill Gas Monitoring Data Form

Facility Name: Georgetown County Landfill

Permit Number: 221001-1102

Sample Collector Name & Position: George Montgomery, Methane Technician

Gas Meter Type & Serial Number: GEM 2000, GM12191

Gas Meter Calibration Date:

Field Calibration Date & Time:

Field Calibration Gas Type (15/15 or 35/50): 35/50 CO2&CH4 ; 50/25 CO&H2S

Gas Meter Pump Rate: NA

Inspection Date: 1/19/2021

Ambient Air Temp: 57° Barometric Pressure (in. or mm Hg): 30.18

Weather Conditions: Clear

Instructions:

Under "Location or LFG Well", list monitoring well # or describe monitoring location (e.g., inside field office).

Attach a test location map or drawing. Report methane readings as both % LEL and % CH4 by volume.

Convert %

CH4 (by volume) to % LEL as follows: % methane (by volume)X20 = % LEL.

*Hydrogen Sulfide (H2S) gas monitoring may be required for Construction & Demolition Landfills (CDLFs). See individual

Structure Location ID	Sample Tube Purge	Time of Day	Time Pumped (sec)	Initial % LEL	Stabilized % LEL	% CH4 (vol)	% O2 (vol)	% CO2 (vol)	% H2S* (vol)	NOTES
S1 - compost	yes	9:03	60			0	21	03		New GEM Pricing/Budget
S2- MRF	yes	9:08	60			0	19.1	01		
S3 - LFG trailer	yes	9:15	60			0	20	03		
S4- Scalehouse	yes	9:18	60			0	21	02		
S5- Paint Shop	yes	9:24	60			0	18.9	03		
S6-Swap Shop	yes	9:28	60			0	19.1	02		
S7 - Admin	yes	9:33	60			0	21	01		
S7.1 - Admin Crawlspace	yes	9:36	60			0	21	03		
S8- EEC	yes	9:40	60			0	20	01		
S9- Nature Center	yes	9:44	60			0	20.2	01		
S10 - Breakroom	yes	9:47	60			0	20	01		
S11- Maintenance	yes	9:50	60			0	20.1	02		

ACTION LEVEL Methane: >1.25% by volume (inside structures) AND >5% by volume (at facility boundary)

Hydrogen Sulfide: >1% by volume (inside structures) AND >4% by volume (at facility boundary)

Certification

To the best of my knowledge, the information reported and statements made on this data submittal and attachments are true and correct. I am aware that there are significant penalties for making any false statement, representation, or certification including the possibility of a fine and imprisonment.

SIGNATURE George Montgomery

TITLE Methane Tech

DATE 29 Dec 2022
Dec

APPENDIX C. STATISTICAL ANALYSIS DATA & TIME SERIES GRAPHS

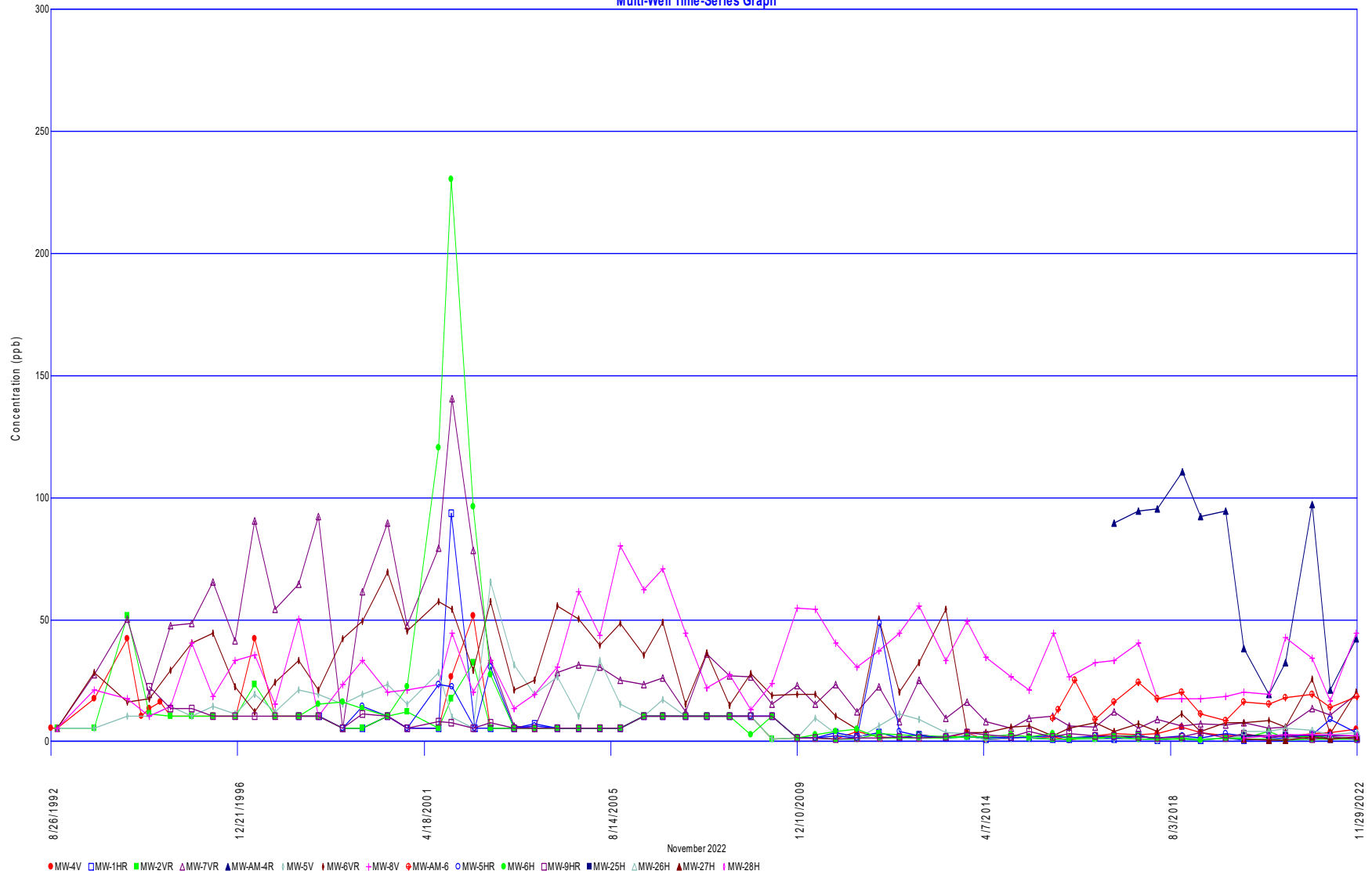
1,2-Dichlorobenzene
Multi-Well Time-Series Graph



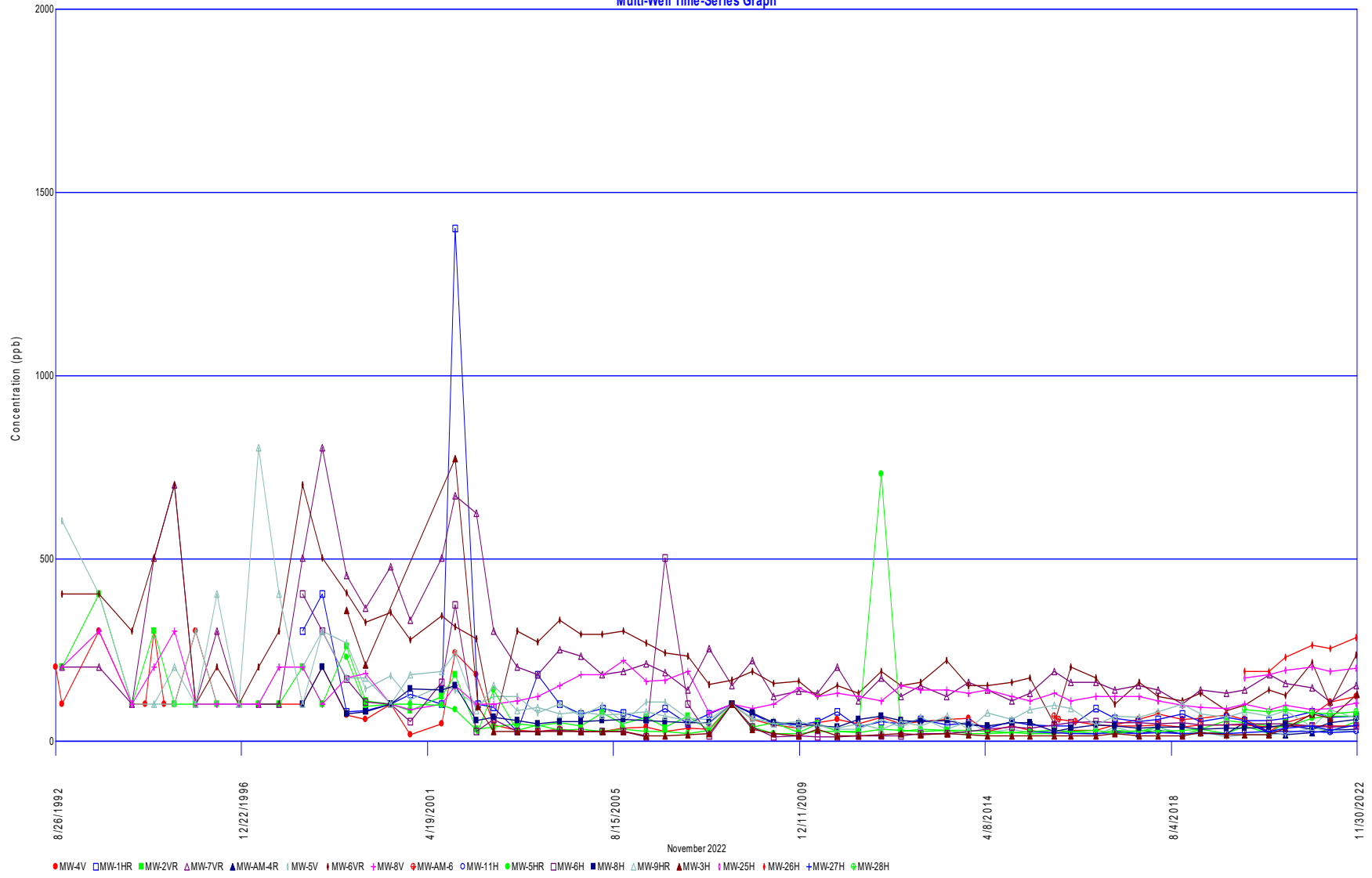
1,4-Dichlorobenzene
Multi-Well Time-Series Graph



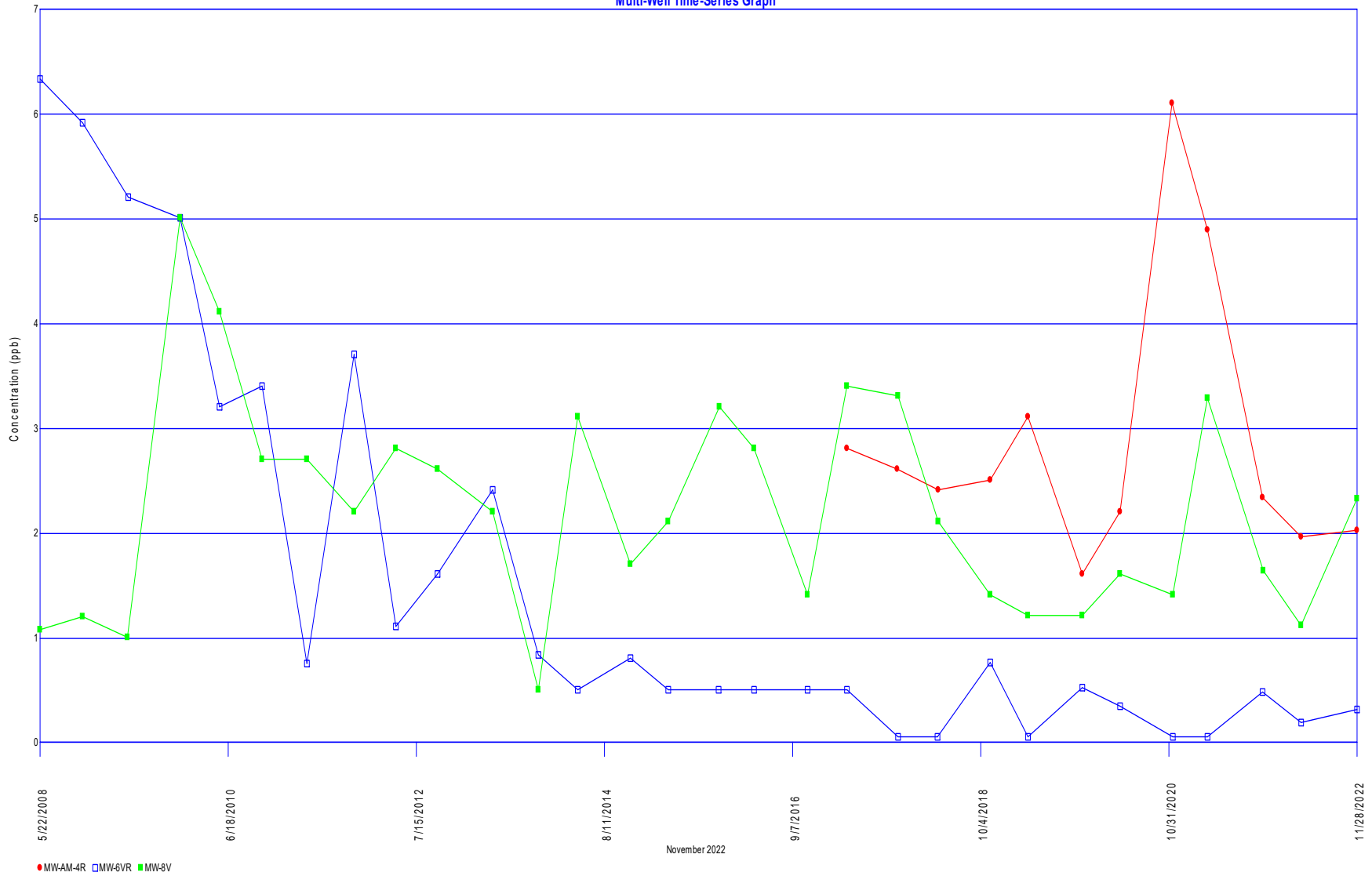
Arsenic, dissolved
Multi-Well Time-Series Graph



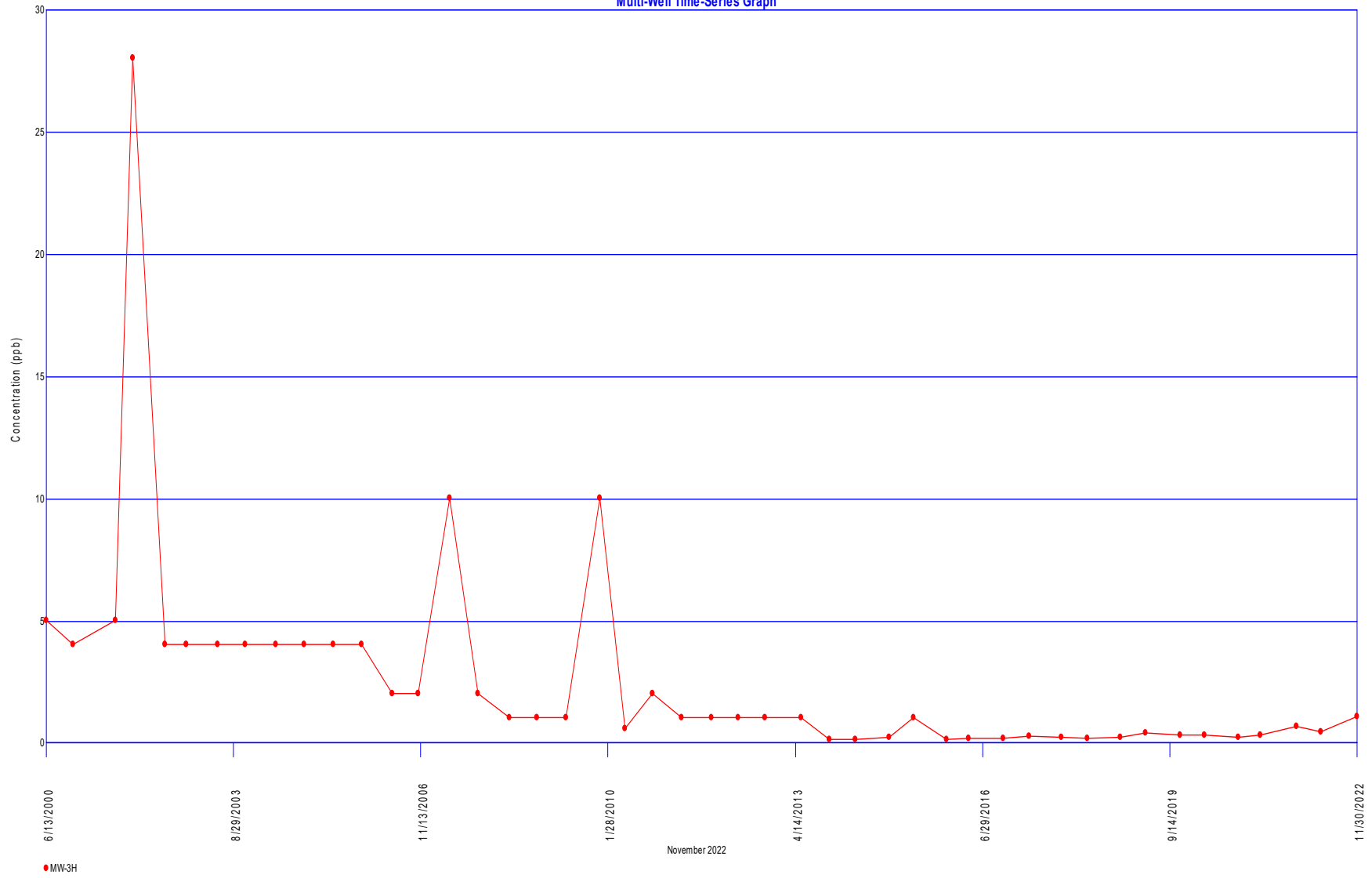
Barium, dissolved
Multi-Well Time-Series Graph



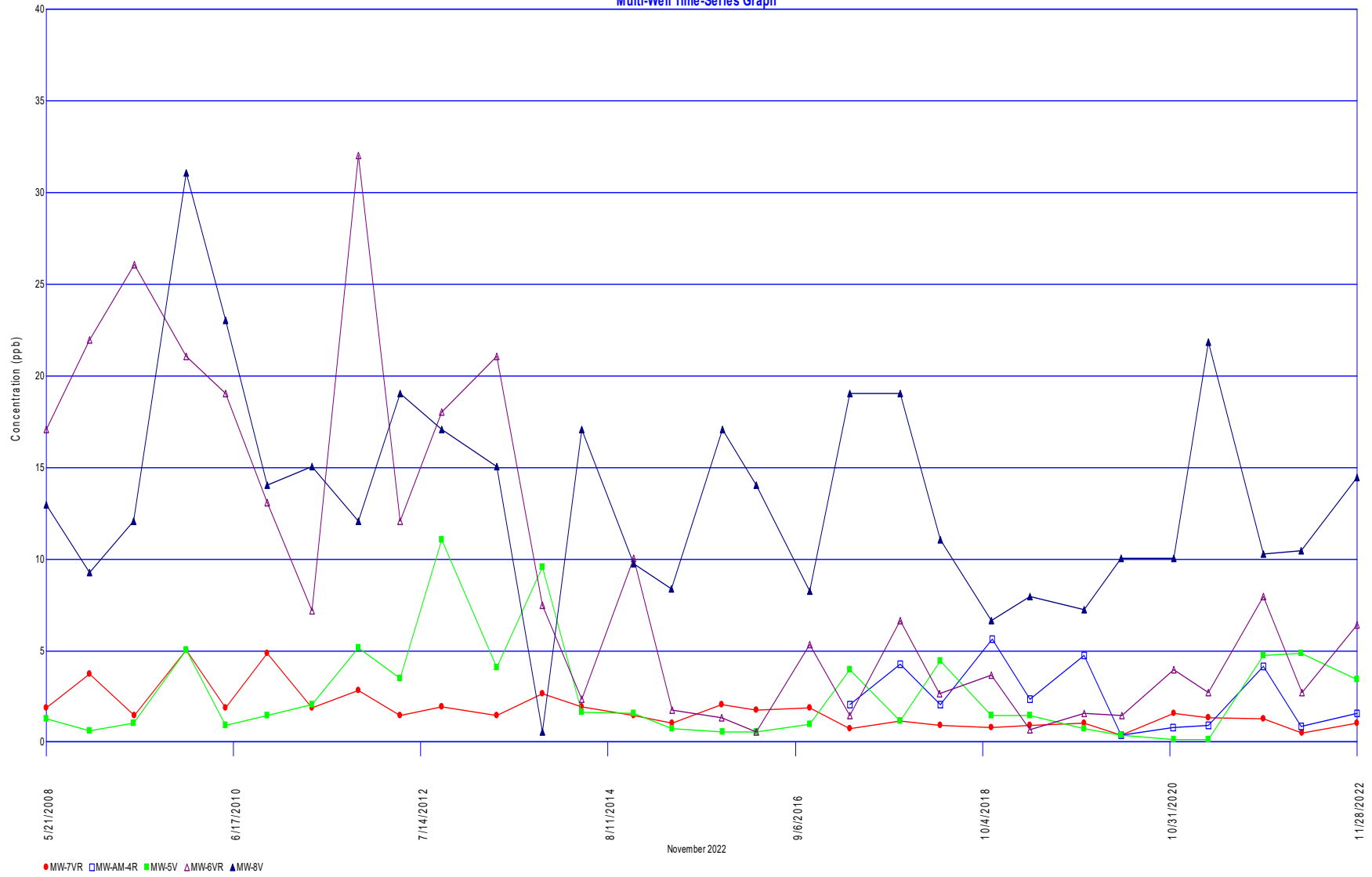
Benzene
Multi-Well Time-Series Graph



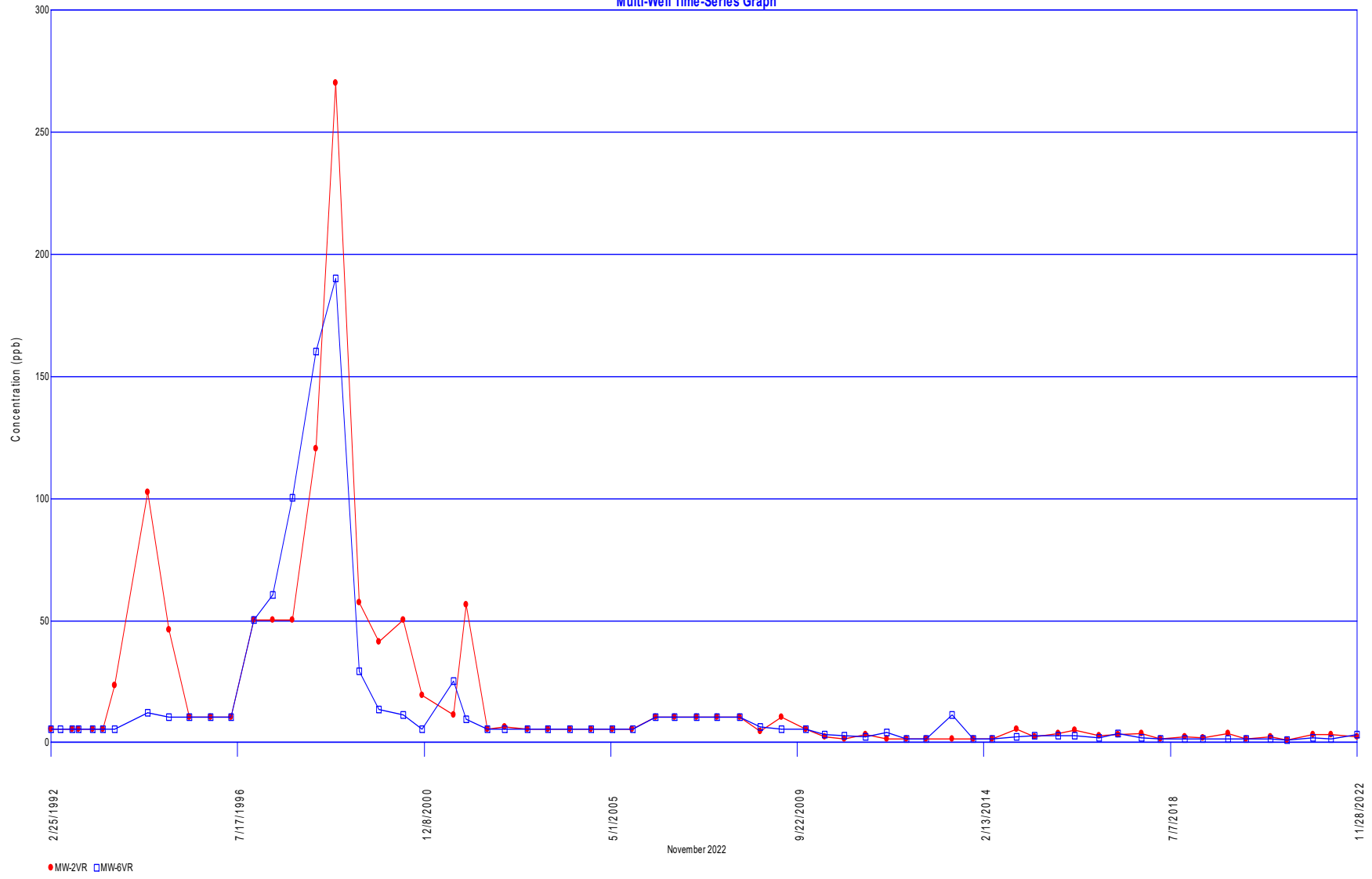
Beryllium, dissolved
Multi-Well Time-Series Graph



Chlorobenzene
Multi-Well Time-Series Graph



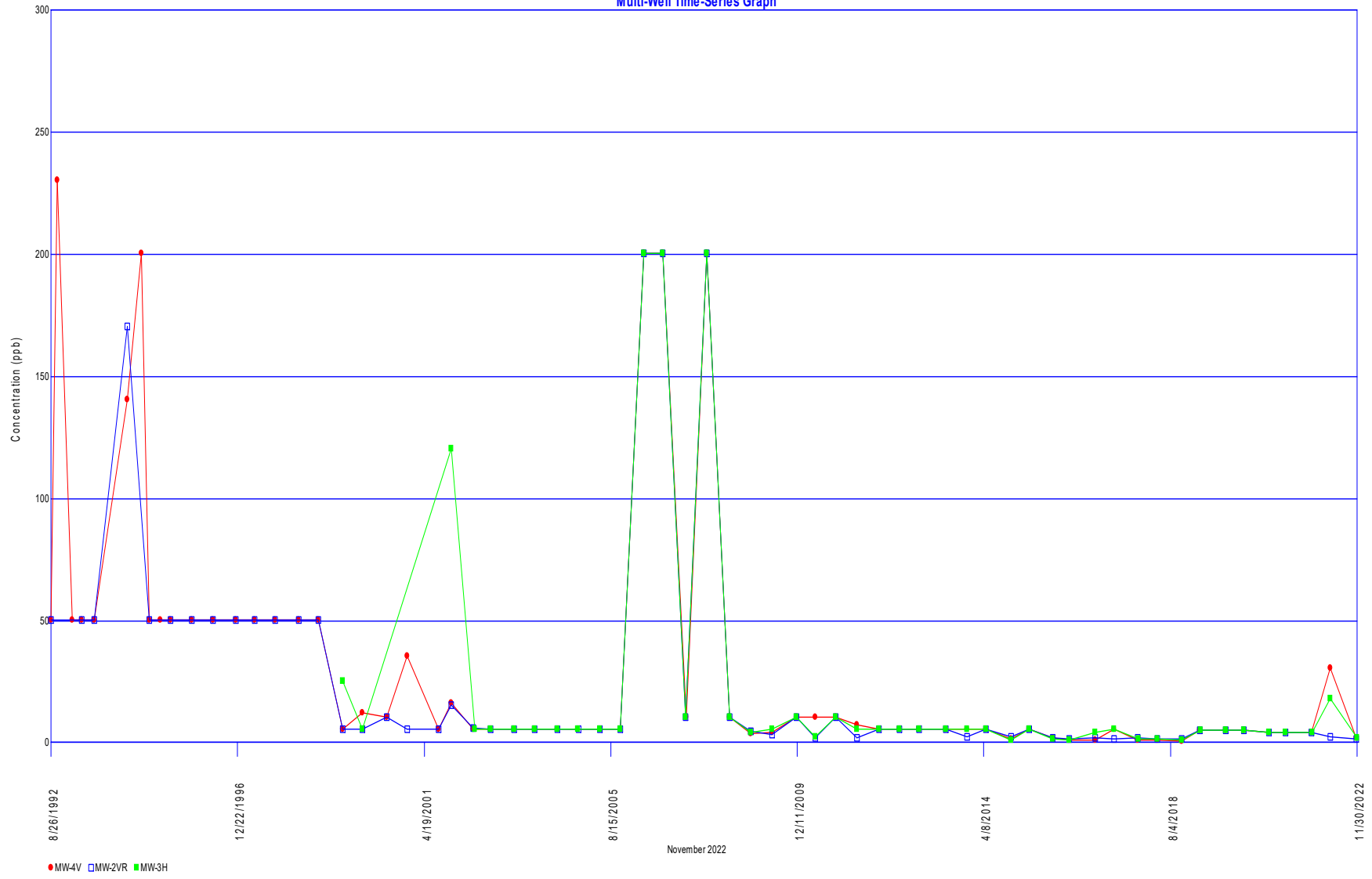
Chromium, dissolved
Multi-Well Time-Series Graph



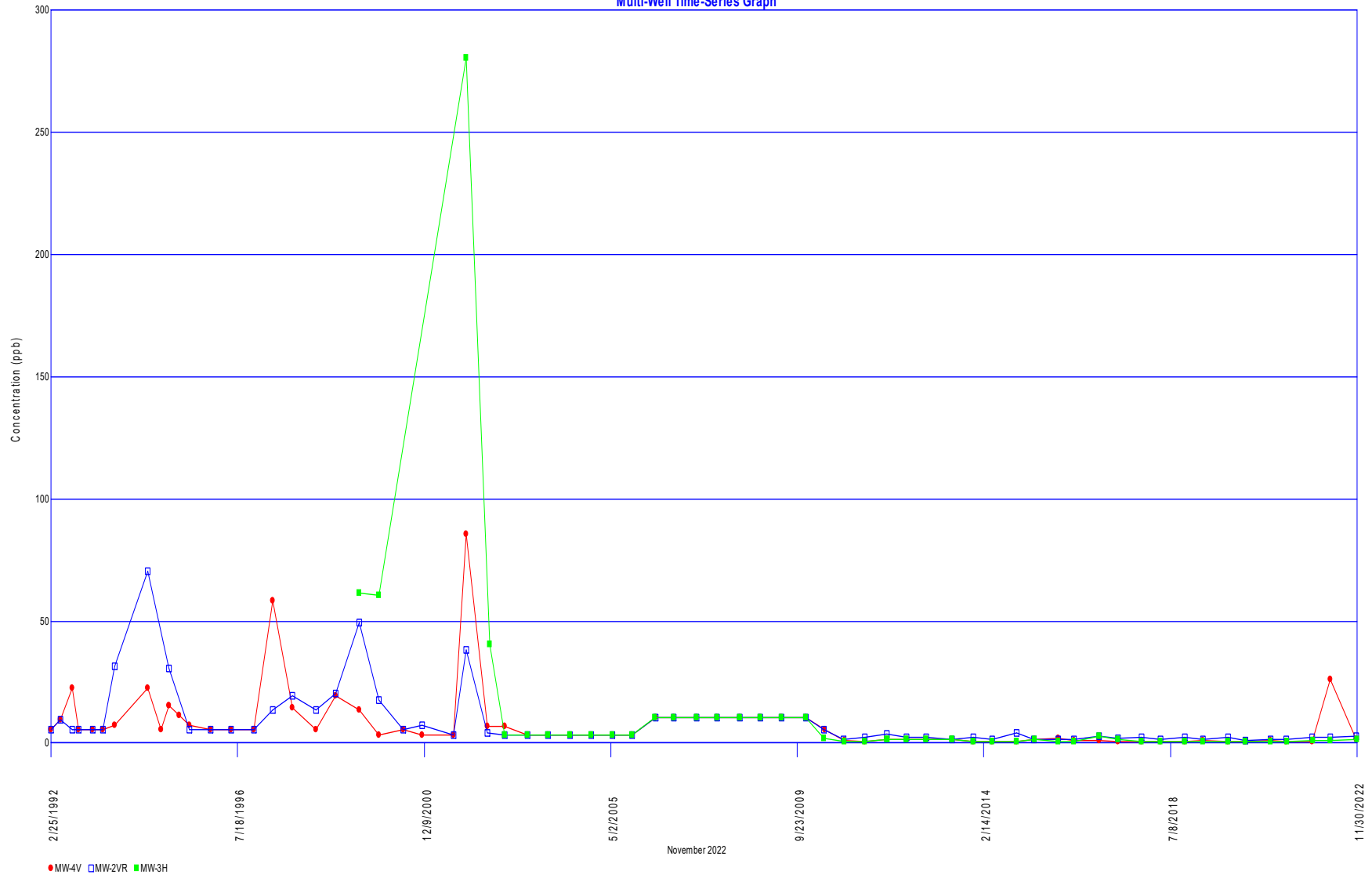
Cobalt, Dissolved
Multi-Well Time-Series Graph

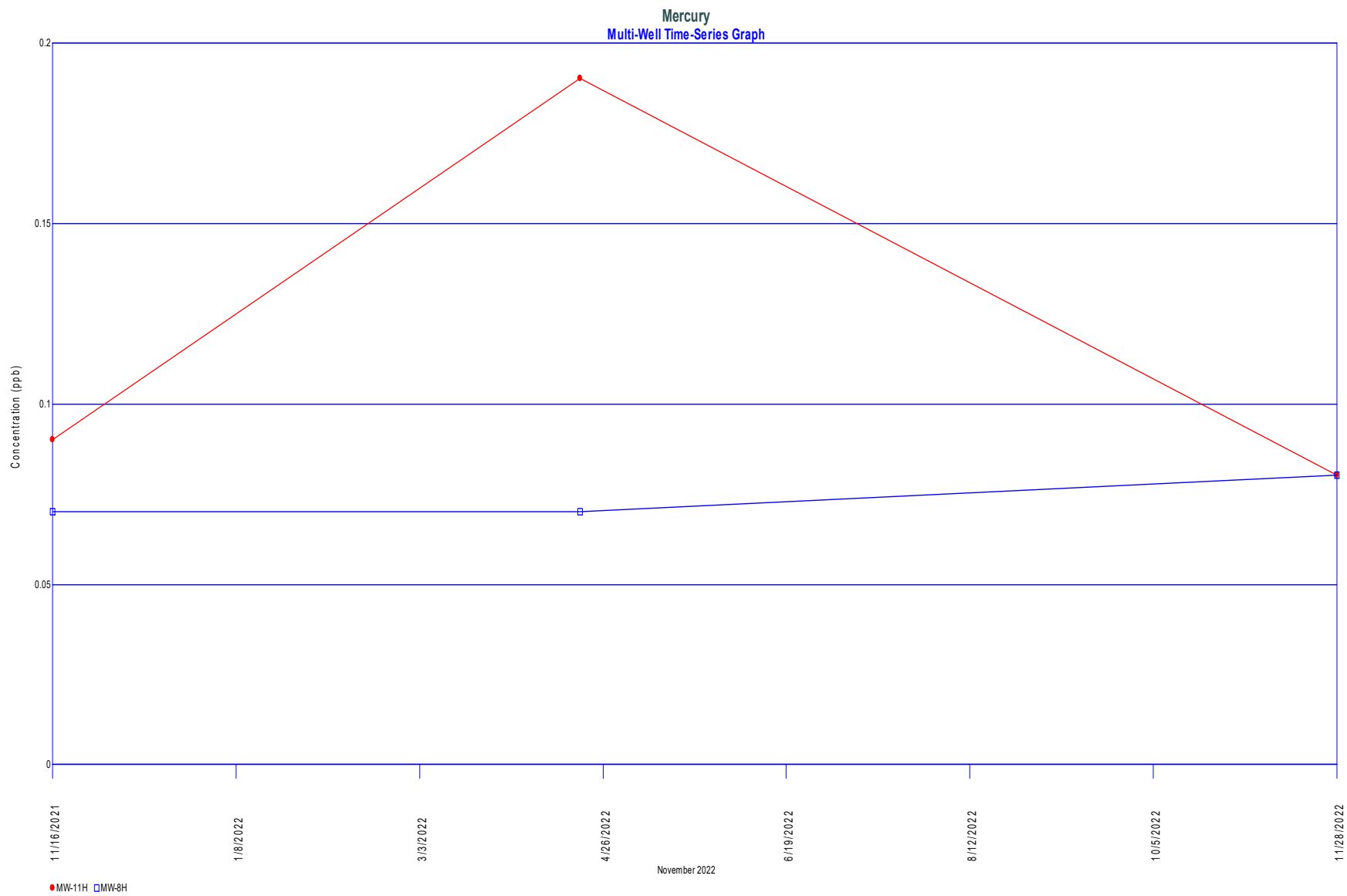


Copper, dissolved
Multi-Well Time-Series Graph

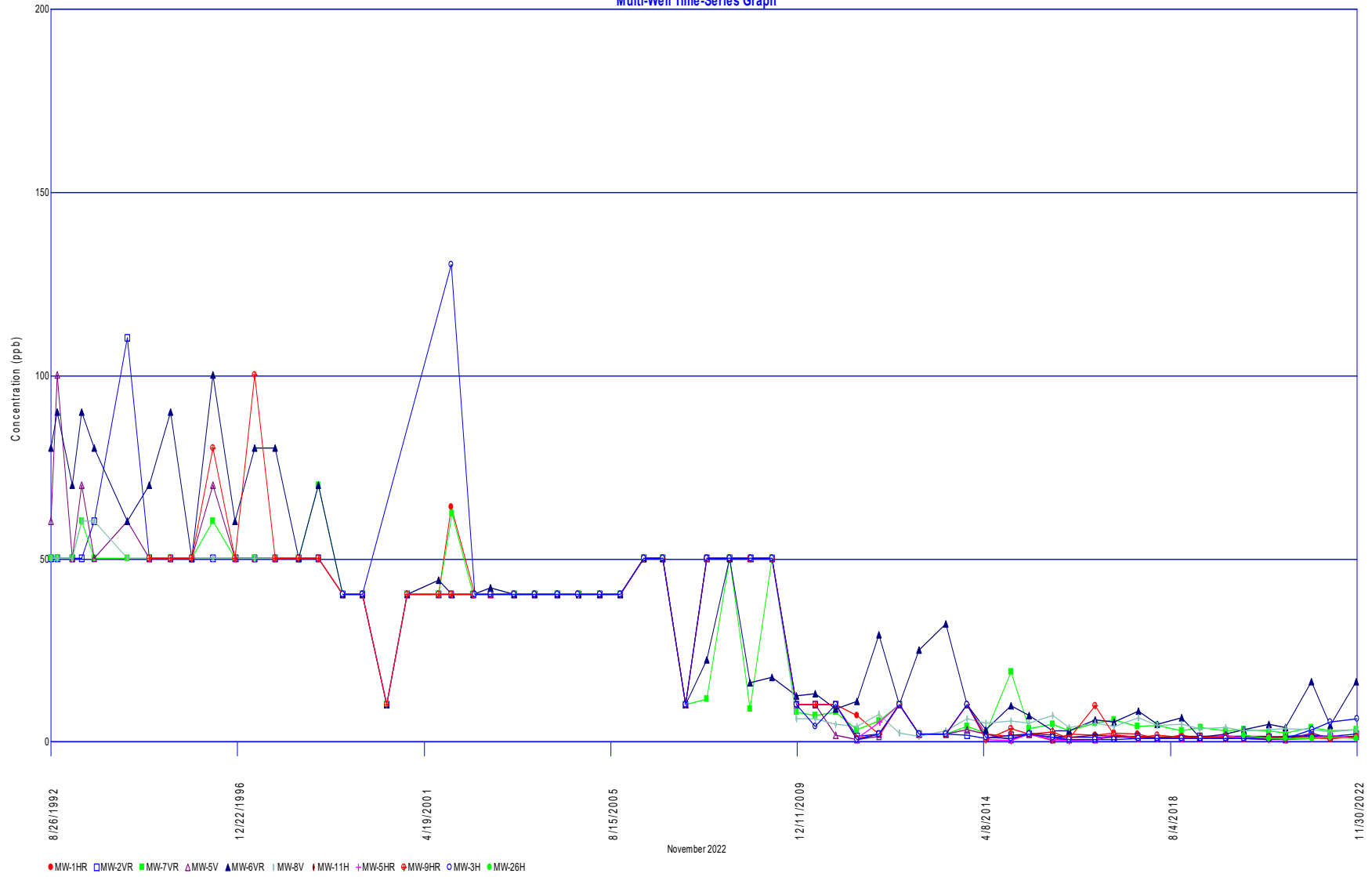


Lead, dissolved
Multi-Well Time-Series Graph

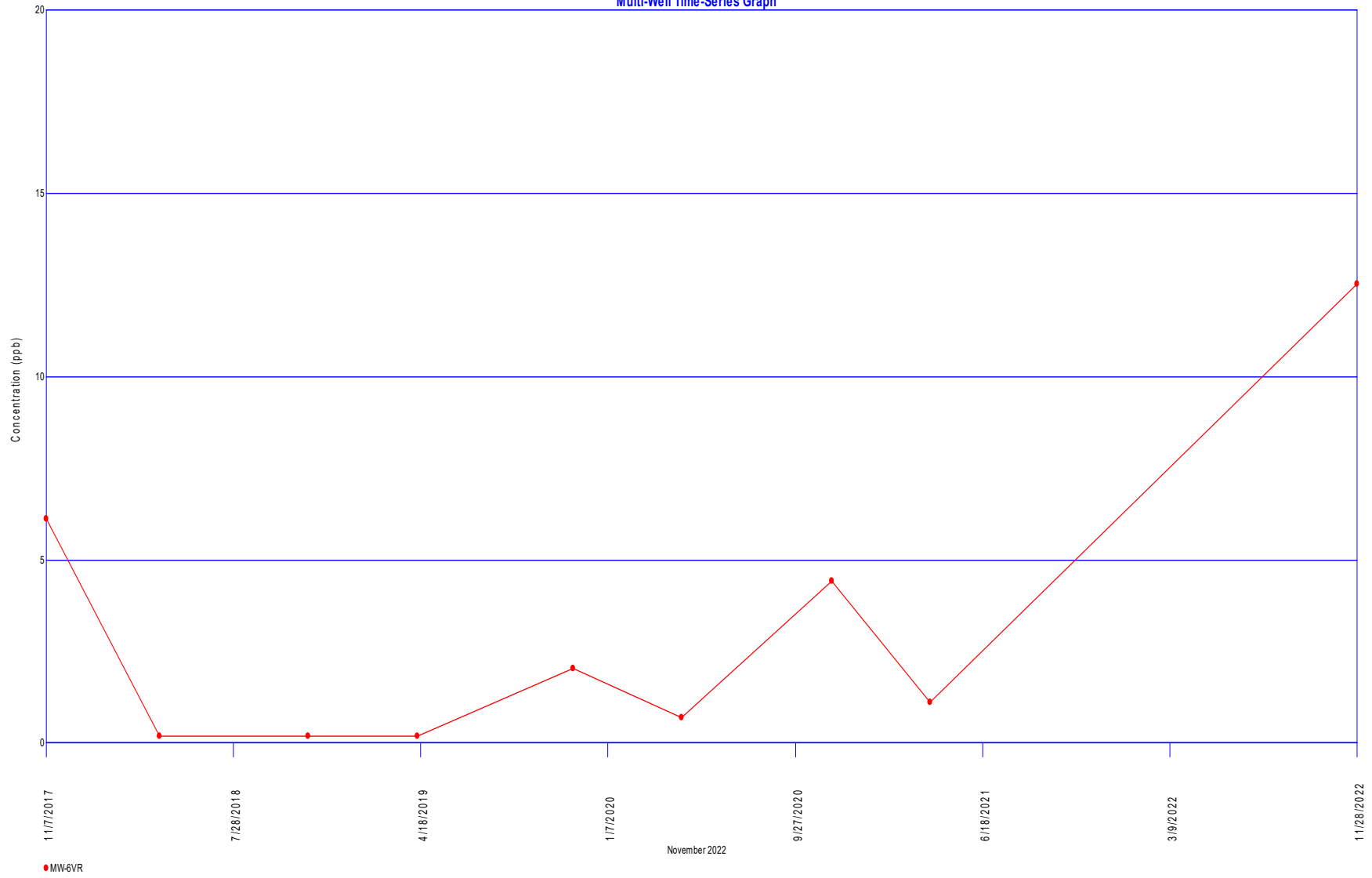




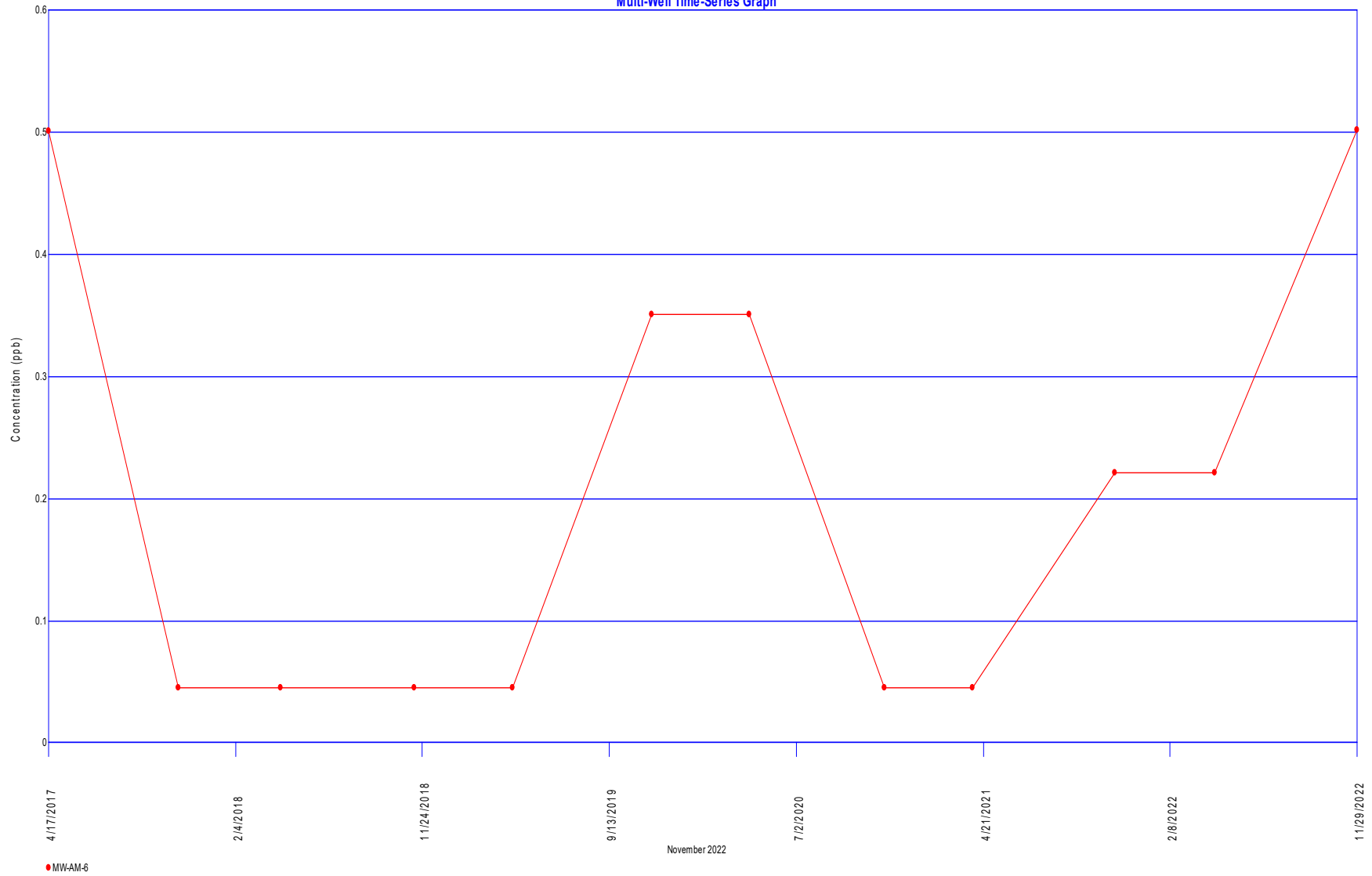
Nickel, dissolved
Multi-Well Time-Series Graph



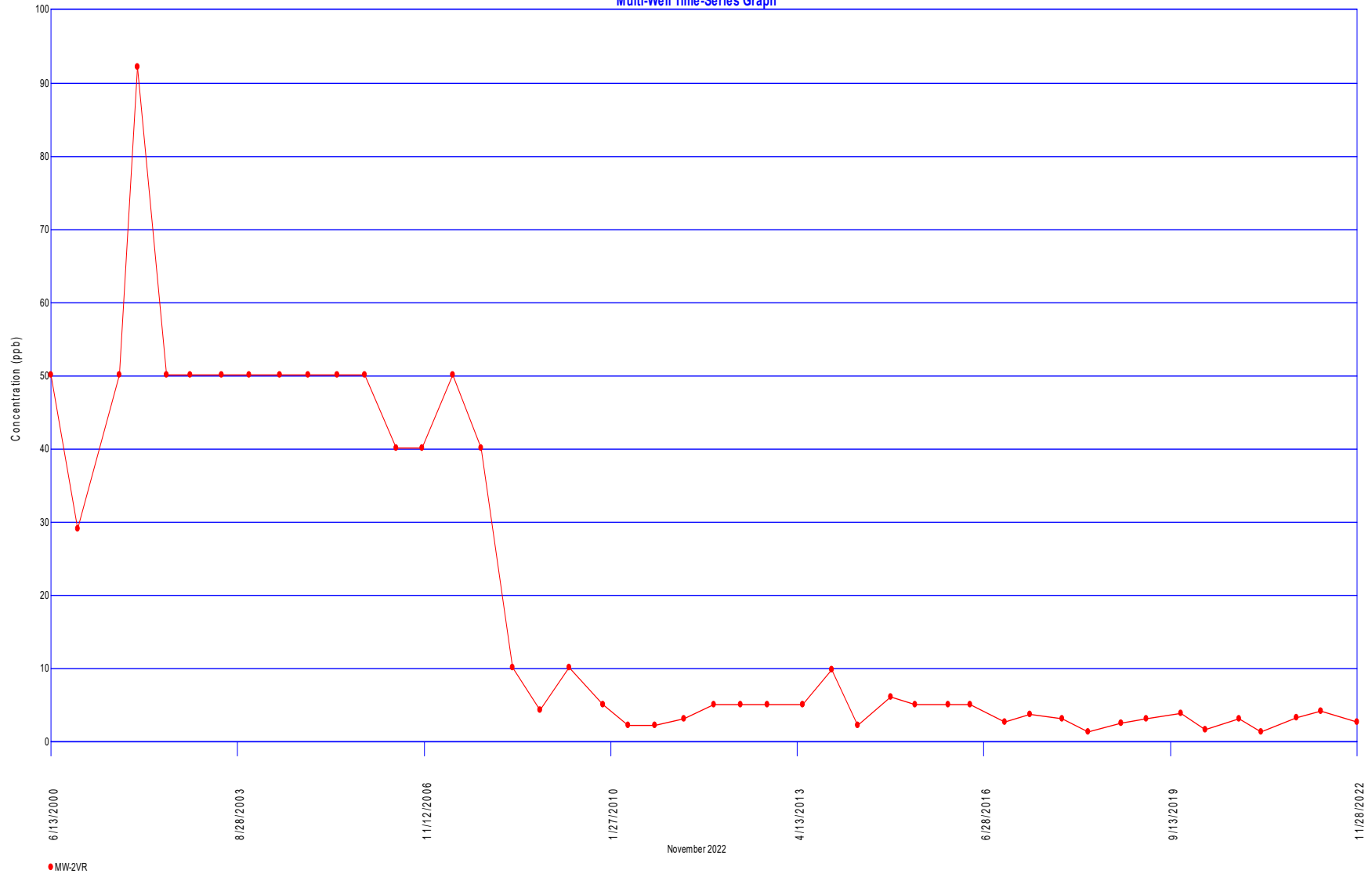
Tetrahydrofuran
Multi-Well Time-Series Graph



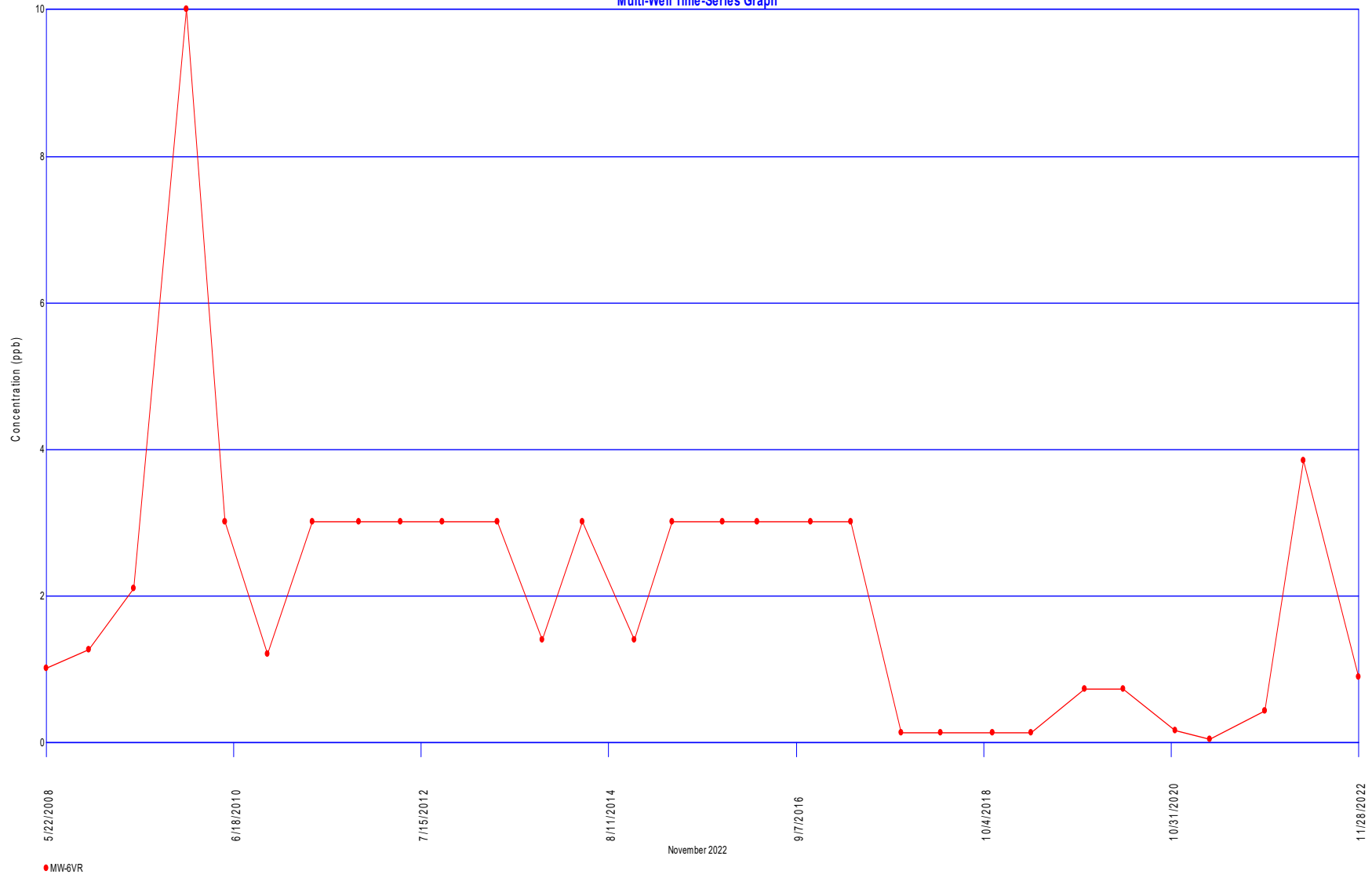
Toluene
Multi-Well Time-Series Graph



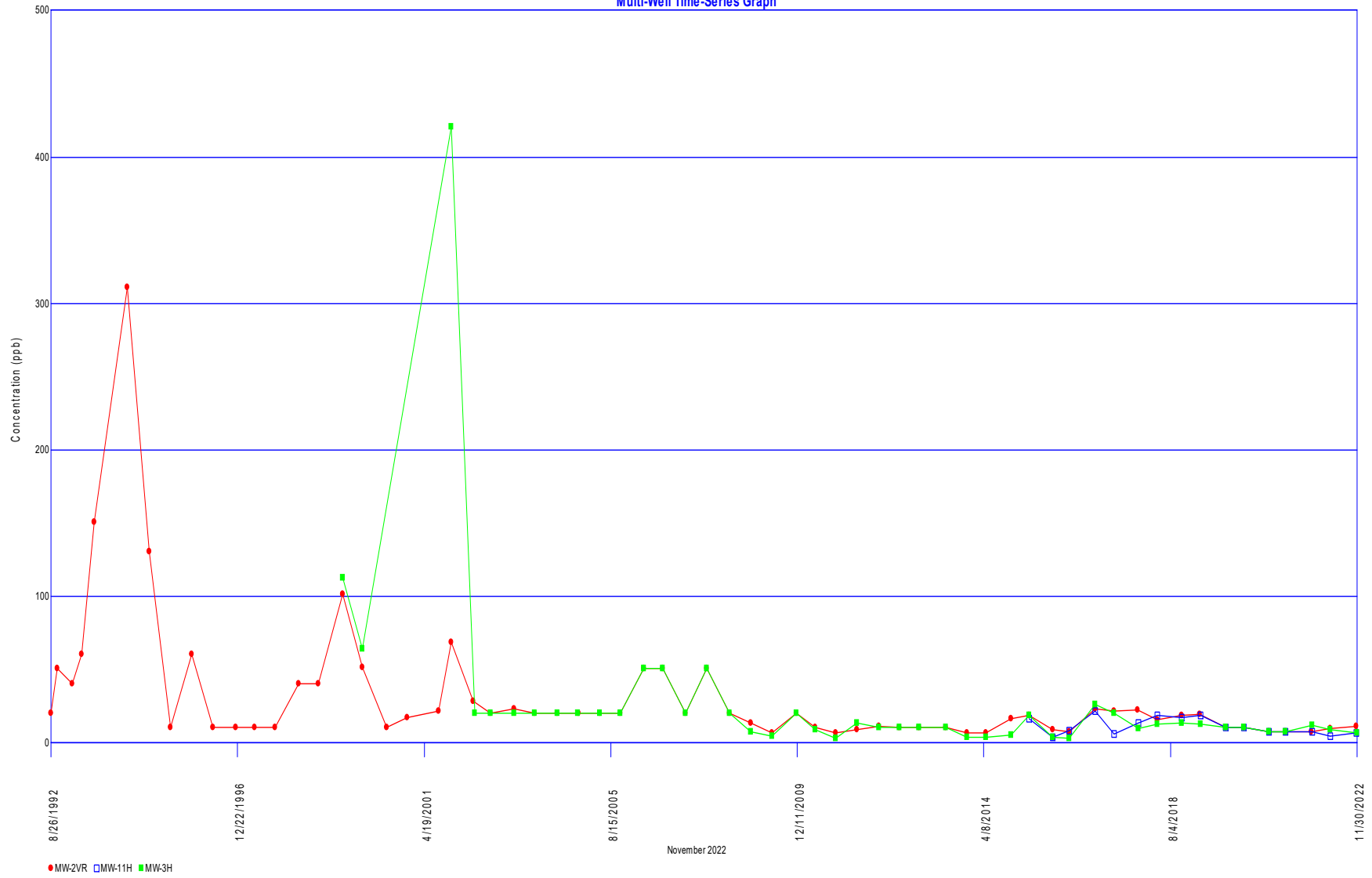
Vanadium
Multi-Well Time-Series Graph



Xylene
Multi-Well Time-Series Graph



Zinc
Multi-Well Time-Series Graph



APPENDIX D. LABORATORY ANALYTICAL REPORTS



12/13/2022

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC, 28422

Ref: Analytical Testing
Lab Report Number: 22-335-0008
Client Project Description: Georgetown County SWF
Site: 00-00

Dear Jeff Leaver:

Waypoint Analytical, LLC (Charlotte) received sample(s) on 12/1/2022 for the analyses presented in the following report.

The above referenced project has been analyzed per your instructions. The analyses were performed in accordance with the applicable analytical method.

The analytical data has been validated using standard quality control measures performed as required by the analytical method. Quality Assurance, method validations, instrumentation maintenance and calibration for all parameters were performed in accordance with guidelines established by the USEPA (including 40 CFR 136 Method Update Rule May 2021) unless otherwise indicated.

Certain parameters (chlorine, pH, dissolved oxygen, sulfite...) are required to be analyzed within 15 minutes of sampling. Usually, but not always, any field parameter analyzed at the laboratory is outside of this holding time. Refer to sample analysis time for confirmation of holding time compliance.

The results are shown on the attached Report of Analysis(s). Results for solid matrices are reported on an as-received basis unless otherwise indicated. This report shall not be reproduced except in full and relates only to the samples included in this report.

Please do not hesitate to contact me or client services if you have any questions or need additional information.

Sincerely,

Angela D Overcash
Senior Project Manager



449 Springbrook Rd, Charlotte, NC 28217
Main 704.529.6364
www.waypointanalytical.com

Certification Summary

Laboratory ID: WP CNC: Waypoint Analytical Carolina, Inc. (C), Charlotte, NC

State	Program	Lab ID	Expiration Date
North Carolina	State Program	37735	07/31/2023
North Carolina	State Program	402	12/31/2022
South Carolina	State Program	99012	07/31/2023
South Carolina	State Program	99012	12/31/2022

Sample Summary Table

Report Number: 22-335-0008
Client Project Description: Georgetown County SWF

Lab No	Client Sample ID	Matrix	Date Collected	Date Received
94482	TripBlank-01	Aqueous	11/28/2022	12/01/2022 10:30
94483	SW/SMC-1	Aqueous	11/28/2022 06:28	12/01/2022 10:30
94484	SW/TW-5	Aqueous	11/28/2022 06:57	12/01/2022 10:30
94485	SW/TW-1	Aqueous	11/28/2022 07:22	12/01/2022 10:30
94486	FB-01	Aqueous	11/28/2022 07:31	12/01/2022 10:30
94487	MW-4V	Aqueous	11/28/2022 07:50	12/01/2022 10:30
94488	SW/TW-4	Aqueous	11/28/2022 08:08	12/01/2022 10:30
94489	MW-2VR	Aqueous	11/28/2022 10:03	12/01/2022 10:30
94490	MW-8V	Aqueous	11/28/2022 10:16	12/01/2022 10:30
94491	SW/SMC-2	Aqueous	11/28/2022 10:33	12/01/2022 10:30
94492	SW/TW-3	Aqueous	11/28/2022 10:54	12/01/2022 10:30
94493	MW-6VR	Aqueous	11/28/2022 11:38	12/01/2022 10:30
94494	MW-5V	Aqueous	11/28/2022 12:58	12/01/2022 10:30
94495	MW-7VR	Aqueous	11/28/2022 13:10	12/01/2022 10:30
94496	SW/TW-2	Aqueous	11/28/2022 13:27	12/01/2022 10:30
94497	MW-AM4R	Aqueous	11/28/2022 14:35	12/01/2022 10:30
94498	MW-11H	Aqueous	11/28/2022 15:58	12/01/2022 10:30
94499	MW-5HR	Aqueous	11/28/2022 16:17	12/01/2022 10:30
94500	MW-8H	Aqueous	11/28/2022 17:05	12/01/2022 10:30
94501	MW-6H	Aqueous	11/28/2022 18:14	12/01/2022 10:30
94502	TripBlank-02	Aqueous	11/29/2022	12/01/2022 10:30
94503	MW-1HR	Aqueous	11/29/2022 08:14	12/01/2022 10:30
94504	MW-9HR	Aqueous	11/29/2022 09:02	12/01/2022 10:30
94505	MW-25H	Aqueous	11/29/2022 10:20	12/01/2022 10:30
94506	MW-AM6	Aqueous	11/29/2022 10:57	12/01/2022 10:30
94507	MW-26H	Aqueous	11/29/2022 13:00	12/01/2022 10:30
94508	MW-27H	Aqueous	11/29/2022 12:40	12/01/2022 10:30



Sample Summary Table

Report Number: 22-335-0008
Client Project Description: Georgetown County SWF

Lab No	Client Sample ID	Matrix	Date Collected	Date Received
94509	MW-28H	Aqueous	11/29/2022 15:18	12/01/2022 10:30
94510	MW-1CD	Aqueous	11/30/2022 09:00	12/01/2022 10:30
94511	MW-2CD	Aqueous	11/30/2022 10:44	12/01/2022 10:30
94512	MW-3CD	Aqueous	11/30/2022 12:29	12/01/2022 10:30
94513	MW-3H	Aqueous	11/30/2022 07:42	12/01/2022 10:30

Summary of Detected Analytes

Project: Georgetown County SWF

Report Number: 22-335-0008

Client Sample ID	Lab Sample ID	Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
SW/SMC-1		V 94483						
2510B-2011			Conductivity	136	µS/cm	1.12	12/06/2022 09:40	
4500H+B-2011			pH	6.1	s.u.		12/06/2022 13:15	H
6020B			Arsenic	0.566	µg/L	0.490	12/07/2022 17:45	J
6020B			Barium	28.8	µg/L	3.40	12/07/2022 17:45	
6020B			Cobalt	1.65	µg/L	0.080	12/07/2022 17:45	
6020B			Nickel	1.05	µg/L	0.720	12/07/2022 17:45	J
SW/TW-5		V 94484						
2510B-2011			Conductivity	838	µS/cm	1.12	12/06/2022 09:40	
4500H+B-2011			pH	7.1	s.u.		12/06/2022 13:15	H
6020B			Arsenic	2.36	µg/L	0.490	12/07/2022 17:52	
6020B			Barium	92.3	µg/L	3.40	12/07/2022 17:52	
6020B			Chromium	1.42	µg/L	1.00	12/07/2022 17:52	J
6020B			Cobalt	0.499	µg/L	0.080	12/07/2022 17:52	J
6020B			Nickel	1.40	µg/L	0.720	12/07/2022 17:52	J
6020B			Zinc	7.33	µg/L	3.90	12/07/2022 17:52	J
SW/TW-1		V 94485						
2510B-2011			Conductivity	303	µS/cm	1.12	12/06/2022 09:40	
4500H+B-2011			pH	6.4	s.u.		12/06/2022 13:15	H
6020B			Arsenic	4.32	µg/L	0.490	12/07/2022 17:58	
6020B			Barium	55.3	µg/L	3.40	12/07/2022 17:58	
6020B			Chromium	1.65	µg/L	1.00	12/07/2022 17:58	J
6020B			Cobalt	2.92	µg/L	0.080	12/07/2022 17:58	
6020B			Nickel	0.909	µg/L	0.720	12/07/2022 17:58	J
8260D			Toluene	1.22	µg/L	0.220	12/02/2022 22:48	
FB-01		V 94486						
2510B-2011			Conductivity	1.60	µS/cm	1.12	12/06/2022 09:40	J
4500H+B-2011			pH	6.7	s.u.		12/06/2022 13:15	H
6020B			Barium	4.07	µg/L	3.40	12/07/2022 18:18	J
6020B			Copper	2.48	µg/L	0.890	12/07/2022 18:18	
MW-4V		V 94487						
2510B-2011			Conductivity	676	µS/cm	1.12	12/06/2022 09:40	
4500H+B-2011			pH	6.8	s.u.		12/06/2022 13:15	H
6020B			Arsenic	4.60	µg/L	0.490	12/07/2022 18:25	
6020B			Barium	120	µg/L	3.40	12/07/2022 18:25	

Summary of Detected Analytes

Project: Georgetown County SWF

Report Number: 22-335-0008

Client Sample ID	Lab Sample ID	Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
MW-4V		V 94487						
6020B			Cobalt	0.089	µg/L	0.080	12/07/2022 18:25	J
6020B			Copper	1.78	µg/L	0.890	12/07/2022 18:25	J
6020B			Lead	1.30	µg/L	0.500	12/07/2022 18:25	
6020B			Zinc	3.90	µg/L	3.90	12/07/2022 18:25	J
SW/TW-4		V 94488						
2510B-2011			Conductivity	364	µS/cm	1.12	12/06/2022 09:40	
4500H+B-2011			pH	6.4	s.u.		12/06/2022 13:15	H
6020B			Arsenic	2.64	µg/L	0.490	12/07/2022 18:31	
6020B			Barium	53.3	µg/L	3.40	12/07/2022 18:31	
6020B			Cadmium	0.281	µg/L	0.150	12/07/2022 18:31	J
6020B			Cobalt	2.55	µg/L	0.080	12/07/2022 18:31	
6020B			Nickel	1.37	µg/L	0.720	12/07/2022 18:31	J
8260D			Toluene	0.580	µg/L	0.220	12/02/2022 23:36	
MW-2VR		V 94489						
2510B-2011			Conductivity	176	µS/cm	1.12	12/06/2022 09:40	
4500H+B-2011			pH	5.9	s.u.		12/06/2022 13:15	H
6020B			Arsenic	1.20	µg/L	0.490	12/07/2022 18:38	
6020B			Barium	51.5	µg/L	3.40	12/07/2022 18:38	
6020B			Chromium	1.84	µg/L	1.00	12/07/2022 18:38	J
6020B			Cobalt	0.792	µg/L	0.080	12/07/2022 18:38	J
6020B			Copper	1.18	µg/L	0.890	12/07/2022 18:38	J
6020B			Lead	2.48	µg/L	0.500	12/07/2022 18:38	
6020B			Nickel	1.86	µg/L	0.720	12/07/2022 18:38	J
6020B			Vanadium	2.55	µg/L	2.10	12/07/2022 18:38	J
6020B			Zinc	10.6	µg/L	3.90	12/07/2022 18:38	J
MW-8V		V 94490						
2510B-2011			Conductivity	1210	µS/cm	1.12	12/06/2022 09:40	
4500H+B-2011			pH	6.6	s.u.		12/06/2022 13:15	H
6020B			Arsenic	44.2	µg/L	0.490	12/07/2022 18:44	
6020B			Barium	103	µg/L	3.40	12/07/2022 18:44	
6020B			Cobalt	0.846	µg/L	0.080	12/07/2022 18:44	J
6020B			Nickel	3.27	µg/L	0.720	12/07/2022 18:44	
8260D			Benzene	2.32	µg/L	0.180	12/03/2022 00:24	
8260D			Chlorobenzene	14.4	µg/L	0.190	12/03/2022 00:24	
8260D			1,2-Dichlorobenzene	0.593	µg/L	0.220	12/03/2022 00:24	

Summary of Detected Analytes

Project: Georgetown County SWF

Report Number: 22-335-0008

Client Sample ID	Lab Sample ID	Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
MW-8V		V 94490						
8260D			1,4-Dichlorobenzene	4.34	µg/L	0.210	12/03/2022 00:24	
SW/SMC-2		V 94491						
2510B-2011			Conductivity	258	µS/cm	1.12	12/06/2022 09:40	
4500H+B-2011			pH	6.2	s.u.		12/06/2022 13:15	H
6020B			Arsenic	0.708	µg/L	0.490	12/07/2022 18:51	J
6020B			Barium	32.9	µg/L	3.40	12/07/2022 18:51	
6020B			Cobalt	1.57	µg/L	0.080	12/07/2022 18:51	
6020B			Nickel	1.30	µg/L	0.720	12/07/2022 18:51	J
6020B			Zinc	6.31	µg/L	3.90	12/07/2022 18:51	J
SW/TW-3		V 94492						
2510B-2011			Conductivity	441	µS/cm	1.12	12/06/2022 09:40	
4500H+B-2011			pH	6.6	s.u.		12/06/2022 13:15	H
6020B			Arsenic	4.02	µg/L	0.490	12/07/2022 18:57	
6020B			Barium	65.9	µg/L	3.40	12/07/2022 18:57	
6020B			Chromium	1.29	µg/L	1.00	12/07/2022 18:57	J
6020B			Cobalt	2.01	µg/L	0.080	12/07/2022 18:57	
6020B			Nickel	1.52	µg/L	0.720	12/07/2022 18:57	J
8260D			Toluene	17.6	µg/L	0.220	12/03/2022 01:12	
MW-6VR		V 94493						
2510B-2011			Conductivity	2310	µS/cm	1.12	12/06/2022 09:40	
4500H+B-2011			pH	6.6	s.u.		12/06/2022 13:15	H
6020B			Arsenic	19.7	µg/L	0.490	12/07/2022 19:04	
6020B			Barium	234	µg/L	3.40	12/07/2022 19:04	
6020B			Chromium	2.85	µg/L	1.00	12/07/2022 19:04	
6020B			Cobalt	3.84	µg/L	0.080	12/07/2022 19:04	
6020B			Nickel	16.1	µg/L	0.720	12/07/2022 19:04	
8260D			Benzene	0.308	µg/L	0.180	12/03/2022 01:36	J
8260D			Chlorobenzene	6.37	µg/L	0.190	12/03/2022 01:36	
8260D			1,4-Dichlorobenzene	0.533	µg/L	0.210	12/03/2022 01:36	
8260D			Tetrahydrofuran	12.5	µg/L	1.50	12/03/2022 01:36	
8260D			o-Xylene	0.416	µg/L	0.210	12/03/2022 01:36	J
8260D			m,p-Xylene	0.467	µg/L	0.420	12/03/2022 01:36	J
8260D			Xylene (Total)	0.883	µg/L	0.210	12/03/2022 01:36	J

Summary of Detected Analytes

Project: Georgetown County SWF

Report Number: 22-335-0008

Client Sample ID	Lab Sample ID	Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
MW-5V		V 94494						
2510B-2011			Conductivity	473	µS/cm	1.12	12/06/2022 09:40	
4500H+B-2011			pH	6.2	s.u.		12/06/2022 13:15	H
6020B			Arsenic	1.01	µg/L	0.490	12/07/2022 19:10	
6020B			Barium	26.0	µg/L	3.40	12/07/2022 19:10	
6020B			Cobalt	0.203	µg/L	0.080	12/07/2022 19:10	J
6020B			Nickel	1.46	µg/L	0.720	12/07/2022 19:10	J
8260D			Chlorobenzene	3.37	µg/L	0.190	12/03/2022 02:00	
MW-7VR		V 94495						
2510B-2011			Conductivity	1020	µS/cm	1.12	12/06/2022 09:40	
4500H+B-2011			pH	6.5	s.u.		12/06/2022 13:15	H
6020B			Arsenic	18.9	µg/L	0.490	12/07/2022 19:17	
6020B			Barium	150	µg/L	3.40	12/07/2022 19:17	
6020B			Cobalt	0.866	µg/L	0.080	12/07/2022 19:17	J
6020B			Nickel	3.03	µg/L	0.720	12/07/2022 19:17	
8260D			Chlorobenzene	0.985	µg/L	0.190	12/03/2022 02:24	
SW/TW-2		V 94496						
2510B-2011			Conductivity	479	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011			pH	6.8	s.u.		12/06/2022 13:15	H
6020B			Arsenic	4.62	µg/L	0.490	12/07/2022 19:37	
6020B			Barium	76.3	µg/L	3.40	12/07/2022 19:37	
6020B			Chromium	1.12	µg/L	1.00	12/07/2022 19:37	J
6020B			Cobalt	2.20	µg/L	0.080	12/07/2022 19:37	
6020B			Nickel	1.70	µg/L	0.720	12/07/2022 19:37	J
8260D			Toluene	12.5	µg/L	0.220	12/03/2022 02:48	
MW-AM4R		V 94497						
2510B-2011			Conductivity	520	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011			pH	6.1	s.u.		12/06/2022 13:15	H
6020B			Arsenic	41.7	µg/L	0.490	12/07/2022 19:43	
6020B			Barium	30.1	µg/L	3.40	12/07/2022 19:43	
6020B			Cobalt	1.14	µg/L	0.080	12/07/2022 19:43	
8260D			Benzene	2.02	µg/L	0.180	12/03/2022 03:11	
8260D			Chlorobenzene	1.50	µg/L	0.190	12/03/2022 03:11	
8260D			1,4-Dichlorobenzene	0.922	µg/L	0.210	12/03/2022 03:11	

Summary of Detected Analytes

Project: Georgetown County SWF

Report Number: 22-335-0008

Client Sample ID	Lab Sample ID	Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
MW-11H		V 94498						
2510B-2011			Conductivity	199	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011			pH	5.5	s.u.		12/06/2022 13:15	H
6020B			Barium	24.4	µg/L	3.40	12/09/2022 00:45	
6020B			Cobalt	1.14	µg/L	0.080	12/09/2022 17:55	
6020B			Nickel	1.38	µg/L	0.720	12/09/2022 17:55	J
6020B			Zinc	6.37	µg/L	3.90	12/09/2022 17:55	J
7470A			Mercury (Total)	0.0800	µg/L	0.0700	12/06/2022 19:16	J
MW-5HR		V 94499						
2510B-2011			Conductivity	515	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011			pH	6.5	s.u.		12/06/2022 13:15	H
6020B			Arsenic	3.49	µg/L	0.490	12/09/2022 18:27	
6020B			Barium	66.9	µg/L	3.40	12/09/2022 01:17	
6020B			Cobalt	0.473	µg/L	0.080	12/09/2022 18:27	J
6020B			Nickel	0.753	µg/L	0.720	12/09/2022 18:27	J
MW-8H		V 94500						
2510B-2011			Conductivity	135	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011			pH	4.8	s.u.		12/06/2022 13:15	H
6020B			Barium	59.2	µg/L	3.40	12/09/2022 01:36	
6020B			Cobalt	0.966	µg/L	0.080	12/09/2022 18:47	J
7470A			Mercury (Total)	0.0800	µg/L	0.0700	12/06/2022 19:21	J
MW-6H		V 94501						
2510B-2011			Conductivity	453	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011			pH	5.5	s.u.		12/06/2022 13:15	H
6020B			Arsenic	0.764	µg/L	0.490	12/09/2022 18:53	J
6020B			Barium	39.2	µg/L	3.40	12/09/2022 01:43	
8260D			1,2-Dichlorobenzene	0.279	µg/L	0.220	12/03/2022 04:47	J
MW-1HR		V 94503						
2510B-2011			Conductivity	695	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011			pH	6.3	s.u.		12/06/2022 13:15	H
6020B			Arsenic	0.997	µg/L	0.490	12/09/2022 18:59	J
6020B			Barium	68.5	µg/L	3.40	12/09/2022 01:49	
6020B			Cobalt	0.432	µg/L	0.080	12/09/2022 18:59	J
6020B			Nickel	1.20	µg/L	0.720	12/09/2022 18:59	J

Summary of Detected Analytes

Project: Georgetown County SWF

Report Number: 22-335-0008

Client Sample ID	Lab Sample ID	Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
MW-9HR		V 94504						
2510B-2011			Conductivity	774	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011			pH	6.1	s.u.		12/06/2022 13:15	H
6020B			Arsenic	0.809	µg/L	0.490	12/09/2022 19:06	J
6020B			Barium	60.7	µg/L	3.40	12/09/2022 01:56	
6020B			Cobalt	0.952	µg/L	0.080	12/09/2022 19:06	J
6020B			Nickel	0.944	µg/L	0.720	12/09/2022 19:06	J
MW-25H		V 94505						
2510B-2011			Conductivity	514	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011			pH	6.9	s.u.		12/06/2022 13:15	H
6020B			Arsenic	2.23	µg/L	0.490	12/09/2022 19:12	
6020B			Barium	199	µg/L	3.40	12/09/2022 02:02	
MW-AM6		V 94506						
2510B-2011			Conductivity	186	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011			pH	5.8	s.u.		12/06/2022 13:15	H
6020B			Arsenic	17.9	µg/L	0.490	12/09/2022 19:19	
6020B			Barium	40.0	µg/L	3.40	12/09/2022 02:08	
6020B			Cobalt	1.31	µg/L	0.080	12/09/2022 19:19	
8260D			Toluene	0.501	µg/L	0.220	12/03/2022 10:22	
MW-26H		V 94507						
2510B-2011			Conductivity	632	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011			pH	6.3	s.u.		12/06/2022 13:15	H
6020B			Arsenic	3.32	µg/L	0.490	12/09/2022 19:25	
6020B			Barium	281	µg/L	3.40	12/09/2022 02:15	
6020B			Cobalt	0.446	µg/L	0.080	12/09/2022 19:25	J
6020B			Nickel	0.867	µg/L	0.720	12/09/2022 19:25	J
MW-27H		V 94508						
2510B-2011			Conductivity	509	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011			pH	7.4	s.u.		12/06/2022 13:15	H
6020B			Arsenic	1.59	µg/L	0.490	12/09/2022 19:31	
6020B			Barium	44.3	µg/L	3.40	12/09/2022 02:21	
MW-28H		V 94509						
2510B-2011			Conductivity	428	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011			pH	7.0	s.u.		12/06/2022 13:15	H
6020B			Arsenic	2.16	µg/L	0.490	12/09/2022 19:38	

Summary of Detected Analytes

Project: Georgetown County SWF

Report Number: 22-335-0008

Client Sample ID	Lab Sample ID	Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
MW-28H		V 94509						
6020B	Barium			78.5	µg/L	3.40	12/09/2022 02:27	
MW-1CD		V 94510						
2510B-2011	Conductivity			619	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011	pH			6.7	s.u.		12/06/2022 13:15	H
6020B	Arsenic			1.12	µg/L	0.490	12/09/2022 19:44	
6020B	Barium			134	µg/L	3.40	12/09/2022 02:34	
9056A	Chloride			14100	µg/L	370	12/01/2022 14:38	
9056A	Sulfate			958	µg/L	650	12/01/2022 14:38	J
MW-2CD		V 94511						
2510B-2011	Conductivity			834	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011	pH			6.1	s.u.		12/06/2022 13:15	H
6020B	Arsenic			4.59	µg/L	0.490	12/09/2022 20:03	
6020B	Barium			86.7	µg/L	3.40	12/09/2022 02:53	
9056A	Chloride			157000	µg/L	370	12/01/2022 14:54	
9056A	Sulfate			12000	µg/L	650	12/01/2022 14:54	
MW-3CD		V 94512						
2510B-2011	Conductivity			758	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011	pH			6.6	s.u.		12/06/2022 13:15	H
6020B	Arsenic			15.3	µg/L	0.490	12/09/2022 20:10	
6020B	Barium			105	µg/L	3.40	12/09/2022 02:59	
9056A	Chloride			20400	µg/L	370	12/01/2022 15:10	
9056A	Sulfate			46800	µg/L	650	12/01/2022 15:10	
MW-3H		V 94513						
2510B-2011	Conductivity			372	µS/cm	1.12	12/06/2022 10:55	
4500H+B-2011	pH			5.1	s.u.		12/06/2022 13:15	H
6020B	Barium			126	µg/L	3.40	12/09/2022 03:06	
6020B	Beryllium			1.04	µg/L	0.240	12/09/2022 03:06	
6020B	Cobalt			2.11	µg/L	0.080	12/09/2022 20:16	
6020B	Copper			1.63	µg/L	0.890	12/09/2022 20:16	J
6020B	Lead			1.04	µg/L	0.500	12/09/2022 03:06	
6020B	Nickel			6.18	µg/L	0.720	12/09/2022 20:16	
6020B	Zinc			6.25	µg/L	3.90	12/09/2022 20:16	J
9056A	Chloride			62900	µg/L	370	12/01/2022 15:58	
9056A	Nitrate (NO3-N)			968	µg/L	76.0	12/01/2022 15:58	

Summary of Detected Analytes

Project: Georgetown County SWF

Report Number: 22-335-0008

Client Sample ID	Lab Sample ID					
Method	Parameters	Result	Units	Report Limit	Analyzed	Qualifiers
MW-3H	V 94513					
9056A	Sulfate	79800	µg/L	650	12/01/2022 15:58	



Client: EFM, Inc.
Project: Georgetown County SWF
Lab Report Number: 22-335-0008
Date: 12/13/2022

CASE NARRATIVE

Metals Analyses Method 6020B

Analyte: Antimony
QC Batch No: V27538/V27209
LLC failed high. Sample concentration BRL. Results not affected.

Mercury Method 7470A

Sample 94483 (SW/SMC-1)
QC Batch No: V27311/V27311
The sample was diluted due to the nature of the sample matrix. Reporting limits have been adjusted accordingly.

EDB and DBCP by Microextraction GC/ECD Method 8011

Analyte: 1,2-Dibromo-3-chloropropane
QC Batch No: V27553/V27473
Relative Percent Difference (RPD) for the duplicate analysis was outside of the allowable QC limits.

Volatile Organic Compounds - GC/MS Method 8260D

Analyte: Vinyl acetate
QC Batch No: V27270/V27336
Relative Percent Difference (RPD) for the duplicate analysis was outside of the allowable QC limits.

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94482**

Matrix: **Aqueous**

Sample ID : **TripBlank-01**

Sampled: **11/28/2022 0:00**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/02/22 20:49	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/02/22 20:49	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/02/22 20:49	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/02/22 20:49	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/02/22 20:49	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/02/22 20:49	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/02/22 20:49	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/02/22 20:49	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/02/22 20:49	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/02/22 20:49	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/02/22 20:49	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/02/22 20:49	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/02/22 20:49	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/02/22 20:49	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/02/22 20:49	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/02/22 20:49	MSA	V27337
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/02/22 20:49	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/02/22 20:49	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/02/22 20:49	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/02/22 20:49	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/02/22 20:49	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/02/22 20:49	MSA	V27337

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time Method Quantitation Limit
	J		MQL	

00093

EFM, Inc.

Jeff Leaver

2300 Ireland Street SE

Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022

Received : 12/01/2022

Report Number : 22-335-0008

REPORT OF ANALYSIS

Lab No : 94482

Matrix: Aqueous

Sample ID : TripBlank-01

Sampled: 11/28/2022 0:00

Analytical Method: 8260D **Prep Batch(es):** V27336 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/02/22 20:49	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 20:49	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/02/22 20:49	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/02/22 20:49	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/02/22 20:49	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/02/22 20:49	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/02/22 20:49	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/02/22 20:49	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/02/22 20:49	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/02/22 20:49	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/02/22 20:49	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/02/22 20:49	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 20:49	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 20:49	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/02/22 20:49	MSA	V27337
Toluene	<0.220	µg/L	0.220	0.500	1	12/02/22 20:49	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 20:49	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/02/22 20:49	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 20:49	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/02/22 20:49	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/02/22 20:49	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/02/22 20:49	MSA	V27337

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time
	J		MQL	Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94482**
Sample ID : **TripBlank-01**

Matrix: **Aqueous**
Sampled: **11/28/2022 0:00**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/02/22 20:49	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/02/22 20:49	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/02/22 20:49	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/02/22 20:49		V27337
Surrogate: 4-Bromofluorobenzene	101		Limits: 80-124%		1	12/02/22 20:49	MSA	V27337
Surrogate: Dibromofluoromethane	93.2		Limits: 75-129%		1	12/02/22 20:49	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	91.8		Limits: 63-136%		1	12/02/22 20:49	MSA	V27337
Surrogate: Toluene-d8	98.0		Limits: 77-123%		1	12/02/22 20:49	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94483**

Matrix: **Aqueous**

Sample ID : **SW/SMC-1**

Sampled: **11/28/2022 6:28**

Test	Results	Units	MDL	ML	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00345	µg/L	0.00345	0.0209	1	12/08/22 16:25	AMP	8011
Conductivity	136	µS/cm	1.12	10.0	1	12/06/22 09:40	CLB	2510B-2011
pH	6.1 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 17:45	EDV	6020B
Arsenic	0.566 J	µg/L	0.490	1.00	1	12/07/22 17:45	EDV	6020B
Barium	28.8	µg/L	3.40	10.0	1	12/07/22 17:45	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 17:45	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 17:45	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/07/22 17:45	EDV	6020B
Cobalt	1.65	µg/L	0.080	1.00	1	12/07/22 17:45	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/07/22 17:45	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/07/22 17:45	EDV	6020B
Mercury (Total)	<0.300	µg/L	0.300	0.800	1	12/06/22 18:32	EDV	7470A
Nickel	1.05 J	µg/L	0.720	2.00	1	12/07/22 17:45	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 17:45	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 17:45	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 17:45	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 17:45	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/07/22 17:45	EDV	6020B

**Qualifiers/
Definitions**

DF
J

Dilution Factor
Estimated value

H
MQL

Beyond holding time
Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94483**
Sample ID : **SW/SMC-1**

Matrix: **Aqueous**
Sampled: **11/28/2022 6:28**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	SQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00418	µg/L	0.00418	0.0209	1	12/08/22 16:25	AMP	V27552
Surrogate: 4-Bromofluorobenzene	95.4		Limits: 70-130%		1	12/08/22 16:25	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	SQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/02/22 22:01	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/02/22 22:01	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/02/22 22:01	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/02/22 22:01	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/02/22 22:01	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/02/22 22:01	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/02/22 22:01	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/02/22 22:01	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/02/22 22:01	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/02/22 22:01	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/02/22 22:01	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/02/22 22:01	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/02/22 22:01	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/02/22 22:01	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/02/22 22:01	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/02/22 22:01	MSA	V27337

Qualifiers/	DF	Dilution Factor	H	Beyond holding time
Definitions	J	Estimated value	SQL	Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94483**

Matrix: **Aqueous**

Sample ID : **SW/SMC-1**

Sampled: **11/28/2022 6:28**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/02/22 22:01	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/02/22 22:01	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/02/22 22:01	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/02/22 22:01	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/02/22 22:01	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/02/22 22:01	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/02/22 22:01	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 22:01	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/02/22 22:01	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/02/22 22:01	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/02/22 22:01	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/02/22 22:01	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/02/22 22:01	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/02/22 22:01	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/02/22 22:01	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/02/22 22:01	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/02/22 22:01	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/02/22 22:01	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 22:01	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 22:01	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/02/22 22:01	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/02/22 22:01	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Project Georgetown County SWF

Information :

Report Date : 12/13/2022

Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94483**

Matrix: **Aqueous**

Sample ID : **SW/SMC-1**

Sampled: **11/28/2022 6:28**

Analytical Method: 8260D

Prep Batch(es): **V27336** 12/02/22 09:00

Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/02/22 22:01	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 22:01	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/02/22 22:01	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 22:01	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/02/22 22:01	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/02/22 22:01	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/02/22 22:01	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/02/22 22:01	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/02/22 22:01	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/02/22 22:01	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/02/22 22:01		V27337
Surrogate: 4-Bromofluorobenzene	103		Limits: 80-124%		1	12/02/22 22:01	MSA	V27337
Surrogate: Dibromofluoromethane	95.0		Limits: 75-129%		1	12/02/22 22:01	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	94.8		Limits: 63-136%		1	12/02/22 22:01	MSA	V27337
Surrogate: Toluene-d8	97.8		Limits: 77-123%		1	12/02/22 22:01	MSA	V27337

**Qualifiers/
Definitions**

DF
J

Dilution Factor
Estimated value

H
MQL

Beyond holding time
Method Quantitation Limit

00093

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Project Georgetown County SWF
Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94484**

Matrix: **Aqueous**

Sample ID : **SW/TW-5**

Sampled: **11/28/2022 6:57**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00340	µg/L	0.00340	0.0206	1	12/08/22 17:05	AMP	8011
Conductivity	838	µS/cm	1.12	10.0	1	12/06/22 09:40	CLB	2510B-2011
pH	7.1 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 17:52	EDV	6020B
Arsenic	2.36	µg/L	0.490	1.00	1	12/07/22 17:52	EDV	6020B
Barium	92.3	µg/L	3.40	10.0	1	12/07/22 17:52	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 17:52	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 17:52	EDV	6020B
Chromium	1.42 J	µg/L	1.00	2.00	1	12/07/22 17:52	EDV	6020B
Cobalt	0.499 J	µg/L	0.080	1.00	1	12/07/22 17:52	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/07/22 17:52	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/07/22 17:52	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 18:34	EDV	7470A
Nickel	1.40 J	µg/L	0.720	2.00	1	12/07/22 17:52	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 17:52	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 17:52	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 17:52	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 17:52	EDV	6020B
Zinc	7.33 J	µg/L	3.90	20.0	1	12/07/22 17:52	EDV	6020B

**Qualifiers/
Definitions**

DF	Dilution Factor	H	Beyond holding time
J	Estimated value	MQL	Method Quantitation Limit

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EFM, Inc.
Jeff Leaver
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Project Georgetown County SWF
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Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94484**
Sample ID : **SW/TW-5**

Matrix: **Aqueous**
Sampled: **11/28/2022 6:57**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00412	µg/L	0.00412	0.0206	1	12/08/22 17:05	AMP	V27552
Surrogate: 4-Bromofluorobenzene	100		Limits: 70-130%		1	12/08/22 17:05	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/02/22 22:25	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/02/22 22:25	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/02/22 22:25	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/02/22 22:25	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/02/22 22:25	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/02/22 22:25	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/02/22 22:25	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/02/22 22:25	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/02/22 22:25	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/02/22 22:25	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/02/22 22:25	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/02/22 22:25	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/02/22 22:25	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/02/22 22:25	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/02/22 22:25	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/02/22 22:25	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.

Jeff Leaver

2300 Ireland Street SE

Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022

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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94484**

Matrix: **Aqueous**

Sample ID : **SW/TW-5**

Sampled: **11/28/2022 6:57**

Analytical Method: 8260D

Prep Batch(es): **V27336** 12/02/22 09:00

Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/02/22 22:25	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 22:25	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/02/22 22:25	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 22:25	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/02/22 22:25	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/02/22 22:25	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/02/22 22:25	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/02/22 22:25	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/02/22 22:25	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/02/22 22:25	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/02/22 22:25		V27337
Surrogate: 4-Bromofluorobenzene	100		Limits: 80-124%		1	12/02/22 22:25	MSA	V27337
Surrogate: Dibromofluoromethane	94.6		Limits: 75-129%		1	12/02/22 22:25	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	94.4		Limits: 63-136%		1	12/02/22 22:25	MSA	V27337
Surrogate: Toluene-d8	96.2		Limits: 77-123%		1	12/02/22 22:25	MSA	V27337

**Qualifiers/
Definitions**

DF
J

Dilution Factor
Estimated value

H
MQL

Beyond holding time
Method Quantitation Limit

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EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94485**
Sample ID : **SW/TW-1**

Matrix: **Aqueous**
Sampled: **11/28/2022 7:22**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00343	µg/L	0.00343	0.0208	1	12/08/22 17:44	AMP	8011
Conductivity	303	µS/cm	1.12	10.0	1	12/06/22 09:40	CLB	2510B-2011
pH	6.4 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 17:58	EDV	6020B
Arsenic	4.32	µg/L	0.490	1.00	1	12/07/22 17:58	EDV	6020B
Barium	55.3	µg/L	3.40	10.0	1	12/07/22 17:58	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 17:58	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 17:58	EDV	6020B
Chromium	1.65 J	µg/L	1.00	2.00	1	12/07/22 17:58	EDV	6020B
Cobalt	2.92	µg/L	0.080	1.00	1	12/07/22 17:58	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/07/22 17:58	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/07/22 17:58	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 18:37	EDV	7470A
Nickel	0.909 J	µg/L	0.720	2.00	1	12/07/22 17:58	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 17:58	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 17:58	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 17:58	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 17:58	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/07/22 17:58	EDV	6020B

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time Method Quantitation Limit
	J		MQL	

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Project Georgetown County SWF
Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94485**

Matrix: **Aqueous**

Sample ID : **SW/TW-1**

Sampled: **11/28/2022 7:22**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00416	µg/L	0.00416	0.0208	1	12/08/22 17:44	AMP	V27552
Surrogate: 4-Bromofluorobenzene		103		Limits: 70-130%	1	12/08/22 17:44	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/02/22 22:48	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/02/22 22:48	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/02/22 22:48	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/02/22 22:48	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/02/22 22:48	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/02/22 22:48	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/02/22 22:48	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/02/22 22:48	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/02/22 22:48	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/02/22 22:48	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/02/22 22:48	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/02/22 22:48	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/02/22 22:48	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/02/22 22:48	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/02/22 22:48	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/02/22 22:48	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

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Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94485**

Matrix: **Aqueous**

Sample ID : **SW/TW-1**

Sampled: **11/28/2022 7:22**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/02/22 22:48	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/02/22 22:48	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/02/22 22:48	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/02/22 22:48	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/02/22 22:48	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/02/22 22:48	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/02/22 22:48	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 22:48	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/02/22 22:48	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/02/22 22:48	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/02/22 22:48	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/02/22 22:48	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/02/22 22:48	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/02/22 22:48	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/02/22 22:48	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/02/22 22:48	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/02/22 22:48	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/02/22 22:48	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 22:48	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 22:48	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/02/22 22:48	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/02/22 22:48	MSA	V27337

Qualifiers/ Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

EFM, Inc.

Jeff Leaver

2300 Ireland Street SE

Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022

Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94485**

Matrix: **Aqueous**

Sample ID : **SW/TW-1**

Sampled: **11/28/2022 7:22**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00

Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	1.22	µg/L	0.220	0.500	1	12/02/22 22:48	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 22:48	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/02/22 22:48	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 22:48	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/02/22 22:48	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/02/22 22:48	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/02/22 22:48	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/02/22 22:48	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/02/22 22:48	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/02/22 22:48	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/02/22 22:48		V27337
Surrogate: 4-Bromofluorobenzene	99.6		Limits: 80-124%		1	12/02/22 22:48	MSA	V27337
Surrogate: Dibromofluoromethane	94.4		Limits: 75-129%		1	12/02/22 22:48	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	93.8		Limits: 63-136%		1	12/02/22 22:48	MSA	V27337
Surrogate: Toluene-d8	97.2		Limits: 77-123%		1	12/02/22 22:48	MSA	V27337

**Qualifiers/
Definitions**

DF
J

Dilution Factor
Estimated value

H
MQL

Beyond holding time
Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94486**
Sample ID : **FB-01**

Matrix: **Aqueous**
Sampled: **11/28/2022 7:31**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00338	µg/L	0.00338	0.0205	1	12/08/22 18:04	AMP	8011
Conductivity	1.60 J	µS/cm	1.12	10.0	1	12/06/22 09:40	CLB	2510B-2011
pH	6.7 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 18:18	EDV	6020B
Arsenic	<0.490	µg/L	0.490	1.00	1	12/07/22 18:18	EDV	6020B
Barium	4.07 J	µg/L	3.40	10.0	1	12/07/22 18:18	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 18:18	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 18:18	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/07/22 18:18	EDV	6020B
Cobalt	<0.080	µg/L	0.080	1.00	1	12/07/22 18:18	EDV	6020B
Copper	2.48	µg/L	0.890	2.00	1	12/07/22 18:18	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/07/22 18:18	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 18:39	EDV	7470A
Nickel	<0.720	µg/L	0.720	2.00	1	12/07/22 18:18	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 18:18	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 18:18	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 18:18	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 18:18	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/07/22 18:18	EDV	6020B

**Qualifiers/
Definitions**

DF	Dilution Factor	H	Beyond holding time
J	Estimated value	MQL	Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94486**

Matrix: **Aqueous**

Sample ID : **FB-01**

Sampled: **11/28/2022 7:31**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00410	µg/L	0.00410	0.0205	1	12/08/22 18:04	AMP	V27552
Surrogate: 4-Bromofluorobenzene	103		Limits: 70-130%		1	12/08/22 18:04	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/02/22 21:37	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/02/22 21:37	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/02/22 21:37	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/02/22 21:37	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/02/22 21:37	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/02/22 21:37	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/02/22 21:37	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/02/22 21:37	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/02/22 21:37	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/02/22 21:37	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/02/22 21:37	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/02/22 21:37	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/02/22 21:37	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/02/22 21:37	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/02/22 21:37	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/02/22 21:37	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94486**

Matrix: **Aqueous**

Sample ID : **FB-01**

Sampled: **11/28/2022 7:31**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/02/22 21:37	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/02/22 21:37	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/02/22 21:37	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/02/22 21:37	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/02/22 21:37	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/02/22 21:37	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/02/22 21:37	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 21:37	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/02/22 21:37	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/02/22 21:37	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/02/22 21:37	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/02/22 21:37	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/02/22 21:37	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/02/22 21:37	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/02/22 21:37	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/02/22 21:37	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/02/22 21:37	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/02/22 21:37	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 21:37	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 21:37	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/02/22 21:37	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/02/22 21:37	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94486**

Matrix: **Aqueous**

Sample ID : **FB-01**

Sampled: **11/28/2022 7:31**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/02/22 21:37	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 21:37	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/02/22 21:37	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 21:37	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/02/22 21:37	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/02/22 21:37	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/02/22 21:37	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/02/22 21:37	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/02/22 21:37	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/02/22 21:37	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/02/22 21:37		V27337
Surrogate: 4-Bromofluorobenzene	99.6		Limits: 80-124%		1	12/02/22 21:37	MSA	V27337
Surrogate: Dibromofluoromethane	93.4		Limits: 75-129%		1	12/02/22 21:37	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	89.6		Limits: 63-136%		1	12/02/22 21:37	MSA	V27337
Surrogate: Toluene-d8	97.8		Limits: 77-123%		1	12/02/22 21:37	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093
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2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94487**
Sample ID : **MW-4V**

Matrix: **Aqueous**
Sampled: **11/28/2022 7:50**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00337	µg/L	0.00337	0.0204	1	12/08/22 18:24	AMP	8011
Conductivity	676	µS/cm	1.12	10.0	1	12/06/22 09:40	CLB	2510B-2011
pH	6.8 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 18:25	EDV	6020B
Arsenic	4.60	µg/L	0.490	1.00	1	12/07/22 18:25	EDV	6020B
Barium	120	µg/L	3.40	10.0	1	12/07/22 18:25	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 18:25	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 18:25	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/07/22 18:25	EDV	6020B
Cobalt	0.089 J	µg/L	0.080	1.00	1	12/07/22 18:25	EDV	6020B
Copper	1.78 J	µg/L	0.890	2.00	1	12/07/22 18:25	EDV	6020B
Lead	1.30	µg/L	0.500	1.00	1	12/07/22 18:25	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 18:42	EDV	7470A
Nickel	<0.720	µg/L	0.720	2.00	1	12/07/22 18:25	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 18:25	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 18:25	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 18:25	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 18:25	EDV	6020B
Zinc	3.90 J	µg/L	3.90	20.0	1	12/07/22 18:25	EDV	6020B

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time Method Quantitation Limit
	J		MQL	

00093
EFM, Inc.
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Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94487**
Sample ID : **MW-4V**

Matrix: **Aqueous**
Sampled: **11/28/2022 7:50**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00408	µg/L	0.00408	0.0204	1	12/08/22 18:24	AMP	V27552
Surrogate: 4-Bromofluorobenzene	90.6		Limits: 70-130%		1	12/08/22 18:24	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/02/22 23:12	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/02/22 23:12	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/02/22 23:12	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/02/22 23:12	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/02/22 23:12	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/02/22 23:12	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/02/22 23:12	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/02/22 23:12	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/02/22 23:12	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/02/22 23:12	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/02/22 23:12	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/02/22 23:12	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/02/22 23:12	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/02/22 23:12	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/02/22 23:12	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/02/22 23:12	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94487**

Matrix: **Aqueous**

Sample ID : **MW-4V**

Sampled: **11/28/2022 7:50**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/02/22 23:12	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/02/22 23:12	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/02/22 23:12	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/02/22 23:12	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/02/22 23:12	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/02/22 23:12	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/02/22 23:12	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 23:12	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/02/22 23:12	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/02/22 23:12	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/02/22 23:12	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/02/22 23:12	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/02/22 23:12	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/02/22 23:12	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/02/22 23:12	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/02/22 23:12	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/02/22 23:12	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/02/22 23:12	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 23:12	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 23:12	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/02/22 23:12	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/02/22 23:12	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

EFM, Inc.

Jeff Leaver

2300 Ireland Street SE

Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022

Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94487**

Matrix: **Aqueous**

Sample ID : **MW-4V**

Sampled: **11/28/2022 7:50**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/02/22 23:12	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 23:12	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/02/22 23:12	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 23:12	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/02/22 23:12	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/02/22 23:12	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/02/22 23:12	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/02/22 23:12	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/02/22 23:12	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/02/22 23:12	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/02/22 23:12		V27337
Surrogate: 4-Bromofluorobenzene	101		Limits: 80-124%		1	12/02/22 23:12	MSA	V27337
Surrogate: Dibromofluoromethane	94.8		Limits: 75-129%		1	12/02/22 23:12	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	94.4		Limits: 63-136%		1	12/02/22 23:12	MSA	V27337
Surrogate: Toluene-d8	97.2		Limits: 77-123%		1	12/02/22 23:12	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
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Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94488**

Matrix: **Aqueous**

Sample ID : **SW/TW-4**

Sampled: **11/28/2022 8:08**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00340	µg/L	0.00340	0.0206	1	12/08/22 18:43	AMP	8011
Conductivity	364	µS/cm	1.12	10.0	1	12/06/22 09:40	CLB	2510B-2011
pH	6.4 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 18:31	EDV	6020B
Arsenic	2.64	µg/L	0.490	1.00	1	12/07/22 18:31	EDV	6020B
Barium	53.3	µg/L	3.40	10.0	1	12/07/22 18:31	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 18:31	EDV	6020B
Cadmium	0.281 J	µg/L	0.150	1.00	1	12/07/22 18:31	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/07/22 18:31	EDV	6020B
Cobalt	2.55	µg/L	0.080	1.00	1	12/07/22 18:31	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/07/22 18:31	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/07/22 18:31	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 18:44	EDV	7470A
Nickel	1.37 J	µg/L	0.720	2.00	1	12/07/22 18:31	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 18:31	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 18:31	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 18:31	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 18:31	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/07/22 18:31	EDV	6020B

**Qualifiers/
Definitions**

DF
J

Dilution Factor
Estimated value

H
MQL

Beyond holding time
Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94488**
Sample ID : **SW/TW-4**

Matrix: **Aqueous**
Sampled: **11/28/2022 8:08**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00412	µg/L	0.00412	0.0206	1	12/08/22 18:43	AMP	V27552
Surrogate: 4-Bromofluorobenzene	109		Limits: 70-130%		1	12/08/22 18:43	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/02/22 23:36	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/02/22 23:36	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/02/22 23:36	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/02/22 23:36	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/02/22 23:36	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/02/22 23:36	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/02/22 23:36	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/02/22 23:36	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/02/22 23:36	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/02/22 23:36	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/02/22 23:36	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/02/22 23:36	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/02/22 23:36	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/02/22 23:36	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/02/22 23:36	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/02/22 23:36	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94488**

Matrix: **Aqueous**

Sample ID : **SW/TW-4**

Sampled: **11/28/2022 8:08**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/02/22 23:36	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/02/22 23:36	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/02/22 23:36	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/02/22 23:36	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/02/22 23:36	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/02/22 23:36	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/02/22 23:36	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 23:36	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/02/22 23:36	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/02/22 23:36	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/02/22 23:36	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/02/22 23:36	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/02/22 23:36	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/02/22 23:36	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/02/22 23:36	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/02/22 23:36	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/02/22 23:36	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/02/22 23:36	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 23:36	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 23:36	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/02/22 23:36	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/02/22 23:36	MSA	V27337

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time Method Quantitation Limit
	J		MQL	

00093

EFM, Inc.

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2300 Ireland Street SE

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Project Georgetown County SWF

Information :

Report Date : 12/13/2022

Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94488**

Matrix: **Aqueous**

Sample ID : **SW/TW-4**

Sampled: **11/28/2022 8:08**

Analytical Method: 8260D

Prep Batch(es): **V27336** 12/02/22 09:00

Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	0.580	µg/L	0.220	0.500	1	12/02/22 23:36	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 23:36	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/02/22 23:36	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 23:36	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/02/22 23:36	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/02/22 23:36	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/02/22 23:36	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/02/22 23:36	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/02/22 23:36	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/02/22 23:36	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/02/22 23:36		V27337
Surrogate: 4-Bromofluorobenzene	98.2		Limits: 80-124%		1	12/02/22 23:36	MSA	V27337
Surrogate: Dibromofluoromethane	94.0		Limits: 75-129%		1	12/02/22 23:36	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	93.6		Limits: 63-136%		1	12/02/22 23:36	MSA	V27337
Surrogate: Toluene-d8	96.2		Limits: 77-123%		1	12/02/22 23:36	MSA	V27337

**Qualifiers/
Definitions**

DF
J

Dilution Factor
Estimated value

H
MQL

Beyond holding time
Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94489**
Sample ID : **MW-2VR**

Matrix: **Aqueous**
Sampled: **11/28/2022 10:03**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00337	µg/L	0.00337	0.0204	1	12/08/22 19:03	AMP	8011
Conductivity	176	µS/cm	1.12	10.0	1	12/06/22 09:40	CLB	2510B-2011
pH	5.9 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 18:38	EDV	6020B
Arsenic	1.20	µg/L	0.490	1.00	1	12/07/22 18:38	EDV	6020B
Barium	51.5	µg/L	3.40	10.0	1	12/07/22 18:38	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 18:38	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 18:38	EDV	6020B
Chromium	1.84 J	µg/L	1.00	2.00	1	12/07/22 18:38	EDV	6020B
Cobalt	0.792 J	µg/L	0.080	1.00	1	12/07/22 18:38	EDV	6020B
Copper	1.18 J	µg/L	0.890	2.00	1	12/07/22 18:38	EDV	6020B
Lead	2.48	µg/L	0.500	1.00	1	12/07/22 18:38	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 18:47	EDV	7470A
Nickel	1.86 J	µg/L	0.720	2.00	1	12/07/22 18:38	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 18:38	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 18:38	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 18:38	EDV	6020B
Vanadium	2.55 J	µg/L	2.10	5.00	1	12/07/22 18:38	EDV	6020B
Zinc	10.6 J	µg/L	3.90	20.0	1	12/07/22 18:38	EDV	6020B

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time Method Quantitation Limit
	J		MQL	

00093
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Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94489**
Sample ID : **MW-2VR**

Matrix: **Aqueous**
Sampled: **11/28/2022 10:03**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00408	µg/L	0.00408	0.0204	1	12/08/22 19:03	AMP	V27552
Surrogate: 4-Bromofluorobenzene	112		Limits: 70-130%		1	12/08/22 19:03	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 00:00	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 00:00	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 00:00	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 00:00	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 00:00	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 00:00	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 00:00	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 00:00	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 00:00	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 00:00	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 00:00	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 00:00	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 00:00	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 00:00	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 00:00	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 00:00	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94489**

Matrix: **Aqueous**

Sample ID : **MW-2VR**

Sampled: **11/28/2022 10:03**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 00:00	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 00:00	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 00:00	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 00:00	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 00:00	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 00:00	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 00:00	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 00:00	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 00:00	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 00:00	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 00:00	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 00:00	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 00:00	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 00:00	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 00:00	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 00:00	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 00:00	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 00:00	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 00:00	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 00:00	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 00:00	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 00:00	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94489**
Sample ID : **MW-2VR**

Matrix: **Aqueous**
Sampled: **11/28/2022 10:03**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 00:00	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 00:00	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 00:00	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 00:00	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 00:00	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 00:00	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 00:00	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 00:00	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 00:00	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 00:00	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 00:00		V27337
Surrogate: 4-Bromofluorobenzene	99.2		Limits: 80-124%		1	12/03/22 00:00	MSA	V27337
Surrogate: Dibromofluoromethane	94.4		Limits: 75-129%		1	12/03/22 00:00	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	93.8		Limits: 63-136%		1	12/03/22 00:00	MSA	V27337
Surrogate: Toluene-d8	96.6		Limits: 77-123%		1	12/03/22 00:00	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

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Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94490**

Matrix: **Aqueous**

Sample ID : **MW-8V**

Sampled: **11/28/2022 10:16**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00340	µg/L	0.00340	0.0206	1	12/08/22 19:23	AMP	8011
Conductivity	1210	µS/cm	1.12	10.0	1	12/06/22 09:40	CLB	2510B-2011
pH	6.6 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 18:44	EDV	6020B
Arsenic	44.2	µg/L	0.490	1.00	1	12/07/22 18:44	EDV	6020B
Barium	103	µg/L	3.40	10.0	1	12/07/22 18:44	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 18:44	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 18:44	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/07/22 18:44	EDV	6020B
Cobalt	0.846 J	µg/L	0.080	1.00	1	12/07/22 18:44	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/07/22 18:44	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/07/22 18:44	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 18:49	EDV	7470A
Nickel	3.27	µg/L	0.720	2.00	1	12/07/22 18:44	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 18:44	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 18:44	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 18:44	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 18:44	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/07/22 18:44	EDV	6020B

**Qualifiers/
Definitions**

DF
J

Dilution Factor
Estimated value

H
MQL

Beyond holding time
Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94490**
Sample ID : **MW-8V**

Matrix: **Aqueous**
Sampled: **11/28/2022 10:16**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00412	µg/L	0.00412	0.0206	1	12/08/22 19:23	AMP	V27552
Surrogate: 4-Bromofluorobenzene	104		Limits: 70-130%		1	12/08/22 19:23	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 00:24	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 00:24	MSA	V27337
Benzene	2.32	µg/L	0.180	0.500	1	12/03/22 00:24	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 00:24	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 00:24	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 00:24	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 00:24	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 00:24	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 00:24	MSA	V27337
Chlorobenzene	14.4	µg/L	0.190	0.500	1	12/03/22 00:24	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 00:24	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 00:24	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 00:24	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 00:24	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 00:24	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 00:24	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94490**

Matrix: **Aqueous**

Sample ID : **MW-8V**

Sampled: **11/28/2022 10:16**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 00:24	MSA	V27337
1,2-Dichlorobenzene	0.593	µg/L	0.220	0.500	1	12/03/22 00:24	MSA	V27337
1,4-Dichlorobenzene	4.34	µg/L	0.210	0.500	1	12/03/22 00:24	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 00:24	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 00:24	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 00:24	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 00:24	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 00:24	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 00:24	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 00:24	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 00:24	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 00:24	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 00:24	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 00:24	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 00:24	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 00:24	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 00:24	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 00:24	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 00:24	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 00:24	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 00:24	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 00:24	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94490**
Sample ID : **MW-8V**

Matrix: **Aqueous**
Sampled: **11/28/2022 10:16**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 00:24	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 00:24	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 00:24	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 00:24	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 00:24	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 00:24	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 00:24	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 00:24	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 00:24	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 00:24	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 00:24		V27337
Surrogate: 4-Bromofluorobenzene	98.6		Limits: 80-124%		1	12/03/22 00:24	MSA	V27337
Surrogate: Dibromofluoromethane	93.6		Limits: 75-129%		1	12/03/22 00:24	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	93.4		Limits: 63-136%		1	12/03/22 00:24	MSA	V27337
Surrogate: Toluene-d8	96.0		Limits: 77-123%		1	12/03/22 00:24	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

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2300 Ireland Street SE
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Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94491**

Matrix: **Aqueous**

Sample ID : **SW/SMC-2**

Sampled: **11/28/2022 10:33**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00338	µg/L	0.00338	0.0205	1	12/08/22 19:42	AMP	8011
Conductivity	258	µS/cm	1.12	10.0	1	12/06/22 09:40	CLB	2510B-2011
pH	6.2 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 18:51	EDV	6020B
Arsenic	0.708 J	µg/L	0.490	1.00	1	12/07/22 18:51	EDV	6020B
Barium	32.9	µg/L	3.40	10.0	1	12/07/22 18:51	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 18:51	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 18:51	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/07/22 18:51	EDV	6020B
Cobalt	1.57	µg/L	0.080	1.00	1	12/07/22 18:51	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/07/22 18:51	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/07/22 18:51	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 18:58	EDV	7470A
Nickel	1.30 J	µg/L	0.720	2.00	1	12/07/22 18:51	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 18:51	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 18:51	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 18:51	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 18:51	EDV	6020B
Zinc	6.31 J	µg/L	3.90	20.0	1	12/07/22 18:51	EDV	6020B

**Qualifiers/
Definitions**

DF
J

Dilution Factor
Estimated value

H
MQL

Beyond holding time
Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94491**
Sample ID : **SW/SMC-2**

Matrix: **Aqueous**
Sampled: **11/28/2022 10:33**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00410	µg/L	0.00410	0.0205	1	12/08/22 19:42	AMP	V27552
Surrogate: 4-Bromofluorobenzene	88.5		Limits: 70-130%		1	12/08/22 19:42	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 00:48	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 00:48	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 00:48	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 00:48	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 00:48	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 00:48	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 00:48	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 00:48	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 00:48	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 00:48	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 00:48	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 00:48	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 00:48	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 00:48	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 00:48	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 00:48	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94491**

Matrix: **Aqueous**

Sample ID : **SW/SMC-2**

Sampled: **11/28/2022 10:33**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 00:48	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 00:48	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 00:48	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 00:48	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 00:48	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 00:48	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 00:48	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 00:48	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 00:48	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 00:48	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 00:48	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 00:48	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 00:48	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 00:48	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 00:48	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 00:48	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 00:48	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 00:48	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 00:48	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 00:48	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 00:48	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 00:48	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94491**
Sample ID : **SW/SMC-2**

Matrix: **Aqueous**
Sampled: **11/28/2022 10:33**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 00:48	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 00:48	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 00:48	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 00:48	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 00:48	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 00:48	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 00:48	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 00:48	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 00:48	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 00:48	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 00:48		V27337
Surrogate: 4-Bromofluorobenzene	99.6		Limits: 80-124%		1	12/03/22 00:48	MSA	V27337
Surrogate: Dibromofluoromethane	93.6		Limits: 75-129%		1	12/03/22 00:48	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	93.6		Limits: 63-136%		1	12/03/22 00:48	MSA	V27337
Surrogate: Toluene-d8	95.8		Limits: 77-123%		1	12/03/22 00:48	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94492**
Sample ID : **SW/TW-3**

Matrix: **Aqueous**
Sampled: **11/28/2022 10:54**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00338	µg/L	0.00338	0.0205	1	12/08/22 20:01	AMP	8011
Conductivity	441	µS/cm	1.12	10.0	1	12/06/22 09:40	CLB	2510B-2011
pH	6.6 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 18:57	EDV	6020B
Arsenic	4.02	µg/L	0.490	1.00	1	12/07/22 18:57	EDV	6020B
Barium	65.9	µg/L	3.40	10.0	1	12/07/22 18:57	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 18:57	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 18:57	EDV	6020B
Chromium	1.29 J	µg/L	1.00	2.00	1	12/07/22 18:57	EDV	6020B
Cobalt	2.01	µg/L	0.080	1.00	1	12/07/22 18:57	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/07/22 18:57	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/07/22 18:57	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 19:01	EDV	7470A
Nickel	1.52 J	µg/L	0.720	2.00	1	12/07/22 18:57	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 18:57	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 18:57	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 18:57	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 18:57	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/07/22 18:57	EDV	6020B

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time Method Quantitation Limit
	J		MQL	

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94492**

Matrix: **Aqueous**

Sample ID : **SW/TW-3**

Sampled: **11/28/2022 10:54**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00410	µg/L	0.00410	0.0205	1	12/08/22 20:01	AMP	V27552
Surrogate: 4-Bromofluorobenzene	93.9		Limits: 70-130%		1	12/08/22 20:01	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 01:12	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 01:12	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 01:12	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 01:12	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 01:12	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 01:12	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 01:12	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 01:12	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 01:12	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 01:12	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 01:12	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 01:12	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 01:12	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 01:12	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 01:12	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 01:12	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94492**

Matrix: **Aqueous**

Sample ID : **SW/TW-3**

Sampled: **11/28/2022 10:54**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 01:12	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 01:12	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 01:12	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 01:12	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 01:12	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 01:12	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 01:12	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 01:12	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 01:12	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 01:12	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 01:12	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 01:12	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 01:12	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 01:12	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 01:12	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 01:12	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 01:12	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 01:12	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 01:12	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 01:12	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 01:12	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 01:12	MSA	V27337

Qualifiers/ Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

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Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94492**

Matrix: **Aqueous**

Sample ID : **SW/TW-3**

Sampled: **11/28/2022 10:54**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	17.6	µg/L	0.220	0.500	1	12/03/22 01:12	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 01:12	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 01:12	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 01:12	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 01:12	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 01:12	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 01:12	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 01:12	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 01:12	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 01:12	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 01:12		V27337
Surrogate: 4-Bromofluorobenzene	99.2		Limits: 80-124%		1	12/03/22 01:12	MSA	V27337
Surrogate: Dibromofluoromethane	95.6		Limits: 75-129%		1	12/03/22 01:12	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	94.8		Limits: 63-136%		1	12/03/22 01:12	MSA	V27337
Surrogate: Toluene-d8	95.6		Limits: 77-123%		1	12/03/22 01:12	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

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Project Georgetown County SWF

Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94493**

Matrix: **Aqueous**

Sample ID : **MW-6VR**

Sampled: **11/28/2022 11:38**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00337	µg/L	0.00337	0.0204	1	12/08/22 20:20	AMP	8011
Conductivity	2310	µS/cm	1.12	10.0	1	12/06/22 09:40	CLB	2510B-2011
pH	6.6 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 19:04	EDV	6020B
Arsenic	19.7	µg/L	0.490	1.00	1	12/07/22 19:04	EDV	6020B
Barium	234	µg/L	3.40	10.0	1	12/07/22 19:04	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 19:04	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 19:04	EDV	6020B
Chromium	2.85	µg/L	1.00	2.00	1	12/07/22 19:04	EDV	6020B
Cobalt	3.84	µg/L	0.080	1.00	1	12/07/22 19:04	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/07/22 19:04	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/07/22 19:04	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 19:03	EDV	7470A
Nickel	16.1	µg/L	0.720	2.00	1	12/07/22 19:04	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 19:04	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 19:04	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 19:04	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 19:04	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/07/22 19:04	EDV	6020B

**Qualifiers/
Definitions**

DF
J

Dilution Factor
Estimated value

H
MQL

Beyond holding time
Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94493**
Sample ID : **MW-6VR**

Matrix: **Aqueous**
Sampled: **11/28/2022 11:38**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00408	µg/L	0.00408	0.0204	1	12/08/22 20:20	AMP	V27552
Surrogate: 4-Bromofluorobenzene	94.7		Limits: 70-130%		1	12/08/22 20:20	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 01:36	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 01:36	MSA	V27337
Benzene	0.308 J	µg/L	0.180	0.500	1	12/03/22 01:36	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 01:36	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 01:36	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 01:36	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 01:36	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 01:36	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 01:36	MSA	V27337
Chlorobenzene	6.37	µg/L	0.190	0.500	1	12/03/22 01:36	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 01:36	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 01:36	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 01:36	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 01:36	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 01:36	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 01:36	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94493**

Matrix: **Aqueous**

Sample ID : **MW-6VR**

Sampled: **11/28/2022 11:38**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 01:36	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 01:36	MSA	V27337
1,4-Dichlorobenzene	0.533	µg/L	0.210	0.500	1	12/03/22 01:36	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 01:36	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 01:36	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 01:36	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 01:36	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 01:36	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 01:36	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 01:36	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 01:36	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 01:36	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 01:36	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 01:36	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 01:36	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 01:36	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 01:36	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 01:36	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 01:36	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 01:36	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 01:36	MSA	V27337
Tetrahydrofuran	12.5	µg/L	1.50	10.0	1	12/03/22 01:36	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

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Jeff Leaver
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Project Georgetown County SWF
Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94493**

Matrix: **Aqueous**

Sample ID : **MW-6VR**

Sampled: **11/28/2022 11:38**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 01:36	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 01:36	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 01:36	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 01:36	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 01:36	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 01:36	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 01:36	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 01:36	MSA	V27337
o-Xylene	0.416 J	µg/L	0.210	0.500	1	12/03/22 01:36	MSA	V27337
m,p-Xylene	0.467 J	µg/L	0.420	1.00	1	12/03/22 01:36	MSA	V27337
Xylene (Total)	0.883 J	µg/L	0.210	0.500	1	12/03/22 01:36		V27337
Surrogate: 4-Bromofluorobenzene	99.4		Limits: 80-124%		1	12/03/22 01:36	MSA	V27337
Surrogate: Dibromofluoromethane	93.4		Limits: 75-129%		1	12/03/22 01:36	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	92.0		Limits: 63-136%		1	12/03/22 01:36	MSA	V27337
Surrogate: Toluene-d8	97.2		Limits: 77-123%		1	12/03/22 01:36	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

EFM, Inc.
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2300 Ireland Street SE
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Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94494**

Matrix: **Aqueous**

Sample ID : **MW-5V**

Sampled: **11/28/2022 12:58**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00340	µg/L	0.00340	0.0206	1	12/08/22 20:40	AMP	8011
Conductivity	473	µS/cm	1.12	10.0	1	12/06/22 09:40	CLB	2510B-2011
pH	6.2 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 19:10	EDV	6020B
Arsenic	1.01	µg/L	0.490	1.00	1	12/07/22 19:10	EDV	6020B
Barium	26.0	µg/L	3.40	10.0	1	12/07/22 19:10	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 19:10	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 19:10	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/07/22 19:10	EDV	6020B
Cobalt	0.203 J	µg/L	0.080	1.00	1	12/07/22 19:10	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/07/22 19:10	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/07/22 19:10	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 19:06	EDV	7470A
Nickel	1.46 J	µg/L	0.720	2.00	1	12/07/22 19:10	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 19:10	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 19:10	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 19:10	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 19:10	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/07/22 19:10	EDV	6020B

**Qualifiers/
Definitions**

DF	Dilution Factor	H	Beyond holding time
J	Estimated value	MQL	Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94494**
Sample ID : **MW-5V**

Matrix: **Aqueous**
Sampled: **11/28/2022 12:58**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00412	µg/L	0.00412	0.0206	1	12/08/22 20:40	AMP	V27552
Surrogate: 4-Bromofluorobenzene	108		Limits: 70-130%		1	12/08/22 20:40	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 02:00	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 02:00	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 02:00	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 02:00	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 02:00	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 02:00	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 02:00	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 02:00	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 02:00	MSA	V27337
Chlorobenzene	3.37	µg/L	0.190	0.500	1	12/03/22 02:00	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 02:00	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 02:00	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 02:00	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 02:00	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 02:00	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 02:00	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94494**

Matrix: **Aqueous**

Sample ID : **MW-5V**

Sampled: **11/28/2022 12:58**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 02:00	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 02:00	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 02:00	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 02:00	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 02:00	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 02:00	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 02:00	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 02:00	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 02:00	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 02:00	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 02:00	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 02:00	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 02:00	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 02:00	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 02:00	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 02:00	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 02:00	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 02:00	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 02:00	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 02:00	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 02:00	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 02:00	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94494**
Sample ID : **MW-5V**

Matrix: **Aqueous**
Sampled: **11/28/2022 12:58**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 02:00	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 02:00	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 02:00	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 02:00	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 02:00	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 02:00	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 02:00	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 02:00	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 02:00	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 02:00	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 02:00		V27337
Surrogate: 4-Bromofluorobenzene	100		Limits: 80-124%		1	12/03/22 02:00	MSA	V27337
Surrogate: Dibromofluoromethane	93.0		Limits: 75-129%		1	12/03/22 02:00	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	93.4		Limits: 63-136%		1	12/03/22 02:00	MSA	V27337
Surrogate: Toluene-d8	96.6		Limits: 77-123%		1	12/03/22 02:00	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093
 EFM, Inc.
 Jeff Leaver
 2300 Ireland Street SE
 Bolivia, NC 28422

Project Georgetown County SWF
 Information :

Report Date : 12/13/2022
 Received : 12/01/2022

Report Number : 22-335-0008

REPORT OF ANALYSIS

Lab No : 94495
 Sample ID : MW-7VR

Matrix: Aqueous
 Sampled: 11/28/2022 13:10

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00337	µg/L	0.00337	0.0204	1	12/08/22 20:59	AMP	8011
Conductivity	1020	µS/cm	1.12	10.0	1	12/06/22 09:40	CLB	2510B-2011
pH	6.5 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 19:17	EDV	6020B
Arsenic	18.9	µg/L	0.490	1.00	1	12/07/22 19:17	EDV	6020B
Barium	150	µg/L	3.40	10.0	1	12/07/22 19:17	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 19:17	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 19:17	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/07/22 19:17	EDV	6020B
Cobalt	0.866 J	µg/L	0.080	1.00	1	12/07/22 19:17	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/07/22 19:17	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/07/22 19:17	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 19:08	EDV	7470A
Nickel	3.03	µg/L	0.720	2.00	1	12/07/22 19:17	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 19:17	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 19:17	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 19:17	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 19:17	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/07/22 19:17	EDV	6020B

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94495**
Sample ID : **MW-7VR**

Matrix: **Aqueous**
Sampled: **11/28/2022 13:10**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00408	µg/L	0.00408	0.0204	1	12/08/22 20:59	AMP	V27552
Surrogate: 4-Bromofluorobenzene	96.7		Limits: 70-130%		1	12/08/22 20:59	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 02:24	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 02:24	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 02:24	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 02:24	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 02:24	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 02:24	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 02:24	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 02:24	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 02:24	MSA	V27337
Chlorobenzene	0.985	µg/L	0.190	0.500	1	12/03/22 02:24	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 02:24	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 02:24	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 02:24	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 02:24	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 02:24	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 02:24	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94495**

Matrix: **Aqueous**

Sample ID : **MW-7VR**

Sampled: **11/28/2022 13:10**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 02:24	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 02:24	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 02:24	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 02:24	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 02:24	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 02:24	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 02:24	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 02:24	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 02:24	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 02:24	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 02:24	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 02:24	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 02:24	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 02:24	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 02:24	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 02:24	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 02:24	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 02:24	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 02:24	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 02:24	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 02:24	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 02:24	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Bolivia, NC 28422

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Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94495**
Sample ID : **MW-7VR**

Matrix: **Aqueous**
Sampled: **11/28/2022 13:10**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 02:24	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 02:24	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 02:24	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 02:24	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 02:24	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 02:24	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 02:24	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 02:24	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 02:24	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 02:24	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 02:24		V27337
Surrogate: 4-Bromofluorobenzene	97.8		Limits: 80-124%		1	12/03/22 02:24	MSA	V27337
Surrogate: Dibromofluoromethane	93.4		Limits: 75-129%		1	12/03/22 02:24	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	94.8		Limits: 63-136%		1	12/03/22 02:24	MSA	V27337
Surrogate: Toluene-d8	95.8		Limits: 77-123%		1	12/03/22 02:24	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

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Project Georgetown County SWF
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Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94496**

Matrix: **Aqueous**

Sample ID : **SW/TW-2**

Sampled: **11/28/2022 13:27**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00340	µg/L	0.00340	0.0206	1	12/08/22 21:19	AMP	8011
Conductivity	479	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
pH	6.8 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 19:37	EDV	6020B
Arsenic	4.62	µg/L	0.490	1.00	1	12/07/22 19:37	EDV	6020B
Barium	76.3	µg/L	3.40	10.0	1	12/07/22 19:37	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 19:37	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 19:37	EDV	6020B
Chromium	1.12 J	µg/L	1.00	2.00	1	12/07/22 19:37	EDV	6020B
Cobalt	2.20	µg/L	0.080	1.00	1	12/07/22 19:37	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/07/22 19:37	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/07/22 19:37	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 19:11	EDV	7470A
Nickel	1.70 J	µg/L	0.720	2.00	1	12/07/22 19:37	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 19:37	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 19:37	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 19:37	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 19:37	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/07/22 19:37	EDV	6020B

**Qualifiers/
Definitions**

DF	Dilution Factor	H	Beyond holding time
J	Estimated value	MQL	Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94496**

Matrix: **Aqueous**

Sample ID : **SW/TW-2**

Sampled: **11/28/2022 13:27**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00412	µg/L	0.00412	0.0206	1	12/08/22 21:19	AMP	V27552
Surrogate: 4-Bromofluorobenzene	97.9		Limits: 70-130%		1	12/08/22 21:19	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 02:48	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 02:48	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 02:48	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 02:48	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 02:48	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 02:48	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 02:48	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 02:48	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 02:48	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 02:48	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 02:48	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 02:48	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 02:48	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 02:48	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 02:48	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 02:48	MSA	V27337

Qualifiers/	DF	Dilution Factor	H	Beyond holding time
Definitions	J	Estimated value	MQL	Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94496**

Matrix: **Aqueous**

Sample ID : **SW/TW-2**

Sampled: **11/28/2022 13:27**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 02:48	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 02:48	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 02:48	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 02:48	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 02:48	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 02:48	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 02:48	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 02:48	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 02:48	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 02:48	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 02:48	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 02:48	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 02:48	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 02:48	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 02:48	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 02:48	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 02:48	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 02:48	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 02:48	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 02:48	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 02:48	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 02:48	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94496**
Sample ID : **SW/TW-2**

Matrix: **Aqueous**
Sampled: **11/28/2022 13:27**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	12.5	µg/L	0.220	0.500	1	12/03/22 02:48	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 02:48	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 02:48	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 02:48	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 02:48	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 02:48	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 02:48	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 02:48	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 02:48	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 02:48	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 02:48		V27337
Surrogate: 4-Bromofluorobenzene	98.6		Limits: 80-124%		1	12/03/22 02:48	MSA	V27337
Surrogate: Dibromofluoromethane	93.6		Limits: 75-129%		1	12/03/22 02:48	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	94.8		Limits: 63-136%		1	12/03/22 02:48	MSA	V27337
Surrogate: Toluene-d8	95.8		Limits: 77-123%		1	12/03/22 02:48	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

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2300 Ireland Street SE
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Project Georgetown County SWF
Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94497**

Matrix: **Aqueous**

Sample ID : **MW-AM4R**

Sampled: **11/28/2022 14:35**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00338	µg/L	0.00338	0.0205	1	12/08/22 21:36	AMP	8011
Conductivity	520	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
pH	6.1 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/07/22 19:43	EDV	6020B
Arsenic	41.7	µg/L	0.490	1.00	1	12/07/22 19:43	EDV	6020B
Barium	30.1	µg/L	3.40	10.0	1	12/07/22 19:43	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/07/22 19:43	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/07/22 19:43	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/07/22 19:43	EDV	6020B
Cobalt	1.14	µg/L	0.080	1.00	1	12/07/22 19:43	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/07/22 19:43	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/07/22 19:43	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 19:13	EDV	7470A
Nickel	<0.720	µg/L	0.720	2.00	1	12/07/22 19:43	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/07/22 19:43	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/07/22 19:43	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/07/22 19:43	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/07/22 19:43	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/07/22 19:43	EDV	6020B

**Qualifiers/
Definitions**

DF	Dilution Factor	H	Beyond holding time
J	Estimated value	MQL	Method Quantitation Limit

00093
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Bolivia, NC 28422

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Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94497**

Matrix: **Aqueous**

Sample ID : **MW-AM4R**

Sampled: **11/28/2022 14:35**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00410	µg/L	0.00410	0.0205	1	12/08/22 21:36	AMP	V27552
Surrogate: 4-Bromofluorobenzene	101		Limits: 70-130%		1	12/08/22 21:36	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 03:11	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 03:11	MSA	V27337
Benzene	2.02	µg/L	0.180	0.500	1	12/03/22 03:11	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 03:11	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 03:11	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 03:11	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 03:11	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 03:11	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 03:11	MSA	V27337
Chlorobenzene	1.50	µg/L	0.190	0.500	1	12/03/22 03:11	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 03:11	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 03:11	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 03:11	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 03:11	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 03:11	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 03:11	MSA	V27337

Qualifiers/	DF	Dilution Factor	H	Beyond holding time
Definitions	J	Estimated value	MQL	Method Quantitation Limit

00093

EFM, Inc.

Jeff Leaver

2300 Ireland Street SE

Bolivia, NC 28422

Project

Georgetown County SWF

Information :

Report Date : 12/13/2022

Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94497**

Matrix: **Aqueous**

Sample ID : **MW-AM4R**

Sampled: **11/28/2022 14:35**

Analytical Method: 8260D

Prep Batch(es): **V27336** 12/02/22 09:00

Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 03:11	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 03:11	MSA	V27337
1,4-Dichlorobenzene	0.922	µg/L	0.210	0.500	1	12/03/22 03:11	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 03:11	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 03:11	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 03:11	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 03:11	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 03:11	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 03:11	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 03:11	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 03:11	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 03:11	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 03:11	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 03:11	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 03:11	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 03:11	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 03:11	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 03:11	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 03:11	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 03:11	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 03:11	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 03:11	MSA	V27337

**Qualifiers/
Definitions**

DF
J

Dilution Factor
Estimated value

H
MQL

Beyond holding time
Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94497**

Matrix: **Aqueous**

Sample ID : **MW-AM4R**

Sampled: **11/28/2022 14:35**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 03:11	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 03:11	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 03:11	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 03:11	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 03:11	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 03:11	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 03:11	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 03:11	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 03:11	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 03:11	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 03:11		V27337
Surrogate: 4-Bromofluorobenzene	98.8		Limits: 80-124%		1	12/03/22 03:11	MSA	V27337
Surrogate: Dibromofluoromethane	95.0		Limits: 75-129%		1	12/03/22 03:11	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	96.0		Limits: 63-136%		1	12/03/22 03:11	MSA	V27337
Surrogate: Toluene-d8	97.0		Limits: 77-123%		1	12/03/22 03:11	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94498**
Sample ID : **MW-11H**

Matrix: **Aqueous**
Sampled: **11/28/2022 15:58**

Test	Results	Units	MDL	ML	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00338	µg/L	0.00338	0.0205	1	12/08/22 21:54	AMP	8011
Conductivity	199	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
pH	5.5 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/09/22 00:45	EDV	6020B
Arsenic	<0.490	µg/L	0.490	1.00	1	12/09/22 17:55	EDV	6020B
Barium	24.4	µg/L	3.40	10.0	1	12/09/22 00:45	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/09/22 00:45	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 00:45	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 17:55	EDV	6020B
Cobalt	1.14	µg/L	0.080	1.00	1	12/09/22 17:55	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/09/22 17:55	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 00:45	EDV	6020B
Mercury (Total)	0.0800 J	µg/L	0.0700	0.200	1	12/06/22 19:16	EDV	7470A
Nickel	1.38 J	µg/L	0.720	2.00	1	12/09/22 17:55	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 17:55	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 00:45	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/09/22 00:45	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/09/22 17:55	EDV	6020B
Zinc	6.37 J	µg/L	3.90	20.0	1	12/09/22 17:55	EDV	6020B

**Qualifiers/
Definitions**

DF	Dilution Factor	H	Beyond holding time
J	Estimated value	ML	Method Quantitation Limit

00093
EFM, Inc.
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Project Georgetown County SWF
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Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94498**
Sample ID : **MW-11H**

Matrix: **Aqueous**
Sampled: **11/28/2022 15:58**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00410	µg/L	0.00410	0.0205	1	12/08/22 21:54	AMP	V27552
Surrogate: 4-Bromofluorobenzene	101		Limits: 70-130%		1	12/08/22 21:54	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 03:35	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 03:35	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 03:35	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 03:35	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 03:35	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 03:35	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 03:35	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 03:35	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 03:35	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 03:35	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 03:35	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 03:35	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 03:35	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 03:35	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 03:35	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 03:35	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.

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Project

Georgetown County SWF

Information :

Report Date : 12/13/2022

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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94498**

Matrix: **Aqueous**

Sample ID : **MW-11H**

Sampled: **11/28/2022 15:58**

Analytical Method: 8260D

Prep Batch(es): **V27336** 12/02/22 09:00

Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 03:35	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 03:35	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 03:35	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 03:35	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 03:35	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 03:35	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 03:35	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 03:35	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 03:35	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 03:35	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 03:35	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 03:35	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 03:35	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 03:35	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 03:35	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 03:35	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 03:35	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 03:35	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 03:35	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 03:35	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 03:35	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 03:35	MSA	V27337

**Qualifiers/
Definitions**

DF
J

Dilution Factor
Estimated value

H
MQL

Beyond holding time
Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94498**
Sample ID : **MW-11H**

Matrix: **Aqueous**
Sampled: **11/28/2022 15:58**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 03:35	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 03:35	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 03:35	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 03:35	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 03:35	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 03:35	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 03:35	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 03:35	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 03:35	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 03:35	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 03:35		V27337
Surrogate: 4-Bromofluorobenzene	100		Limits: 80-124%		1	12/03/22 03:35	MSA	V27337
Surrogate: Dibromofluoromethane	92.8		Limits: 75-129%		1	12/03/22 03:35	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	91.4		Limits: 63-136%		1	12/03/22 03:35	MSA	V27337
Surrogate: Toluene-d8	97.8		Limits: 77-123%		1	12/03/22 03:35	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94499**

Matrix: **Aqueous**

Sample ID : **MW-5HR**

Sampled: **11/28/2022 16:17**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00342	µg/L	0.00342	0.0207	1	12/08/22 22:13	AMP	8011
Conductivity	515	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
pH	6.5 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/09/22 01:17	EDV	6020B
Arsenic	3.49	µg/L	0.490	1.00	1	12/09/22 18:27	EDV	6020B
Barium	66.9	µg/L	3.40	10.0	1	12/09/22 01:17	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/09/22 01:17	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 01:17	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 18:27	EDV	6020B
Cobalt	0.473 J	µg/L	0.080	1.00	1	12/09/22 18:27	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/09/22 18:27	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 01:17	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/06/22 19:18	EDV	7470A
Nickel	0.753 J	µg/L	0.720	2.00	1	12/09/22 18:27	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 18:27	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 01:17	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/09/22 01:17	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/09/22 18:27	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/09/22 18:27	EDV	6020B

**Qualifiers/
Definitions**

DF	Dilution Factor	H	Beyond holding time
J	Estimated value	MQL	Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94499**
Sample ID : **MW-5HR**

Matrix: **Aqueous**
Sampled: **11/28/2022 16:17**

Analytical Method: 8011 **Prep Batch(es):** **V27473** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00414	µg/L	0.00414	0.0207	1	12/08/22 22:13	AMP	V27552
Surrogate: 4-Bromofluorobenzene	116		Limits: 70-130%		1	12/08/22 22:13	AMP	V27552

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 03:59	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 03:59	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 03:59	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 03:59	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 03:59	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 03:59	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 03:59	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 03:59	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 03:59	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 03:59	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 03:59	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 03:59	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 03:59	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 03:59	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 03:59	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 03:59	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

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Bolivia, NC 28422

Project Georgetown County SWF
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94499**
Sample ID : **MW-5HR**

Matrix: **Aqueous**
Sampled: **11/28/2022 16:17**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 03:59	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 03:59	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 03:59	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 03:59	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 03:59	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 03:59	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 03:59	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 03:59	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 03:59	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 03:59	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 03:59	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 03:59	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 03:59	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 03:59	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 03:59	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 03:59	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 03:59	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 03:59	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 03:59	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 03:59	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 03:59	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 03:59	MSA	V27337

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time
	J		MQL	Method Quantitation Limit

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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94499**
Sample ID : **MW-5HR**

Matrix: **Aqueous**
Sampled: **11/28/2022 16:17**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 03:59	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 03:59	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 03:59	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 03:59	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 03:59	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 03:59	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 03:59	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 03:59	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 03:59	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 03:59	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 03:59		V27337
Surrogate: 4-Bromofluorobenzene	101		Limits: 80-124%		1	12/03/22 03:59	MSA	V27337
Surrogate: Dibromofluoromethane	94.4		Limits: 75-129%		1	12/03/22 03:59	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	95.8		Limits: 63-136%		1	12/03/22 03:59	MSA	V27337
Surrogate: Toluene-d8	95.6		Limits: 77-123%		1	12/03/22 03:59	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Bolivia, NC 28422

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Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94500**
Sample ID : **MW-8H**

Matrix: **Aqueous**
Sampled: **11/28/2022 17:05**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00338	µg/L	0.00338	0.0205	1	12/08/22 23:44	AMP	8011
Conductivity	135	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
pH	4.8 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/09/22 01:36	EDV	6020B
Arsenic	<0.490	µg/L	0.490	1.00	1	12/09/22 18:47	EDV	6020B
Barium	59.2	µg/L	3.40	10.0	1	12/09/22 01:36	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/09/22 01:36	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 01:36	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 18:47	EDV	6020B
Cobalt	0.966 J	µg/L	0.080	1.00	1	12/09/22 18:47	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/09/22 18:47	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 01:36	EDV	6020B
Mercury (Total)	0.0800 J	µg/L	0.0700	0.200	1	12/06/22 19:21	EDV	7470A
Nickel	<0.720	µg/L	0.720	2.00	1	12/09/22 18:47	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 18:47	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 01:36	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/09/22 01:36	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/09/22 18:47	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/09/22 18:47	EDV	6020B

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time Method Quantitation Limit
	J		MQL	

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94500**
Sample ID : **MW-8H**

Matrix: **Aqueous**
Sampled: **11/28/2022 17:05**

Analytical Method: 8011 **Prep Batch(es):** **V27474** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00410	µg/L	0.00410	0.0205	1	12/08/22 23:44	AMP	V27553
Surrogate: 4-Bromofluorobenzene	78.3		Limits: 70-130%		1	12/08/22 23:44	AMP	V27553

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 04:23	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 04:23	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 04:23	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 04:23	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 04:23	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 04:23	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 04:23	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 04:23	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 04:23	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 04:23	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 04:23	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 04:23	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 04:23	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 04:23	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 04:23	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 04:23	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

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Information :

Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94500**
Sample ID : **MW-8H**

Matrix: **Aqueous**
Sampled: **11/28/2022 17:05**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 04:23	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 04:23	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 04:23	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 04:23	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 04:23	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 04:23	MSA	V27337
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 04:23	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 04:23	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 04:23	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 04:23	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 04:23	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 04:23	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 04:23	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 04:23	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 04:23	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 04:23	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 04:23	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 04:23	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 04:23	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 04:23	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 04:23	MSA	V27337
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 04:23	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093

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Information :

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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94500**
Sample ID : **MW-8H**

Matrix: **Aqueous**
Sampled: **11/28/2022 17:05**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 04:23	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 04:23	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 04:23	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 04:23	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 04:23	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 04:23	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 04:23	MSA	V27337
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 04:23	MSA	V27337
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 04:23	MSA	V27337
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 04:23	MSA	V27337
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 04:23		V27337
Surrogate: 4-Bromofluorobenzene	99.6		Limits: 80-124%		1	12/03/22 04:23	MSA	V27337
Surrogate: Dibromofluoromethane	93.4		Limits: 75-129%		1	12/03/22 04:23	MSA	V27337
Surrogate: 1,2-Dichloroethane - d4	93.8		Limits: 63-136%		1	12/03/22 04:23	MSA	V27337
Surrogate: Toluene-d8	96.4		Limits: 77-123%		1	12/03/22 04:23	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Bolivia, NC 28422

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Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94501**
Sample ID : **MW-6H**

Matrix: **Aqueous**
Sampled: **11/28/2022 18:14**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00338	µg/L	0.00338	0.0205	1	12/09/22 00:03	AMP	8011
Conductivity	453	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
pH	5.5 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/09/22 18:53	EDV	6020B
Arsenic	0.764 J	µg/L	0.490	1.00	1	12/09/22 18:53	EDV	6020B
Barium	39.2	µg/L	3.40	10.0	1	12/09/22 01:43	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/09/22 01:43	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 01:43	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 18:53	EDV	6020B
Cobalt	<0.080	µg/L	0.080	1.00	1	12/09/22 18:53	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/09/22 18:53	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 01:43	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/07/22 13:25	EDV	7470A
Nickel	<0.720	µg/L	0.720	2.00	1	12/09/22 18:53	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 18:53	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 01:43	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/09/22 01:43	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/09/22 18:53	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/09/22 18:53	EDV	6020B

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time Method Quantitation Limit
	J		MQL	

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94501**
Sample ID : **MW-6H**

Matrix: **Aqueous**
Sampled: **11/28/2022 18:14**

Analytical Method: 8011 **Prep Batch(es):** **V27474** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00410	µg/L	0.00410	0.0205	1	12/09/22 00:03	AMP	V27553
Surrogate: 4-Bromofluorobenzene	117		Limits: 70-130%		1	12/09/22 00:03	AMP	V27553

Analytical Method: 8260D **Prep Batch(es):** **V27267** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 04:47	MSA	V27268
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 04:47	MSA	V27268
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 04:47	MSA	V27268
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 04:47	MSA	V27268
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 04:47	MSA	V27268
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 04:47	MSA	V27268
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 04:47	MSA	V27268
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 04:47	MSA	V27268
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 04:47	MSA	V27268
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 04:47	MSA	V27268
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 04:47	MSA	V27268
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 04:47	MSA	V27268
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 04:47	MSA	V27268
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 04:47	MSA	V27268
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 04:47	MSA	V27268
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 04:47	MSA	V27268

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

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EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94501**
Sample ID : **MW-6H**

Matrix: **Aqueous**
Sampled: **11/28/2022 18:14**

Analytical Method: 8260D **Prep Batch(es):** **V27267** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 04:47	MSA	V27268
1,2-Dichlorobenzene	0.279 J	µg/L	0.220	0.500	1	12/03/22 04:47	MSA	V27268
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 04:47	MSA	V27268
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 04:47	MSA	V27268
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 04:47	MSA	V27268
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 04:47	MSA	V27268
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 04:47	MSA	V27268
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 04:47	MSA	V27268
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 04:47	MSA	V27268
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 04:47	MSA	V27268
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 04:47	MSA	V27268
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 04:47	MSA	V27268
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 04:47	MSA	V27268
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 04:47	MSA	V27268
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 04:47	MSA	V27268
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 04:47	MSA	V27268
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 04:47	MSA	V27268
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 04:47	MSA	V27268
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 04:47	MSA	V27268
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 04:47	MSA	V27268
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 04:47	MSA	V27268
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 04:47	MSA	V27268

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94501**

Matrix: **Aqueous**

Sample ID : **MW-6H**

Sampled: **11/28/2022 18:14**

Analytical Method: 8260D **Prep Batch(es):** **V27267** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 04:47	MSA	V27268
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 04:47	MSA	V27268
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 04:47	MSA	V27268
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 04:47	MSA	V27268
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 04:47	MSA	V27268
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 04:47	MSA	V27268
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 04:47	MSA	V27268
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 04:47	MSA	V27268
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 04:47	MSA	V27268
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 04:47	MSA	V27268
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 04:47		V27268
Surrogate: 4-Bromofluorobenzene	100		Limits: 80-124%		1	12/03/22 04:47	MSA	V27268
Surrogate: Dibromofluoromethane	93.4		Limits: 75-129%		1	12/03/22 04:47	MSA	V27268
Surrogate: 1,2-Dichloroethane - d4	92.2		Limits: 63-136%		1	12/03/22 04:47	MSA	V27268
Surrogate: Toluene-d8	97.0		Limits: 77-123%		1	12/03/22 04:47	MSA	V27268

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94502**
Sample ID : **TripBlank-02**

Matrix: **Aqueous**
Sampled: **11/29/2022 0:00**

Analytical Method: 8260D **Prep Batch(es):** **V27336** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/02/22 21:13	MSA	V27337
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/02/22 21:13	MSA	V27337
Benzene	<0.180	µg/L	0.180	0.500	1	12/02/22 21:13	MSA	V27337
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/02/22 21:13	MSA	V27337
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/02/22 21:13	MSA	V27337
Bromoform	<1.50	µg/L	1.50	5.00	1	12/02/22 21:13	MSA	V27337
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/02/22 21:13	MSA	V27337
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/02/22 21:13	MSA	V27337
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/02/22 21:13	MSA	V27337
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/02/22 21:13	MSA	V27337
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/02/22 21:13	MSA	V27337
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/02/22 21:13	MSA	V27337
Chloroform	<0.220	µg/L	0.220	0.500	1	12/02/22 21:13	MSA	V27337
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/02/22 21:13	MSA	V27337
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/02/22 21:13	MSA	V27337
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/02/22 21:13	MSA	V27337
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/02/22 21:13	MSA	V27337
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/02/22 21:13	MSA	V27337
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/02/22 21:13	MSA	V27337
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/02/22 21:13	MSA	V27337
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/02/22 21:13	MSA	V27337
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/02/22 21:13	MSA	V27337

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.

Jeff Leaver

2300 Ireland Street SE

Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022

Received : 12/01/2022

Report Number : 22-335-0008

REPORT OF ANALYSIS

Lab No : 94502

Matrix: Aqueous

Sample ID : TripBlank-02

Sampled: 11/29/2022 0:00

Analytical Method: 8260D **Prep Batch(es):** V27336 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/02/22 21:13	MSA	V27337
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 21:13	MSA	V27337
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/02/22 21:13	MSA	V27337
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/02/22 21:13	MSA	V27337
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/02/22 21:13	MSA	V27337
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/02/22 21:13	MSA	V27337
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/02/22 21:13	MSA	V27337
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/02/22 21:13	MSA	V27337
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/02/22 21:13	MSA	V27337
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/02/22 21:13	MSA	V27337
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/02/22 21:13	MSA	V27337
Styrene	<0.220	µg/L	0.220	0.500	1	12/02/22 21:13	MSA	V27337
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 21:13	MSA	V27337
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 21:13	MSA	V27337
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/02/22 21:13	MSA	V27337
Toluene	<0.220	µg/L	0.220	0.500	1	12/02/22 21:13	MSA	V27337
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/02/22 21:13	MSA	V27337
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/02/22 21:13	MSA	V27337
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/02/22 21:13	MSA	V27337
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/02/22 21:13	MSA	V27337
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/02/22 21:13	MSA	V27337
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/02/22 21:13	MSA	V27337

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94503**
Sample ID : **MW-1HR**

Matrix: **Aqueous**
Sampled: **11/29/2022 8:14**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00338	µg/L	0.00338	0.0205	1	12/09/22 00:39	AMP	8011
Conductivity	695	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
pH	6.3 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/09/22 01:49	EDV	6020B
Arsenic	0.997 J	µg/L	0.490	1.00	1	12/09/22 18:59	EDV	6020B
Barium	68.5	µg/L	3.40	10.0	1	12/09/22 01:49	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/09/22 01:49	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 01:49	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 18:59	EDV	6020B
Cobalt	0.432 J	µg/L	0.080	1.00	1	12/09/22 18:59	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/09/22 18:59	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 01:49	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/07/22 13:41	EDV	7470A
Nickel	1.20 J	µg/L	0.720	2.00	1	12/09/22 18:59	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 18:59	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 01:49	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/09/22 01:49	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/09/22 18:59	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/09/22 18:59	EDV	6020B

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94503**
Sample ID : **MW-1HR**

Matrix: **Aqueous**
Sampled: **11/29/2022 8:14**

Analytical Method: 8011 **Prep Batch(es):** **V27474** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00410	µg/L	0.00410	0.0205	1	12/09/22 00:39	AMP	V27553
Surrogate: 4-Bromofluorobenzene	108		Limits: 70-130%		1	12/09/22 00:39	AMP	V27553

Analytical Method: 8260D **Prep Batch(es):** **V27267** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 05:11	MSA	V27268
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 05:11	MSA	V27268
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 05:11	MSA	V27268
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 05:11	MSA	V27268
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 05:11	MSA	V27268
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 05:11	MSA	V27268
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 05:11	MSA	V27268
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 05:11	MSA	V27268
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 05:11	MSA	V27268
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 05:11	MSA	V27268
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 05:11	MSA	V27268
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 05:11	MSA	V27268
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 05:11	MSA	V27268
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 05:11	MSA	V27268
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 05:11	MSA	V27268
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 05:11	MSA	V27268

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.

Jeff Leaver

2300 Ireland Street SE

Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022

Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94503**

Sample ID : **MW-1HR**

Matrix: **Aqueous**

Sampled: **11/29/2022 8:14**

Analytical Method: 8260D

Prep Batch(es): **V27267** 12/02/22 09:00

Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 05:11	MSA	V27268
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 05:11	MSA	V27268
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 05:11	MSA	V27268
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 05:11	MSA	V27268
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 05:11	MSA	V27268
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 05:11	MSA	V27268
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 05:11	MSA	V27268
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 05:11	MSA	V27268
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 05:11	MSA	V27268
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 05:11	MSA	V27268
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 05:11	MSA	V27268
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 05:11	MSA	V27268
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 05:11	MSA	V27268
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 05:11	MSA	V27268
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 05:11	MSA	V27268
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 05:11	MSA	V27268
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 05:11	MSA	V27268
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 05:11	MSA	V27268
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 05:11	MSA	V27268
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 05:11	MSA	V27268
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 05:11	MSA	V27268
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 05:11	MSA	V27268

**Qualifiers/
Definitions**

DF
J

Dilution Factor
Estimated value

H
MQL

Beyond holding time
Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94503**
Sample ID : **MW-1HR**

Matrix: **Aqueous**
Sampled: **11/29/2022 8:14**

Analytical Method: 8260D **Prep Batch(es):** **V27267** 12/02/22 09:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 05:11	MSA	V27268
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 05:11	MSA	V27268
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 05:11	MSA	V27268
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 05:11	MSA	V27268
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 05:11	MSA	V27268
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 05:11	MSA	V27268
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 05:11	MSA	V27268
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 05:11	MSA	V27268
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 05:11	MSA	V27268
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 05:11	MSA	V27268
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 05:11		V27268
Surrogate: 4-Bromofluorobenzene	100		Limits: 80-124%		1	12/03/22 05:11	MSA	V27268
Surrogate: Dibromofluoromethane	96.8		Limits: 75-129%		1	12/03/22 05:11	MSA	V27268
Surrogate: 1,2-Dichloroethane - d4	95.8		Limits: 63-136%		1	12/03/22 05:11	MSA	V27268
Surrogate: Toluene-d8	96.0		Limits: 77-123%		1	12/03/22 05:11	MSA	V27268

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94504**
Sample ID : **MW-9HR**

Matrix: **Aqueous**
Sampled: **11/29/2022 9:02**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00340	µg/L	0.00340	0.0206	1	12/09/22 01:15	AMP	8011
Conductivity	774	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
pH	6.1 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/09/22 01:56	EDV	6020B
Arsenic	0.809 J	µg/L	0.490	1.00	1	12/09/22 19:06	EDV	6020B
Barium	60.7	µg/L	3.40	10.0	1	12/09/22 01:56	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/09/22 01:56	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 01:56	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 19:06	EDV	6020B
Cobalt	0.952 J	µg/L	0.080	1.00	1	12/09/22 19:06	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/09/22 19:06	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 01:56	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/07/22 13:50	EDV	7470A
Nickel	0.944 J	µg/L	0.720	2.00	1	12/09/22 19:06	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 19:06	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 01:56	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/09/22 01:56	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/09/22 19:06	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/09/22 19:06	EDV	6020B

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time Method Quantitation Limit
	J		MQL	

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94504**
Sample ID : **MW-9HR**

Matrix: **Aqueous**
Sampled: **11/29/2022 9:02**

Analytical Method: 8011 **Prep Batch(es):** **V27474** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00412	µg/L	0.00412	0.0206	1	12/09/22 01:15	AMP	V27553
Surrogate: 4-Bromofluorobenzene	97.1		Limits: 70-130%		1	12/09/22 01:15	AMP	V27553

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 09:34	MSA	V27270
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 09:34	MSA	V27270
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 09:34	MSA	V27270
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 09:34	MSA	V27270
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 09:34	MSA	V27270
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 09:34	MSA	V27270
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 09:34	MSA	V27270
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 09:34	MSA	V27270
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 09:34	MSA	V27270
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 09:34	MSA	V27270
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 09:34	MSA	V27270
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 09:34	MSA	V27270
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 09:34	MSA	V27270
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 09:34	MSA	V27270
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 09:34	MSA	V27270
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 09:34	MSA	V27270

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093
 EFM, Inc.
 Jeff Leaver
 2300 Ireland Street SE
 Bolivia, NC 28422

Project Georgetown County SWF
 Information :

Report Date : 12/13/2022
 Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94504**

Matrix: **Aqueous**

Sample ID : **MW-9HR**

Sampled: **11/29/2022 9:02**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 09:34	MSA	V27270
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 09:34	MSA	V27270
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 09:34	MSA	V27270
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 09:34	MSA	V27270
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 09:34	MSA	V27270
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 09:34	MSA	V27270
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 09:34	MSA	V27270
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 09:34	MSA	V27270
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 09:34	MSA	V27270
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 09:34	MSA	V27270
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 09:34	MSA	V27270
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 09:34	MSA	V27270
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 09:34	MSA	V27270
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 09:34	MSA	V27270
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 09:34	MSA	V27270
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 09:34	MSA	V27270
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 09:34	MSA	V27270
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 09:34	MSA	V27270
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 09:34	MSA	V27270
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 09:34	MSA	V27270
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 09:34	MSA	V27270
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 09:34	MSA	V27270

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time Method Quantitation Limit
	J		MQL	

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94504**
Sample ID : **MW-9HR**

Matrix: **Aqueous**
Sampled: **11/29/2022 9:02**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 09:34	MSA	V27270
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 09:34	MSA	V27270
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 09:34	MSA	V27270
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 09:34	MSA	V27270
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 09:34	MSA	V27270
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 09:34	MSA	V27270
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 09:34	MSA	V27270
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 09:34	MSA	V27270
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 09:34	MSA	V27270
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 09:34	MSA	V27270
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 09:34		V27270
Surrogate: 4-Bromofluorobenzene	100		Limits: 80-124%		1	12/03/22 09:34	MSA	V27270
Surrogate: Dibromofluoromethane	93.8		Limits: 75-129%		1	12/03/22 09:34	MSA	V27270
Surrogate: 1,2-Dichloroethane - d4	96.0		Limits: 63-136%		1	12/03/22 09:34	MSA	V27270
Surrogate: Toluene-d8	95.6		Limits: 77-123%		1	12/03/22 09:34	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94505**
Sample ID : **MW-25H**

Matrix: **Aqueous**
Sampled: **11/29/2022 10:20**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00340	µg/L	0.00340	0.0206	1	12/09/22 01:33	AMP	8011
Conductivity	514	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
pH	6.9 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/09/22 02:02	EDV	6020B
Arsenic	2.23	µg/L	0.490	1.00	1	12/09/22 19:12	EDV	6020B
Barium	199	µg/L	3.40	10.0	1	12/09/22 02:02	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/09/22 02:02	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 02:02	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 19:12	EDV	6020B
Cobalt	<0.080	µg/L	0.080	1.00	1	12/09/22 19:12	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/09/22 19:12	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 02:02	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/07/22 13:53	EDV	7470A
Nickel	<0.720	µg/L	0.720	2.00	1	12/09/22 19:12	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 19:12	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 02:02	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/09/22 02:02	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/09/22 19:12	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/09/22 19:12	EDV	6020B

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time Method Quantitation Limit
	J		MQL	

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94505**
Sample ID : **MW-25H**

Matrix: **Aqueous**
Sampled: **11/29/2022 10:20**

Analytical Method: 8011 **Prep Batch(es):** **V27474** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00412	µg/L	0.00412	0.0206	1	12/09/22 01:33	AMP	V27553
Surrogate: 4-Bromofluorobenzene	103		Limits: 70-130%		1	12/09/22 01:33	AMP	V27553

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 09:58	MSA	V27270
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 09:58	MSA	V27270
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 09:58	MSA	V27270
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 09:58	MSA	V27270
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 09:58	MSA	V27270
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 09:58	MSA	V27270
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 09:58	MSA	V27270
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 09:58	MSA	V27270
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 09:58	MSA	V27270
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 09:58	MSA	V27270
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 09:58	MSA	V27270
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 09:58	MSA	V27270
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 09:58	MSA	V27270
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 09:58	MSA	V27270
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 09:58	MSA	V27270
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 09:58	MSA	V27270

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

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Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94505**

Matrix: **Aqueous**

Sample ID : **MW-25H**

Sampled: **11/29/2022 10:20**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 09:58	MSA	V27270
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 09:58	MSA	V27270
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 09:58	MSA	V27270
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 09:58	MSA	V27270
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 09:58	MSA	V27270
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 09:58	MSA	V27270
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 09:58	MSA	V27270
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 09:58	MSA	V27270
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 09:58	MSA	V27270
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 09:58	MSA	V27270
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 09:58	MSA	V27270
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 09:58	MSA	V27270
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 09:58	MSA	V27270
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 09:58	MSA	V27270
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 09:58	MSA	V27270
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 09:58	MSA	V27270
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 09:58	MSA	V27270
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 09:58	MSA	V27270
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 09:58	MSA	V27270
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 09:58	MSA	V27270
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 09:58	MSA	V27270
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 09:58	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94505**
Sample ID : **MW-25H**

Matrix: **Aqueous**
Sampled: **11/29/2022 10:20**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 09:58	MSA	V27270
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 09:58	MSA	V27270
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 09:58	MSA	V27270
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 09:58	MSA	V27270
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 09:58	MSA	V27270
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 09:58	MSA	V27270
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 09:58	MSA	V27270
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 09:58	MSA	V27270
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 09:58	MSA	V27270
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 09:58	MSA	V27270
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 09:58		V27270
Surrogate: 4-Bromofluorobenzene	101		Limits: 80-124%		1	12/03/22 09:58	MSA	V27270
Surrogate: Dibromofluoromethane	94.4		Limits: 75-129%		1	12/03/22 09:58	MSA	V27270
Surrogate: 1,2-Dichloroethane - d4	92.8		Limits: 63-136%		1	12/03/22 09:58	MSA	V27270
Surrogate: Toluene-d8	96.0		Limits: 77-123%		1	12/03/22 09:58	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94506**
Sample ID : **MW-AM6**

Matrix: **Aqueous**
Sampled: **11/29/2022 10:57**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00340	µg/L	0.00340	0.0206	1	12/09/22 01:51	AMP	8011
Conductivity	186	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
pH	5.8 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/09/22 02:08	EDV	6020B
Arsenic	17.9	µg/L	0.490	1.00	1	12/09/22 19:19	EDV	6020B
Barium	40.0	µg/L	3.40	10.0	1	12/09/22 02:08	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/09/22 02:08	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 02:08	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 19:19	EDV	6020B
Cobalt	1.31	µg/L	0.080	1.00	1	12/09/22 19:19	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/09/22 19:19	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 02:08	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/07/22 13:55	EDV	7470A
Nickel	<0.720	µg/L	0.720	2.00	1	12/09/22 19:19	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 19:19	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 02:08	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/09/22 02:08	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/09/22 19:19	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/09/22 19:19	EDV	6020B

**Qualifiers/
Definitions**

DF	Dilution Factor	H	Beyond holding time
J	Estimated value	MQL	Method Quantitation Limit

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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94506**
Sample ID : **MW-AM6**

Matrix: **Aqueous**
Sampled: **11/29/2022 10:57**

Analytical Method: 8011 **Prep Batch(es):** **V27474** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00412	µg/L	0.00412	0.0206	1	12/09/22 01:51	AMP	V27553
Surrogate: 4-Bromofluorobenzene	111		Limits: 70-130%		1	12/09/22 01:51	AMP	V27553

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 10:22	MSA	V27270
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 10:22	MSA	V27270
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 10:22	MSA	V27270
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 10:22	MSA	V27270
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 10:22	MSA	V27270
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 10:22	MSA	V27270
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 10:22	MSA	V27270
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 10:22	MSA	V27270
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 10:22	MSA	V27270
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 10:22	MSA	V27270
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 10:22	MSA	V27270
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 10:22	MSA	V27270
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 10:22	MSA	V27270
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 10:22	MSA	V27270
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 10:22	MSA	V27270
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 10:22	MSA	V27270

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

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REPORT OF ANALYSIS

Lab No : **94506**
Sample ID : **MW-AM6**

Matrix: **Aqueous**
Sampled: **11/29/2022 10:57**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	0.501	µg/L	0.220	0.500	1	12/03/22 10:22	MSA	V27270
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 10:22	MSA	V27270
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 10:22	MSA	V27270
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 10:22	MSA	V27270
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 10:22	MSA	V27270
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 10:22	MSA	V27270
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 10:22	MSA	V27270
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 10:22	MSA	V27270
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 10:22	MSA	V27270
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 10:22	MSA	V27270
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 10:22		V27270
Surrogate: 4-Bromofluorobenzene	98.6		Limits: 80-124%		1	12/03/22 10:22	MSA	V27270
Surrogate: Dibromofluoromethane	93.2		Limits: 75-129%		1	12/03/22 10:22	MSA	V27270
Surrogate: 1,2-Dichloroethane - d4	93.8		Limits: 63-136%		1	12/03/22 10:22	MSA	V27270
Surrogate: Toluene-d8	95.8		Limits: 77-123%		1	12/03/22 10:22	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Report Date : 12/13/2022
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Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94507**
Sample ID : **MW-26H**

Matrix: **Aqueous**
Sampled: **11/29/2022 13:00**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00343	µg/L	0.00343	0.0208	1	12/09/22 02:09	AMP	8011
Conductivity	632	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
pH	6.3 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/09/22 02:15	EDV	6020B
Arsenic	3.32	µg/L	0.490	1.00	1	12/09/22 19:25	EDV	6020B
Barium	281	µg/L	3.40	10.0	1	12/09/22 02:15	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/09/22 02:15	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 02:15	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 19:25	EDV	6020B
Cobalt	0.446 J	µg/L	0.080	1.00	1	12/09/22 19:25	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/09/22 19:25	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 02:15	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/07/22 13:58	EDV	7470A
Nickel	0.867 J	µg/L	0.720	2.00	1	12/09/22 19:25	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 19:25	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 02:15	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/09/22 02:15	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/09/22 19:25	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/09/22 19:25	EDV	6020B

**Qualifiers/
Definitions**

DF	Dilution Factor	H	Beyond holding time
J	Estimated value	MQL	Method Quantitation Limit

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REPORT OF ANALYSIS

Lab No : **94507**
Sample ID : **MW-26H**

Matrix: **Aqueous**
Sampled: **11/29/2022 13:00**

Analytical Method: 8011 **Prep Batch(es):** **V27474** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00416	µg/L	0.00416	0.0208	1	12/09/22 02:09	AMP	V27553
Surrogate: 4-Bromofluorobenzene	94.2		Limits: 70-130%		1	12/09/22 02:09	AMP	V27553

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 10:46	MSA	V27270
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 10:46	MSA	V27270
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 10:46	MSA	V27270
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 10:46	MSA	V27270
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 10:46	MSA	V27270
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 10:46	MSA	V27270
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 10:46	MSA	V27270
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 10:46	MSA	V27270
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 10:46	MSA	V27270
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 10:46	MSA	V27270
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 10:46	MSA	V27270
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 10:46	MSA	V27270
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 10:46	MSA	V27270
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 10:46	MSA	V27270
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 10:46	MSA	V27270
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 10:46	MSA	V27270

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

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Report Number : 22-335-0008

REPORT OF ANALYSIS

Lab No : **94507**
Sample ID : **MW-26H**

Matrix: **Aqueous**
Sampled: **11/29/2022 13:00**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 10:46	MSA	V27270
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 10:46	MSA	V27270
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 10:46	MSA	V27270
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 10:46	MSA	V27270
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 10:46	MSA	V27270
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 10:46	MSA	V27270
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 10:46	MSA	V27270
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 10:46	MSA	V27270
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 10:46	MSA	V27270
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 10:46	MSA	V27270
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 10:46	MSA	V27270
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 10:46	MSA	V27270
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 10:46	MSA	V27270
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 10:46	MSA	V27270
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 10:46	MSA	V27270
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 10:46	MSA	V27270
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 10:46	MSA	V27270
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 10:46	MSA	V27270
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 10:46	MSA	V27270
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 10:46	MSA	V27270
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 10:46	MSA	V27270
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 10:46	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94507**
Sample ID : **MW-26H**

Matrix: **Aqueous**
Sampled: **11/29/2022 13:00**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 10:46	MSA	V27270
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 10:46	MSA	V27270
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 10:46	MSA	V27270
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 10:46	MSA	V27270
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 10:46	MSA	V27270
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 10:46	MSA	V27270
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 10:46	MSA	V27270
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 10:46	MSA	V27270
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 10:46	MSA	V27270
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 10:46	MSA	V27270
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 10:46		V27270
Surrogate: 4-Bromofluorobenzene	99.6		Limits: 80-124%		1	12/03/22 10:46	MSA	V27270
Surrogate: Dibromofluoromethane	93.2		Limits: 75-129%		1	12/03/22 10:46	MSA	V27270
Surrogate: 1,2-Dichloroethane - d4	95.6		Limits: 63-136%		1	12/03/22 10:46	MSA	V27270
Surrogate: Toluene-d8	96.0		Limits: 77-123%		1	12/03/22 10:46	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94508**

Matrix: **Aqueous**

Sample ID : **MW-27H**

Sampled: **11/29/2022 12:40**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00338	µg/L	0.00338	0.0205	1	12/09/22 02:27	AMP	8011
Conductivity	509	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
pH	7.4 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/09/22 02:21	EDV	6020B
Arsenic	1.59	µg/L	0.490	1.00	1	12/09/22 19:31	EDV	6020B
Barium	44.3	µg/L	3.40	10.0	1	12/09/22 02:21	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/09/22 02:21	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 02:21	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 19:31	EDV	6020B
Cobalt	<0.080	µg/L	0.080	1.00	1	12/09/22 19:31	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/09/22 19:31	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 02:21	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/07/22 14:00	EDV	7470A
Nickel	<0.720	µg/L	0.720	2.00	1	12/09/22 19:31	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 19:31	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 02:21	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/09/22 02:21	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/09/22 19:31	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/09/22 19:31	EDV	6020B

**Qualifiers/
Definitions**

DF	Dilution Factor	H	Beyond holding time
J	Estimated value	MQL	Method Quantitation Limit

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EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94508**
Sample ID : **MW-27H**

Matrix: **Aqueous**
Sampled: **11/29/2022 12:40**

Analytical Method: 8011 **Prep Batch(es):** **V27474** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00410	µg/L	0.00410	0.0205	1	12/09/22 02:27	AMP	V27553
Surrogate: 4-Bromofluorobenzene	93.9		Limits: 70-130%		1	12/09/22 02:27	AMP	V27553

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 11:10	MSA	V27270
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 11:10	MSA	V27270
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 11:10	MSA	V27270
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 11:10	MSA	V27270
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 11:10	MSA	V27270
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 11:10	MSA	V27270
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 11:10	MSA	V27270
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 11:10	MSA	V27270
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 11:10	MSA	V27270
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 11:10	MSA	V27270
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 11:10	MSA	V27270
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 11:10	MSA	V27270
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 11:10	MSA	V27270
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 11:10	MSA	V27270
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 11:10	MSA	V27270
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 11:10	MSA	V27270

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94508**

Matrix: **Aqueous**

Sample ID : **MW-27H**

Sampled: **11/29/2022 12:40**

Analytical Method: 8260D

Prep Batch(es): **V27269** 12/02/22 14:00

Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 11:10	MSA	V27270
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 11:10	MSA	V27270
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 11:10	MSA	V27270
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 11:10	MSA	V27270
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 11:10	MSA	V27270
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 11:10	MSA	V27270
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 11:10	MSA	V27270
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 11:10	MSA	V27270
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 11:10	MSA	V27270
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 11:10	MSA	V27270
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 11:10	MSA	V27270
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 11:10	MSA	V27270
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 11:10	MSA	V27270
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 11:10	MSA	V27270
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 11:10	MSA	V27270
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 11:10	MSA	V27270
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 11:10	MSA	V27270
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 11:10	MSA	V27270
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 11:10	MSA	V27270
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 11:10	MSA	V27270
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 11:10	MSA	V27270
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 11:10	MSA	V27270

**Qualifiers/
Definitions**

DF Dilution Factor
J Estimated value

H Beyond holding time
MQL Method Quantitation Limit

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Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94508**
Sample ID : **MW-27H**

Matrix: **Aqueous**
Sampled: **11/29/2022 12:40**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 11:10	MSA	V27270
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 11:10	MSA	V27270
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 11:10	MSA	V27270
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 11:10	MSA	V27270
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 11:10	MSA	V27270
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 11:10	MSA	V27270
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 11:10	MSA	V27270
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 11:10	MSA	V27270
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 11:10	MSA	V27270
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 11:10	MSA	V27270
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 11:10		V27270
Surrogate: 4-Bromofluorobenzene	103		Limits: 80-124%		1	12/03/22 11:10	MSA	V27270
Surrogate: Dibromofluoromethane	94.2		Limits: 75-129%		1	12/03/22 11:10	MSA	V27270
Surrogate: 1,2-Dichloroethane - d4	92.0		Limits: 63-136%		1	12/03/22 11:10	MSA	V27270
Surrogate: Toluene-d8	98.8		Limits: 77-123%		1	12/03/22 11:10	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94509**
Sample ID : **MW-28H**

Matrix: **Aqueous**
Sampled: **11/29/2022 15:18**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane	<0.00340	µg/L	0.00340	0.0206	1	12/09/22 02:44	AMP	8011
Conductivity	428	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
pH	7.0 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Antimony	<0.680	µg/L	0.680	2.00	1	12/09/22 02:27	EDV	6020B
Arsenic	2.16	µg/L	0.490	1.00	1	12/09/22 19:38	EDV	6020B
Barium	78.5	µg/L	3.40	10.0	1	12/09/22 02:27	EDV	6020B
Beryllium	<0.240	µg/L	0.240	1.00	1	12/09/22 02:27	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 02:27	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 19:38	EDV	6020B
Cobalt	<0.080	µg/L	0.080	1.00	1	12/09/22 19:38	EDV	6020B
Copper	<0.890	µg/L	0.890	2.00	1	12/09/22 19:38	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 02:27	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/07/22 14:03	EDV	7470A
Nickel	<0.720	µg/L	0.720	2.00	1	12/09/22 19:38	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 19:38	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 02:27	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/09/22 02:27	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/09/22 19:38	EDV	6020B
Zinc	<3.90	µg/L	3.90	20.0	1	12/09/22 19:38	EDV	6020B

Qualifiers/ Definitions	DF	Dilution Factor Estimated value	H	Beyond holding time Method Quantitation Limit
	J		MQL	

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Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94509**
Sample ID : **MW-28H**

Matrix: **Aqueous**
Sampled: **11/29/2022 15:18**

Analytical Method: 8011 **Prep Batch(es):** **V27474** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00412	µg/L	0.00412	0.0206	1	12/09/22 02:44	AMP	V27553
Surrogate: 4-Bromofluorobenzene	93.8		Limits: 70-130%		1	12/09/22 02:44	AMP	V27553

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 11:34	MSA	V27270
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 11:34	MSA	V27270
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 11:34	MSA	V27270
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 11:34	MSA	V27270
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 11:34	MSA	V27270
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 11:34	MSA	V27270
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 11:34	MSA	V27270
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 11:34	MSA	V27270
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 11:34	MSA	V27270
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 11:34	MSA	V27270
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 11:34	MSA	V27270
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 11:34	MSA	V27270
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 11:34	MSA	V27270
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 11:34	MSA	V27270
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 11:34	MSA	V27270
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 11:34	MSA	V27270

Qualifiers/ DF Dilution Factor H Beyond holding time
Definitions J Estimated value MQL Method Quantitation Limit

00093

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Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94509**

Matrix: **Aqueous**

Sample ID : **MW-28H**

Sampled: **11/29/2022 15:18**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 11:34	MSA	V27270
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 11:34	MSA	V27270
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 11:34	MSA	V27270
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 11:34	MSA	V27270
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 11:34	MSA	V27270
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 11:34	MSA	V27270
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 11:34	MSA	V27270
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 11:34	MSA	V27270
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 11:34	MSA	V27270
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 11:34	MSA	V27270
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 11:34	MSA	V27270
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 11:34	MSA	V27270
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 11:34	MSA	V27270
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 11:34	MSA	V27270
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 11:34	MSA	V27270
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 11:34	MSA	V27270
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 11:34	MSA	V27270
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 11:34	MSA	V27270
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 11:34	MSA	V27270
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 11:34	MSA	V27270
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 11:34	MSA	V27270
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 11:34	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94509**
Sample ID : **MW-28H**

Matrix: **Aqueous**
Sampled: **11/29/2022 15:18**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 11:34	MSA	V27270
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 11:34	MSA	V27270
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 11:34	MSA	V27270
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 11:34	MSA	V27270
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 11:34	MSA	V27270
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 11:34	MSA	V27270
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 11:34	MSA	V27270
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 11:34	MSA	V27270
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 11:34	MSA	V27270
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 11:34	MSA	V27270
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 11:34		V27270
Surrogate: 4-Bromofluorobenzene	101		Limits: 80-124%		1	12/03/22 11:34	MSA	V27270
Surrogate: Dibromofluoromethane	95.4		Limits: 75-129%		1	12/03/22 11:34	MSA	V27270
Surrogate: 1,2-Dichloroethane - d4	93.4		Limits: 63-136%		1	12/03/22 11:34	MSA	V27270
Surrogate: Toluene-d8	95.8		Limits: 77-123%		1	12/03/22 11:34	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94510**
Sample ID : **MW-1CD**

Matrix: **Aqueous**
Sampled: **11/30/2022 9:00**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
Chloride	14100	µg/L	370	1000	1	12/01/22 14:38	CMJ	9056A
Conductivity	619	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
Nitrate (NO3-N)	<76.0	µg/L	76.0	200	1	12/01/22 14:38	CMJ	9056A
pH	6.7 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Sulfate	958 J	µg/L	650	2000	1	12/01/22 14:38	CMJ	9056A
Arsenic	1.12	µg/L	0.490	1.00	1	12/09/22 19:44	EDV	6020B
Barium	134	µg/L	3.40	10.0	1	12/09/22 02:34	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 02:34	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 19:44	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 02:34	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/07/22 14:05	EDV	7470A
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 19:44	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 02:34	EDV	6020B

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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2300 Ireland Street SE
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Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : 22-335-0008

REPORT OF ANALYSIS

Lab No : 94510

Matrix: Aqueous

Sample ID : MW-1CD

Sampled: 11/30/2022 9:00

Analytical Method: 8260D **Prep Batch(es):** V27269 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 11:58	MSA	V27270
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 11:58	MSA	V27270
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 11:58	MSA	V27270
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 11:58	MSA	V27270
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 11:58	MSA	V27270
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 11:58	MSA	V27270
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 11:58	MSA	V27270
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 11:58	MSA	V27270
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 11:58	MSA	V27270
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 11:58	MSA	V27270
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 11:58	MSA	V27270
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 11:58	MSA	V27270
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 11:58	MSA	V27270
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 11:58	MSA	V27270
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 11:58	MSA	V27270
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 11:58	MSA	V27270
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 11:58	MSA	V27270
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 11:58	MSA	V27270
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 11:58	MSA	V27270
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 11:58	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94510**
Sample ID : **MW-1CD**

Matrix: **Aqueous**
Sampled: **11/30/2022 9:00**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 11:58		V27270
Surrogate: 4-Bromofluorobenzene	103		Limits: 80-124%		1	12/03/22 11:58	MSA	V27270
Surrogate: Dibromofluoromethane	94.4		Limits: 75-129%		1	12/03/22 11:58	MSA	V27270
Surrogate: 1,2-Dichloroethane - d4	94.0		Limits: 63-136%		1	12/03/22 11:58	MSA	V27270
Surrogate: Toluene-d8	96.0		Limits: 77-123%		1	12/03/22 11:58	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94511**
Sample ID : **MW-2CD**

Matrix: **Aqueous**
Sampled: **11/30/2022 10:44**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
Chloride	157000	µg/L	370	1000	1	12/01/22 14:54	CMJ	9056A
Conductivity	834	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
Nitrate (NO3-N)	<76.0	µg/L	76.0	200	1	12/01/22 14:54	CMJ	9056A
pH	6.1 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Sulfate	12000	µg/L	650	2000	1	12/01/22 14:54	CMJ	9056A
Arsenic	4.59	µg/L	0.490	1.00	1	12/09/22 20:03	EDV	6020B
Barium	86.7	µg/L	3.40	10.0	1	12/09/22 02:53	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 02:53	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 20:03	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 02:53	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/07/22 14:08	EDV	7470A
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 20:03	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 02:53	EDV	6020B

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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EFM, Inc.

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2300 Ireland Street SE

Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022

Received : 12/01/2022

Report Number : 22-335-0008

REPORT OF ANALYSIS

Lab No : 94511

Sample ID : MW-2CD

Matrix: Aqueous

Sampled: 11/30/2022 10:44

Analytical Method: 8260D **Prep Batch(es):** V27269 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 12:22	MSA	V27270
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 12:22	MSA	V27270
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 12:22	MSA	V27270
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 12:22	MSA	V27270
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 12:22	MSA	V27270
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 12:22	MSA	V27270
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 12:22	MSA	V27270
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 12:22	MSA	V27270
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 12:22	MSA	V27270
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 12:22	MSA	V27270
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 12:22	MSA	V27270
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 12:22	MSA	V27270
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 12:22	MSA	V27270
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 12:22	MSA	V27270
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 12:22	MSA	V27270
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 12:22	MSA	V27270
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 12:22	MSA	V27270
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 12:22	MSA	V27270
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 12:22	MSA	V27270
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 12:22	MSA	V27270

**Qualifiers/
Definitions**

DF
J

Dilution Factor
Estimated value

H
MQL

Beyond holding time
Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94511**
Sample ID : **MW-2CD**

Matrix: **Aqueous**
Sampled: **11/30/2022 10:44**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 12:22		V27270
Surrogate: 4-Bromofluorobenzene	100		Limits: 80-124%		1	12/03/22 12:22	MSA	V27270
Surrogate: Dibromofluoromethane	93.8		Limits: 75-129%		1	12/03/22 12:22	MSA	V27270
Surrogate: 1,2-Dichloroethane - d4	93.2		Limits: 63-136%		1	12/03/22 12:22	MSA	V27270
Surrogate: Toluene-d8	95.4		Limits: 77-123%		1	12/03/22 12:22	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94512**
Sample ID : **MW-3CD**

Matrix: **Aqueous**
Sampled: **11/30/2022 12:29**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
Chloride	20400	µg/L	370	1000	1	12/01/22 15:10	CMJ	9056A
Conductivity	758	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
Nitrate (NO3-N)	<76.0	µg/L	76.0	200	1	12/01/22 15:10	CMJ	9056A
pH	6.6 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Sulfate	46800	µg/L	650	2000	1	12/01/22 15:10	CMJ	9056A
Arsenic	15.3	µg/L	0.490	1.00	1	12/09/22 20:10	EDV	6020B
Barium	105	µg/L	3.40	10.0	1	12/09/22 02:59	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 02:59	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 20:10	EDV	6020B
Lead	<0.500	µg/L	0.500	1.00	1	12/09/22 02:59	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/07/22 14:10	EDV	7470A
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 20:10	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 02:59	EDV	6020B

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : 22-335-0008

REPORT OF ANALYSIS

Lab No : 94512

Matrix: Aqueous

Sample ID : MW-3CD

Sampled: 11/30/2022 12:29

Analytical Method: 8260D **Prep Batch(es):** V27269 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 12:46	MSA	V27270
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 12:46	MSA	V27270
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 12:46	MSA	V27270
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 12:46	MSA	V27270
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 12:46	MSA	V27270
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 12:46	MSA	V27270
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 12:46	MSA	V27270
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 12:46	MSA	V27270
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 12:46	MSA	V27270
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 12:46	MSA	V27270
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 12:46	MSA	V27270
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 12:46	MSA	V27270
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 12:46	MSA	V27270
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 12:46	MSA	V27270
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 12:46	MSA	V27270
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 12:46	MSA	V27270
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 12:46	MSA	V27270
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 12:46	MSA	V27270
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 12:46	MSA	V27270
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 12:46	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94512**
Sample ID : **MW-3CD**

Matrix: **Aqueous**
Sampled: **11/30/2022 12:29**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 12:46		V27270
Surrogate: 4-Bromofluorobenzene	101		Limits: 80-124%		1	12/03/22 12:46	MSA	V27270
Surrogate: Dibromofluoromethane	92.4		Limits: 75-129%		1	12/03/22 12:46	MSA	V27270
Surrogate: 1,2-Dichloroethane - d4	92.8		Limits: 63-136%		1	12/03/22 12:46	MSA	V27270
Surrogate: Toluene-d8	96.2		Limits: 77-123%		1	12/03/22 12:46	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94513**
Sample ID : **MW-3H**

Matrix: **Aqueous**
Sampled: **11/30/2022 7:42**

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Method
1,2-Dibromoethane Chloride	<0.00342 62900	µg/L	0.00342 370	0.0207 1000	1	12/09/22 03:03 12/01/22 15:58	AMP CMJ	8011 9056A
Conductivity	372	µS/cm	1.12	10.0	1	12/06/22 10:55	CLB	2510B-2011
Nitrate (NO3-N)	968	µg/L	76.0	200	1	12/01/22 15:58	CMJ	9056A
pH	5.1 H	s.u.			1	12/06/22 13:15	CLB	4500H+B-2011
Sulfate	79800	µg/L	650	2000	1	12/01/22 15:58	CMJ	9056A
Antimony	<0.680	µg/L	0.680	2.00	1	12/09/22 03:06	EDV	6020B
Arsenic	<0.490	µg/L	0.490	1.00	1	12/09/22 20:16	EDV	6020B
Barium	126	µg/L	3.40	10.0	1	12/09/22 03:06	EDV	6020B
Beryllium	1.04	µg/L	0.240	1.00	1	12/09/22 03:06	EDV	6020B
Cadmium	<0.150	µg/L	0.150	1.00	1	12/09/22 03:06	EDV	6020B
Chromium	<1.00	µg/L	1.00	2.00	1	12/09/22 20:16	EDV	6020B
Cobalt	2.11	µg/L	0.080	1.00	1	12/09/22 20:16	EDV	6020B
Copper	1.63 J	µg/L	0.890	2.00	1	12/09/22 20:16	EDV	6020B
Lead	1.04	µg/L	0.500	1.00	1	12/09/22 03:06	EDV	6020B
Mercury (Total)	<0.0700	µg/L	0.0700	0.200	1	12/07/22 14:13	EDV	7470A
Nickel	6.18	µg/L	0.720	2.00	1	12/09/22 20:16	EDV	6020B
Selenium	<2.30	µg/L	2.30	5.00	1	12/09/22 20:16	EDV	6020B
Silver	<0.130	µg/L	0.130	1.00	1	12/09/22 03:06	EDV	6020B
Thallium	<0.280	µg/L	0.280	2.00	1	12/09/22 03:06	EDV	6020B
Vanadium	<2.10	µg/L	2.10	5.00	1	12/09/22 20:16	EDV	6020B
Zinc	6.25 J	µg/L	3.90	20.0	1	12/09/22 20:16	EDV	6020B

**Qualifiers/
Definitions**

DF	Dilution Factor	H	Beyond holding time
J	Estimated value	MQL	Method Quantitation Limit

00093
EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94513**
Sample ID : **MW-3H**

Matrix: **Aqueous**
Sampled: **11/30/2022 7:42**

Analytical Method: 8011 **Prep Batch(es):** **V27474** 12/08/22 14:58
Prep Method: 8011

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
1,2-Dibromo-3-Chloropropane	<0.00414	µg/L	0.00414	0.0207	1	12/09/22 03:03	AMP	V27553
Surrogate: 4-Bromofluorobenzene	96.0		Limits: 70-130%		1	12/09/22 03:03	AMP	V27553

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MLQ	DF	Date / Time Analyzed	By	Analytical Batch
Acetone	<1.80	µg/L	1.80	5.00	1	12/03/22 13:10	MSA	V27270
Acrylonitrile	<0.230	µg/L	0.230	5.00	1	12/03/22 13:10	MSA	V27270
Benzene	<0.180	µg/L	0.180	0.500	1	12/03/22 13:10	MSA	V27270
Bromochloromethane	<0.420	µg/L	0.420	1.00	1	12/03/22 13:10	MSA	V27270
Bromodichloromethane	<0.160	µg/L	0.160	0.500	1	12/03/22 13:10	MSA	V27270
Bromoform	<1.50	µg/L	1.50	5.00	1	12/03/22 13:10	MSA	V27270
Bromomethane	<0.280	µg/L	0.280	1.00	1	12/03/22 13:10	MSA	V27270
Carbon Disulfide	<0.150	µg/L	0.150	5.00	1	12/03/22 13:10	MSA	V27270
Carbon Tetrachloride	<0.180	µg/L	0.180	0.500	1	12/03/22 13:10	MSA	V27270
Chlorobenzene	<0.190	µg/L	0.190	0.500	1	12/03/22 13:10	MSA	V27270
Chlorodibromomethane	<0.190	µg/L	0.190	0.500	1	12/03/22 13:10	MSA	V27270
Chloroethane	<0.430	µg/L	0.430	1.00	1	12/03/22 13:10	MSA	V27270
Chloroform	<0.220	µg/L	0.220	0.500	1	12/03/22 13:10	MSA	V27270
Chloromethane	<0.220	µg/L	0.220	0.500	1	12/03/22 13:10	MSA	V27270
1,2-Dibromoethane	<0.200	µg/L	0.200	0.500	1	12/03/22 13:10	MSA	V27270
Dibromomethane	<0.230	µg/L	0.230	0.500	1	12/03/22 13:10	MSA	V27270

Qualifiers/Definitions DF Dilution Factor H Beyond holding time
J Estimated value MQL Method Quantitation Limit

00093

EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF

Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94513**
Sample ID : **MW-3H**

Matrix: **Aqueous**
Sampled: **11/30/2022 7:42**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
trans-1,4-Dichloro-2-butene	<1.30	µg/L	1.30	10.0	1	12/03/22 13:10	MSA	V27270
1,2-Dichlorobenzene	<0.220	µg/L	0.220	0.500	1	12/03/22 13:10	MSA	V27270
1,4-Dichlorobenzene	<0.210	µg/L	0.210	0.500	1	12/03/22 13:10	MSA	V27270
1,1-Dichloroethane	<0.240	µg/L	0.240	0.500	1	12/03/22 13:10	MSA	V27270
1,2-Dichloroethane	<0.150	µg/L	0.150	0.500	1	12/03/22 13:10	MSA	V27270
1,1-Dichloroethene	<0.150	µg/L	0.150	0.500	1	12/03/22 13:10	MSA	V27270
cis-1,2-Dichloroethene	<0.200	µg/L	0.200	0.500	1	12/03/22 13:10	MSA	V27270
trans-1,2-Dichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 13:10	MSA	V27270
1,2-Dichloropropane	<0.190	µg/L	0.190	0.500	1	12/03/22 13:10	MSA	V27270
cis-1,3-Dichloropropene	<0.210	µg/L	0.210	0.500	1	12/03/22 13:10	MSA	V27270
trans-1,3-Dichloropropene	<0.150	µg/L	0.150	0.500	1	12/03/22 13:10	MSA	V27270
Ethylbenzene	<0.170	µg/L	0.170	0.500	1	12/03/22 13:10	MSA	V27270
2-Hexanone	<0.380	µg/L	0.380	5.00	1	12/03/22 13:10	MSA	V27270
Iodomethane	<0.054	µg/L	0.054	0.500	1	12/03/22 13:10	MSA	V27270
Methyl Ethyl Ketone (MEK)	<0.710	µg/L	0.710	5.00	1	12/03/22 13:10	MSA	V27270
4-Methyl-2-Pentanone	<1.00	µg/L	1.00	5.00	1	12/03/22 13:10	MSA	V27270
Methylene Chloride	<0.330	µg/L	0.330	1.00	1	12/03/22 13:10	MSA	V27270
Styrene	<0.220	µg/L	0.220	0.500	1	12/03/22 13:10	MSA	V27270
1,1,1,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 13:10	MSA	V27270
1,1,2,2-Tetrachloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 13:10	MSA	V27270
Tetrachloroethene	<0.220	µg/L	0.220	0.500	1	12/03/22 13:10	MSA	V27270
Tetrahydrofuran	<1.50	µg/L	1.50	10.0	1	12/03/22 13:10	MSA	V27270

Qualifiers/Definitions	DF	Dilution Factor	H	Beyond holding time
	J	Estimated value	MQL	Method Quantitation Limit

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EFM, Inc.
Jeff Leaver
2300 Ireland Street SE
Bolivia, NC 28422

Project Georgetown County SWF
Information :

Report Date : 12/13/2022
Received : 12/01/2022

Report Number : **22-335-0008**

REPORT OF ANALYSIS

Lab No : **94513**
Sample ID : **MW-3H**

Matrix: **Aqueous**
Sampled: **11/30/2022 7:42**

Analytical Method: 8260D **Prep Batch(es):** **V27269** 12/02/22 14:00
Prep Method: 5030B

Test	Results	Units	MDL	MQL	DF	Date / Time Analyzed	By	Analytical Batch
Toluene	<0.220	µg/L	0.220	0.500	1	12/03/22 13:10	MSA	V27270
1,1,1-Trichloroethane	<0.160	µg/L	0.160	0.500	1	12/03/22 13:10	MSA	V27270
1,1,2-Trichloroethane	<0.096	µg/L	0.096	0.500	1	12/03/22 13:10	MSA	V27270
Trichloroethene	<0.180	µg/L	0.180	0.500	1	12/03/22 13:10	MSA	V27270
Trichlorofluoromethane	<0.180	µg/L	0.180	0.500	1	12/03/22 13:10	MSA	V27270
1,2,3-Trichloropropane	<0.270	µg/L	0.270	1.00	1	12/03/22 13:10	MSA	V27270
Vinyl Acetate	<1.00	µg/L	1.00	2.00	1	12/03/22 13:10	MSA	V27270
Vinyl Chloride	<0.170	µg/L	0.170	0.500	1	12/03/22 13:10	MSA	V27270
o-Xylene	<0.210	µg/L	0.210	0.500	1	12/03/22 13:10	MSA	V27270
m,p-Xylene	<0.420	µg/L	0.420	1.00	1	12/03/22 13:10	MSA	V27270
Xylene (Total)	<0.21	µg/L	0.210	0.500	1	12/03/22 13:10		V27270
Surrogate: 4-Bromofluorobenzene	99.6		Limits: 80-124%		1	12/03/22 13:10	MSA	V27270
Surrogate: Dibromofluoromethane	96.2		Limits: 75-129%		1	12/03/22 13:10	MSA	V27270
Surrogate: 1,2-Dichloroethane - d4	95.2		Limits: 63-136%		1	12/03/22 13:10	MSA	V27270
Surrogate: Toluene-d8	94.6		Limits: 77-123%		1	12/03/22 13:10	MSA	V27270

Qualifiers/Definitions DF Dilution Factor H Beyond holding time

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Analytical Batch: V27309
Analysis Method: 2510B-2011
Analysis Description: Conductivity/Resistivity

Laboratory Control Sample LCS

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Conductivity	µS/cm	1410	1440	102	90-110

Laboratory Control Sample LCS4

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Conductivity	µS/cm	1410	1440	102	90-110

Duplicate V 94117-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Conductivity	µS/cm	955	954	0.1	20.0	12/06/22 09:40

Duplicate V 94118-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Conductivity	µS/cm	559	562	0.5	20.0	12/06/22 09:40

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Analytical Batch: V27310
Analysis Method: 2510B-2011
Analysis Description: Conductivity/Resistivity

Laboratory Control Sample LCS

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Conductivity	µS/cm	1410	1440	102	90-110

Duplicate V 94496-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Conductivity	µS/cm	479	483	0.8	20.0	12/06/22 10:55

Duplicate V 94497-DUP

Parameter	Units	Result	DUP Result	RPD	Max RPD	Analyzed
Conductivity	µS/cm	520	523	0.5	20.0	12/06/22 10:55

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Analytical Batch: V27352
Analysis Method: 4500H+B-2011
Analysis Description: pH

Laboratory Control Sample LCS

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
pH	s.u.	6.8	6.8	100	3.54-101.4

Laboratory Control Sample LCS21

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
pH	s.u.	6.8	6.8	100	3.54-101.4

Duplicate V 94484-DUP

Parameter	Units	Result	DUP Result	Criteria	Analyzed
pH	s.u.	7.1	7.1	+/- 0.1	12/06/22 13:15

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Analytical Batch: V27353
Analysis Method: 4500H+B-2011
Analysis Description: pH

Laboratory Control Sample LCS

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
pH	s.u.	6.8	6.8	100	3.54-101.4

Laboratory Control Sample LCS22

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
pH	s.u.	6.8	6.8	100	3.54-101.4

Duplicate V 94492-DUP

Parameter	Units	Result	DUP Result	Criteria	Analyzed
pH	s.u.	6.6	6.6	+/- 0.1	12/06/22 13:15

Duplicate V 94498-DUP

Parameter	Units	Result	DUP Result	Criteria	Analyzed
pH	s.u.	5.5	5.5	+/- 0.1	12/06/22 13:15

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27209 **QC Analytical Batch(es):** V27454
QC Prep Batch Method: 3005A **Analysis Method:** 6020B
Analysis Description: Metals Analyses

Lab Reagent Blank LRB-V27209 Matrix: AQU
Associated Lab Samples: 94483, 94484, 94485, 94486, 94487, 94488, 94489, 94490, 94491, 94492, 94493, 94494, 94495, 94496, 94497

Parameter	Units	Blank Result	MDL	MQL	Analyzed
Antimony	µg/L	<0.680	0.680	2.00	12/07/22 16:20
Arsenic	µg/L	<0.490	0.490	1.00	12/07/22 16:20
Barium	µg/L	<3.40	3.40	10.0	12/07/22 16:20
Beryllium	µg/L	<0.240	0.240	1.00	12/07/22 16:20
Cadmium	µg/L	<0.150	0.150	1.00	12/07/22 16:20
Chromium	µg/L	<1.00	1.00	2.00	12/07/22 16:20
Cobalt	µg/L	<0.080	0.080	1.00	12/07/22 16:20
Copper	µg/L	<0.890	0.890	2.00	12/07/22 16:20
Lead	µg/L	<0.500	0.500	1.00	12/07/22 16:20
Nickel	µg/L	<0.720	0.720	2.00	12/07/22 16:20
Selenium	µg/L	<2.30	2.30	5.00	12/07/22 16:20
Silver	µg/L	<0.130	0.130	1.00	12/07/22 16:20
Thallium	µg/L	<0.280	0.280	2.00	12/07/22 16:20
Vanadium	µg/L	<2.10	2.10	5.00	12/07/22 16:20
Zinc	µg/L	<3.90	3.90	20.0	12/07/22 16:20

Laboratory Control Sample LCS-V27209

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Antimony	µg/L	100	111	111	80-120
Arsenic	µg/L	100	96.9	97.0	80-120
Barium	µg/L	100	108	108	80-120
Beryllium	µg/L	100	101	101	80-120
Cadmium	µg/L	100	103	103	80-120
Chromium	µg/L	100	97.0	97.0	80-120
Cobalt	µg/L	100	97.3	97.0	80-120
Copper	µg/L	100	94.7	95.0	80-120

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27209 **QC Analytical Batch(es):** V27454
QC Prep Batch Method: 3005A **Analysis Method:** 6020B
Analysis Description: Metals Analyses

Laboratory Control Sample LCS-V27209

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Lead	µg/L	100	99.9	100	80-120
Nickel	µg/L	100	95.0	95.0	80-120
Selenium	µg/L	100	104	104	80-120
Silver	µg/L	100	98.2	98.0	80-120
Thallium	µg/L	100	93.6	94.0	80-120
Vanadium	µg/L	100	99.6	100	80-120
Zinc	µg/L	100	96.1	96.0	80-120

Matrix Spike & Matrix Spike Duplicate V 94594-MS-V27209 V 94594-MSD-V27209

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Antimony	µg/L	0.774	100	100	101	101	100	100	75-125	0.0	20.0
Arsenic	µg/L	< 0.490	100	100	97.1	94.8	97.0	95.0	75-125	2.3	20.0
Barium	µg/L	62.1	100	100	162	167	100	105	75-125	3.0	20.0
Beryllium	µg/L	0.475	100	100	103	98.6	103	98.0	75-125	4.3	20.0
Cadmium	µg/L	< 0.150	100	100	103	102	103	102	75-125	0.9	20.0
Chromium	µg/L	22.0	100	100	117	116	95.0	94.0	75-125	0.8	20.0
Cobalt	µg/L	4.84	100	100	100	98.7	95.0	94.0	75-125	1.3	20.0
Copper	µg/L	15.2	100	100	109	109	94.0	94.0	75-125	0.0	20.0
Lead	µg/L	3.76	100	100	103	102	99.0	98.0	75-125	0.9	20.0
Nickel	µg/L	13.9	100	100	106	105	92.0	91.0	75-125	0.9	20.0
Selenium	µg/L	< 2.30	100	100	105	106	105	106	75-125	0.9	20.0
Silver	µg/L	< 0.130	100	100	98.9	97.6	99.0	98.0	75-125	1.3	20.0
Thallium	µg/L	< 0.280	100	100	94.6	92.7	95.0	93.0	75-125	2.0	20.0
Vanadium	µg/L	23.7	100	100	123	122	99.0	98.0	75-125	0.8	20.0
Zinc	µg/L	21.9	100	100	118	117	96.0	95.0	75-125	0.8	20.0

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27209 **QC Analytical Batch(es):** V27454
QC Prep Batch Method: 3005A **Analysis Method:** 6020B
Analysis Description: Metals Analyses

Post Digestion Spike V 94594-PDS-V27209

Parameter	Units	PDS Result	% Recovery	Analyzed
Antimony	µg/L	53.7	106	12/07/22 17:06
Arsenic	µg/L	49.4	99.0	12/07/22 17:06
Barium	µg/L	84.9	105	12/07/22 17:06
Beryllium	µg/L	49.0	98.0	12/07/22 17:06
Cadmium	µg/L	50.8	102	12/07/22 17:06
Chromium	µg/L	58.6	96.0	12/07/22 17:06
Cobalt	µg/L	48.9	93.0	12/07/22 17:06
Copper	µg/L	54.0	94.0	12/07/22 17:06
Lead	µg/L	50.6	98.0	12/07/22 17:06
Nickel	µg/L	52.5	92.0	12/07/22 17:06
Selenium	µg/L	50.6	101	12/07/22 17:06
Silver	µg/L	49.1	98.0	12/07/22 17:06
Thallium	µg/L	46.5	93.0	12/07/22 17:06
Vanadium	µg/L	60.7	98.0	12/07/22 17:06
Zinc	µg/L	57.7	95.0	12/07/22 17:06

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27444 **QC Analytical Batch(es):** V27538,V27627
QC Prep Batch Method: 3005A **Analysis Method:** 6020B
Analysis Description: Metals Analyses

Lab Reagent Blank LRB-V27444 Matrix: AQU
Associated Lab Samples: 94498, 94499, 94500, 94501, 94503, 94504, 94505, 94506, 94507, 94508, 94509, 94510, 94511, 94512, 94513

Parameter	Units	Blank Result	MDL	MQL	Analyzed
Antimony	µg/L	<0.680	0.680	2.00	12/09/22 00:32
Arsenic	µg/L	<0.490	0.490	1.00	12/09/22 17:43
Barium	µg/L	<3.40	3.40	10.0	12/09/22 00:32
Beryllium	µg/L	<0.240	0.240	1.00	12/09/22 00:32
Cadmium	µg/L	<0.150	0.150	1.00	12/09/22 00:32
Chromium	µg/L	<1.00	1.00	2.00	12/09/22 17:43
Cobalt	µg/L	<0.080	0.080	1.00	12/09/22 17:43
Copper	µg/L	<0.890	0.890	2.00	12/09/22 17:43
Lead	µg/L	<0.500	0.500	1.00	12/09/22 00:32
Nickel	µg/L	<0.720	0.720	2.00	12/09/22 17:43
Selenium	µg/L	<2.30	2.30	5.00	12/09/22 17:43
Silver	µg/L	<0.130	0.130	1.00	12/09/22 00:32
Thallium	µg/L	<0.280	0.280	2.00	12/09/22 00:32
Vanadium	µg/L	<2.10	2.10	5.00	12/09/22 17:43
Zinc	µg/L	<3.90	3.90	20.0	12/09/22 17:43

Laboratory Control Sample LCS-V27444

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Antimony	µg/L	100	116	116	80-120
Arsenic	µg/L	100	96.4	96.0	80-120
Barium	µg/L	100	115	115	80-120
Beryllium	µg/L	100	96.8	97.0	80-120
Cadmium	µg/L	100	106	106	80-120
Chromium	µg/L	100	94.8	95.0	80-120
Cobalt	µg/L	100	102	102	80-120
Copper	µg/L	100	99.6	100	80-120

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27444 **QC Analytical Batch(es):** V27538,V27627
QC Prep Batch Method: 3005A **Analysis Method:** 6020B
Analysis Description: Metals Analyses

Laboratory Control Sample LCS-V27444

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Lead	µg/L	100	100	100	80-120
Nickel	µg/L	100	101	101	80-120
Selenium	µg/L	100	105	105	80-120
Silver	µg/L	100	99.5	100	80-120
Thallium	µg/L	100	92.7	93.0	80-120
Vanadium	µg/L	100	97.7	98.0	80-120
Zinc	µg/L	100	98.4	98.0	80-120

Matrix Spike & Matrix Spike Duplicate V 94498-MS-V27444 V 94498-MSD-V27444

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Antimony	µg/L	< 0.680	100	100	113	114	113	114	75-125	0.8	20.0
Arsenic	µg/L	< 0.490	100	100	98.1	96.4	98.0	96.0	75-125	1.7	20.0
Barium	µg/L	24.4	100	100	135	135	111	111	75-125	0.0	20.0
Beryllium	µg/L	< 0.240	100	100	100	100	100	100	75-125	0.0	20.0
Cadmium	µg/L	< 0.150	100	100	104	104	104	104	75-125	0.0	20.0
Chromium	µg/L	< 1.00	100	100	96.3	93.5	96.0	94.0	75-125	2.9	20.0
Cobalt	µg/L	1.14	100	100	105	102	104	101	75-125	2.8	20.0
Copper	µg/L	< 0.890	100	100	101	100	101	100	75-125	0.9	20.0
Lead	µg/L	< 0.500	100	100	96.8	99.9	97.0	100	75-125	3.1	20.0
Nickel	µg/L	1.38	100	100	102	100	101	99.0	75-125	1.9	20.0
Selenium	µg/L	< 2.30	100	100	106	104	106	104	75-125	1.9	20.0
Silver	µg/L	< 0.130	100	100	95.3	97.6	95.0	98.0	75-125	2.3	20.0
Thallium	µg/L	< 0.280	100	100	88.2	91.8	88.0	92.0	75-125	4.0	20.0
Vanadium	µg/L	< 2.10	100	100	98.9	96.3	99.0	96.0	75-125	2.6	20.0
Zinc	µg/L	6.37	100	100	101	97.7	95.0	91.0	75-125	3.3	20.0

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27444 **QC Analytical Batch(es):** V27538,V27627
QC Prep Batch Method: 3005A **Analysis Method:** 6020B
Analysis Description: Metals Analyses

Post Digestion Spike V 94498-PDS-V27444

Parameter	Units	PDS Result	% Recovery	Analyzed
Antimony	µg/L	55.6	111	12/09/22 01:04
Arsenic	µg/L	49.4	99.0	12/09/22 18:14
Barium	µg/L	68.6	110	12/09/22 01:04
Beryllium	µg/L	51.6	103	12/09/22 01:04
Cadmium	µg/L	51.7	103	12/09/22 01:04
Chromium	µg/L	47.5	95.0	12/09/22 18:14
Cobalt	µg/L	51.1	101	12/09/22 18:14
Copper	µg/L	50.8	102	12/09/22 18:14
Lead	µg/L	49.2	98.0	12/09/22 01:04
Nickel	µg/L	51.0	101	12/09/22 18:14
Selenium	µg/L	50.9	102	12/09/22 18:14
Silver	µg/L	48.9	98.0	12/09/22 01:04
Thallium	µg/L	46.2	92.0	12/09/22 01:04
Vanadium	µg/L	49.0	98.0	12/09/22 18:14
Zinc	µg/L	51.9	98.0	12/09/22 18:14

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27311 **QC Analytical Batch(es):** V27392
QC Prep Batch Method: 7470A **Analysis Method:** 7470A
Analysis Description: Total Aqueous Mercury Analysis - CVAA

Lab Reagent Blank LRB-V27311 Matrix: AQU
Associated Lab Samples: 94483, 94484, 94485, 94486, 94487, 94488, 94489, 94490, 94491, 94492, 94493, 94494, 94495, 94496, 94497, 94498, 94499, 94500

Parameter	Units	Blank Result	MDL	MQL	Analyzed
Mercury (Total)	µg/L	<0.0700	0.0700	0.200	12/06/22 18:01

Laboratory Control Sample LCS-V27311

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Mercury (Total)	µg/L	4.69	4.64	99.0	80-120

Matrix Spike & Matrix Spike Duplicate V 94397-MS-V27311 V 94397-MSD-V27311

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Mercury (Total)	µg/L	0.150	4.69	4.69	4.40	4.47	91.0	92.0	80-120	1.5	20

Post Digestion Spike V 94397-PDS-V27311

Parameter	Units	PDS Result	% Recovery	Analyzed
Mercury (Total)	µg/L	2.54	105	12/06/22 18:18

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27385 **QC Analytical Batch(es):** V27419
QC Prep Batch Method: 7470A **Analysis Method:** 7470A
Analysis Description: Total Aqueous Mercury Analysis - CVAA

Lab Reagent Blank LRB-V27385 Matrix: AQU
Associated Lab Samples: 94501, 94503, 94504, 94505, 94506, 94507, 94508, 94509, 94510, 94511, 94512, 94513

Parameter	Units	Blank Result	MDL	MQL	Analyzed
Mercury (Total)	µg/L	<0.0700	0.0700	0.200	12/07/22 13:20

Laboratory Control Sample LCS-V27385

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Mercury (Total)	µg/L	4.69	4.62	99.0	80-120

Matrix Spike & Matrix Spike Duplicate V 94501-MS-V27385 V 94501-MSD-V27385

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Mercury (Total)	µg/L	<0.0700	4.69	4.69	4.71	4.67	100	100	80-120	0.8	20

Post Digestion Spike V 94501-PDS-V27385

Parameter	Units	PDS Result	% Recovery	Analyzed
Mercury (Total)	µg/L	2.46	105	12/07/22 13:36

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27473 **QC Analytical Batch(es):** V27552
QC Prep Batch Method: 8011 **Analysis Method:** 8011
Analysis Description: EDB and DBCP by Microextraction GC/ECD

Lab Reagent Blank LRB-V27473 Matrix: AQU
 Associated Lab Samples: 94483, 94484, 94485, 94486, 94487, 94488, 94489, 94490, 94491, 94492, 94493, 94494, 94495, 94496, 94497, 94498, 94499

Parameter	Units	Blank Result	MDL	MQL	Analyzed	% Recovery	% Rec Limits
1,2-Dibromo-3-Chloropropane	µg/L	<0.00400	0.00400	0.0200	12/08/22 15:25		
1,2-Dibromoethane	µg/L	<0.00330	0.00330	0.0200	12/08/22 15:25		
4-Bromofluorobenzene (S)					12/08/22 15:25	94.8	70-130

Laboratory Control Sample & LCSD LCS-V27473 LCSD-V27473

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD
1,2-Dibromo-3-Chloropropane	µg/L	0.250	0.226	0.263	90.4	105	60-140	15.1	20.0
1,2-Dibromoethane	µg/L	0.250	0.226	0.276	90.4	110	60-140	19.9	20.0
4-Bromofluorobenzene (S)					97.4	104	70-130		

Duplicate V 94484-DUP-V27473

Parameter	Units	DUP Result	Surrogate Recovery	Analyzed
4-Bromofluorobenzene (S)	µg/L	5.02	97.2	12/08/22 17:24

Matrix Spike V 94483-MS-V27473

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	%Rec Limits	Max RPD
1,2-Dibromo-3-Chloropropane	µg/L	< 0.00416	0.259		0.238		91.8	60-140	
1,2-Dibromoethane	µg/L	< 0.00343	0.259		0.251		96.9	60-140	
4-Bromofluorobenzene (S)							96.1	70-130	

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27474 **QC Analytical Batch(es):** V27553
QC Prep Batch Method: 8011 **Analysis Method:** 8011
Analysis Description: EDB and DBCP by Microextraction GC/ECD

Lab Reagent Blank LRB-V27474 Matrix: AQU
Associated Lab Samples: 94500, 94501, 94503, 94504, 94505, 94506, 94507, 94508, 94509, 94513

Parameter	Units	Blank Result	MDL	MQL	Analyzed	% Recovery	% Rec Limits
1,2-Dibromo-3-Chloropropane	µg/L	<0.00400	0.00400	0.0200	12/08/22 22:51		
1,2-Dibromoethane	µg/L	<0.00330	0.00330	0.0200	12/08/22 22:51		
4-Bromofluorobenzene (S)					12/08/22 22:51	85.2	70-130

Laboratory Control Sample & LCSD LCS-V27474 LCSD-V27474

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD
1,2-Dibromo-3-Chloropropane	µg/L	0.250	0.191	0.254	76.4	102	60-140	28.3*	20.0
1,2-Dibromoethane	µg/L	0.250	0.204	0.233	81.6	93.2	60-140	13.2	20.0
4-Bromofluorobenzene (S)					84.2	96.8	70-130		

Duplicate V 94503-DUP-V27474

Parameter	Units	DUP Result	Surrogate Recovery	Analyzed
4-Bromofluorobenzene (S)	µg/L	4.82	94.6	12/09/22 00:57

Matrix Spike V 94501-MS-V27474

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	%Rec Limits	Max RPD
1,2-Dibromo-3-Chloropropane	µg/L	< 0.00414	0.258		0.252		97.6	60-140	
1,2-Dibromoethane	µg/L	< 0.00342	0.258		0.256		99.2	60-140	
4-Bromofluorobenzene (S)							85.4	70-130	

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27267 **QC Analytical Batch(es):** V27268
QC Prep Batch Method: 5030B **Analysis Method:** 8260D
Analysis Description: Volatile Organic Compounds - GC/MS

Lab Reagent Blank LRB-V27267 Matrix: AQU
Associated Lab Samples: 94501, 94503

Parameter	Units	Blank Result	MDL	MQL	Analyzed	% Recovery	% Rec Limits
Acetone	µg/L	<1.80	1.80	5.00	12/02/22 20:25		
Acrylonitrile	µg/L	<0.230	0.230	5.00	12/02/22 20:25		
Benzene	µg/L	<0.180	0.180	0.500	12/02/22 20:25		
Bromochloromethane	µg/L	<0.420	0.420	1.00	12/02/22 20:25		
Bromodichloromethane	µg/L	<0.160	0.160	0.500	12/02/22 20:25		
Bromoform	µg/L	<1.50	1.50	5.00	12/02/22 20:25		
Bromomethane	µg/L	<0.280	0.280	1.00	12/02/22 20:25		
Carbon Disulfide	µg/L	<0.150	0.150	5.00	12/02/22 20:25		
Carbon Tetrachloride	µg/L	<0.180	0.180	0.500	12/02/22 20:25		
Chlorobenzene	µg/L	<0.190	0.190	0.500	12/02/22 20:25		
Chlorodibromomethane	µg/L	<0.190	0.190	0.500	12/02/22 20:25		
Chloroethane	µg/L	<0.430	0.430	1.00	12/02/22 20:25		
Chloroform	µg/L	<0.220	0.220	0.500	12/02/22 20:25		
Chloromethane	µg/L	<0.220	0.220	0.500	12/02/22 20:25		
1,2-Dibromoethane	µg/L	<0.200	0.200	0.500	12/02/22 20:25		
Dibromomethane	µg/L	<0.230	0.230	0.500	12/02/22 20:25		
trans-1,4-Dichloro-2-butene	µg/L	<1.30	1.30	10.0	12/02/22 20:25		
1,2-Dichlorobenzene	µg/L	<0.220	0.220	0.500	12/02/22 20:25		
1,4-Dichlorobenzene	µg/L	<0.210	0.210	0.500	12/02/22 20:25		
1,1-Dichloroethane	µg/L	<0.240	0.240	0.500	12/02/22 20:25		
1,2-Dichloroethane	µg/L	<0.150	0.150	0.500	12/02/22 20:25		
1,1-Dichloroethene	µg/L	<0.150	0.150	0.500	12/02/22 20:25		
cis-1,2-Dichloroethene	µg/L	<0.200	0.200	0.500	12/02/22 20:25		
trans-1,2-Dichloroethene	µg/L	<0.180	0.180	0.500	12/02/22 20:25		
1,2-Dichloropropane	µg/L	<0.190	0.190	0.500	12/02/22 20:25		
cis-1,3-Dichloropropene	µg/L	<0.210	0.210	0.500	12/02/22 20:25		
trans-1,3-Dichloropropene	µg/L	<0.150	0.150	0.500	12/02/22 20:25		

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27267 **QC Analytical Batch(es):** V27268
QC Prep Batch Method: 5030B **Analysis Method:** 8260D
Analysis Description: Volatile Organic Compounds - GC/MS

Lab Reagent Blank LRB-V27267 Matrix: AQU
Associated Lab Samples: 94501, 94503

Parameter	Units	Blank Result	MDL	MQL	Analyzed	% Recovery	% Rec Limits
Ethylbenzene	µg/L	<0.170	0.170	0.500	12/02/22 20:25		
2-Hexanone	µg/L	<0.380	0.380	5.00	12/02/22 20:25		
Iodomethane	µg/L	<0.054	0.054	0.500	12/02/22 20:25		
Methyl Ethyl Ketone (MEK)	µg/L	<0.710	0.710	5.00	12/02/22 20:25		
4-Methyl-2-Pentanone	µg/L	<1.00	1.00	5.00	12/02/22 20:25		
Methylene Chloride	µg/L	<0.330	0.330	1.00	12/02/22 20:25		
Styrene	µg/L	<0.220	0.220	0.500	12/02/22 20:25		
1,1,1,2-Tetrachloroethane	µg/L	<0.160	0.160	0.500	12/02/22 20:25		
1,1,2,2-Tetrachloroethane	µg/L	<0.160	0.160	0.500	12/02/22 20:25		
Tetrachloroethene	µg/L	<0.220	0.220	0.500	12/02/22 20:25		
Tetrahydrofuran	µg/L	<1.50	1.50	10.0	12/02/22 20:25		
Toluene	µg/L	<0.220	0.220	0.500	12/02/22 20:25		
1,1,1-Trichloroethane	µg/L	<0.160	0.160	0.500	12/02/22 20:25		
1,1,2-Trichloroethane	µg/L	<0.096	0.096	0.500	12/02/22 20:25		
Trichloroethene	µg/L	<0.180	0.180	0.500	12/02/22 20:25		
Trichlorofluoromethane	µg/L	<0.180	0.180	0.500	12/02/22 20:25		
1,2,3-Trichloropropane	µg/L	<0.270	0.270	1.00	12/02/22 20:25		
Vinyl Acetate	µg/L	<1.00	1.00	2.00	12/02/22 20:25		
Vinyl Chloride	µg/L	<0.170	0.170	0.500	12/02/22 20:25		
o-Xylene	µg/L	<0.210	0.210	0.500	12/02/22 20:25		
m,p-Xylene	µg/L	<0.420	0.420	1.00	12/02/22 20:25		
4-Bromofluorobenzene (S)					12/02/22 20:25	98.8	80-124
Dibromofluoromethane (S)					12/02/22 20:25	94.2	75-129
1,2-Dichloroethane - d4 (S)					12/02/22 20:25	91.2	63-136
Toluene-d8 (S)					12/02/22 20:25	97.0	77-123

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27267 **QC Analytical Batch(es):** V27268
QC Prep Batch Method: 5030B **Analysis Method:** 8260D
Analysis Description: Volatile Organic Compounds - GC/MS

Laboratory Control Sample & LCSD LCS-V27267 LCSD-V27267

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD
Acetone	µg/L	40.0	33.1	30.0	82.7	75.0	40-166	9.8	20.0
Acrylonitrile	µg/L	40.0	38.7	36.3	96.7	90.7	81-127	6.4	20.0
Benzene	µg/L	20.0	19.0	18.6	95.0	93.0	77-128	2.1	20.0
Bromochloromethane	µg/L	20.0	18.3	17.9	91.5	89.5	78-135	2.2	20.0
Bromodichloromethane	µg/L	20.0	17.0	16.8	85.0	84.0	76-138	1.1	20.0
Bromoform	µg/L	20.0	18.5	17.4	92.5	87.0	71-135	6.1	20.0
Bromomethane	µg/L	20.0	17.3	17.6	86.5	88.0	41-168	1.7	20.0
Carbon Disulfide	µg/L	20.0	19.4	19.1	97.0	95.5	59-135	1.5	20.0
Carbon Tetrachloride	µg/L	20.0	18.6	18.6	93.0	93.0	72-142	0.0	20.0
Chlorobenzene	µg/L	20.0	18.5	18.1	92.5	90.5	78-119	2.1	20.0
Chlorodibromomethane	µg/L	20.0	18.0	16.9	90.0	84.5	75-134	6.3	20.0
Chloroethane	µg/L	20.0	18.6	18.5	93.0	92.5	57-142	0.5	20.0
Chloroform	µg/L	20.0	18.4	18.1	92.0	90.5	77-130	1.6	20.0
Chloromethane	µg/L	20.0	17.0	16.6	85.0	83.0	47-145	2.3	20.0
1,2-Dibromoethane	µg/L	20.0	18.1	17.4	90.5	87.0	77-135	3.9	20.0
Dibromomethane	µg/L	20.0	19.2	18.1	96.0	90.5	76-138	5.8	20.0
trans-1,4-Dichloro-2-butene	µg/L	20.0	18.1	16.1	90.5	80.5	70-130	11.6	20.0
1,2-Dichlorobenzene	µg/L	20.0	19.6	18.5	98.0	92.5	78-128	5.7	20.0
1,4-Dichlorobenzene	µg/L	20.0	19.0	18.2	95.0	91.0	75-126	4.3	20.0
1,1-Dichloroethane	µg/L	20.0	18.6	18.4	93.0	92.0	70-130	1.0	20.0
1,2-Dichloroethane	µg/L	20.0	18.5	17.6	92.5	88.0	68-131	4.9	20.0
1,1-Dichloroethene	µg/L	20.0	18.1	18.0	90.5	90.0	70-154	0.5	20.0
cis-1,2-Dichloroethene	µg/L	20.0	18.3	17.8	91.5	89.0	76-141	2.7	20.0
trans-1,2-Dichloroethene	µg/L	20.0	17.9	17.7	89.5	88.5	76-135	1.1	20.0
1,2-Dichloropropane	µg/L	20.0	18.9	18.4	94.5	92.0	77-130	2.6	20.0
cis-1,3-Dichloropropene	µg/L	20.0	18.2	17.9	91.0	89.5	65-140	1.6	20.0

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27267 **QC Analytical Batch(es):** V27268
QC Prep Batch Method: 5030B **Analysis Method:** 8260D
Analysis Description: Volatile Organic Compounds - GC/MS

Laboratory Control Sample & LCSD LCS-V27267 LCSD-V27267

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD
trans-1,3-Dichloropropene	µg/L	20.0	19.5	19.0	97.5	95.0	67-140	2.5	20.0
Ethylbenzene	µg/L	20.0	18.5	18.3	92.5	91.5	80-127	1.0	20.0
2-Hexanone	µg/L	20.0	17.2	15.9	86.0	79.5	64-137	7.8	20.0
Iodomethane	µg/L	20.0	16.0	16.2	80.0	81.0	70-130	1.2	20.0
Methyl Ethyl Ketone (MEK)	µg/L	20.0	19.5	17.4	97.5	87.0	71-134	11.3	20.0
4-Methyl-2-Pentanone	µg/L	20.0	18.3	17.2	91.5	86.0	69-134	6.1	20.0
Methylene Chloride	µg/L	20.0	19.6	19.5	98.0	97.5	73-131	0.5	20.0
Styrene	µg/L	20.0	18.6	18.0	93.0	90.0	78-129	3.2	20.0
1,1,1,2-Tetrachloroethane	µg/L	20.0	18.2	17.7	91.0	88.5	79-134	2.7	20.0
1,1,2,2-Tetrachloroethane	µg/L	20.0	19.8	18.8	99.0	94.0	62-127	5.1	20.0
Tetrachloroethene	µg/L	20.0	18.5	18.2	92.5	91.0	80-129	1.6	20.0
Tetrahydrofuran	µg/L	20.0	18.6	17.8	93.0	89.0	70-130	4.3	20.0
Toluene	µg/L	20.0	18.9	18.5	94.5	92.5	76-131	2.1	20.0
1,1,1-Trichloroethane	µg/L	20.0	17.9	17.9	89.5	89.5	75-135	0.0	20.0
1,1,2-Trichloroethane	µg/L	20.0	18.5	18.0	92.5	90.0	70-140	2.7	20.0
Trichloroethene	µg/L	20.0	17.7	17.4	88.5	87.0	77-133	1.7	20.0
Trichlorofluoromethane	µg/L	20.0	18.3	17.9	91.5	89.5	62-148	2.2	20.0
1,2,3-Trichloropropane	µg/L	20.0	18.8	17.7	94.0	88.5	71-127	6.0	20.0
Vinyl Acetate	µg/L	20.0	21.6	20.8	108	104	34-167	3.7	20.0
Vinyl Chloride	µg/L	20.0	18.2	18.2	91.0	91.0	57-141	0.0	20.0
o-Xylene	µg/L	20.0	18.2	17.7	91.0	88.5	78-128	2.7	20.0
m,p-Xylene	µg/L	40.0	39.3	38.5	98.2	96.2	77-133	2.0	20.0
4-Bromofluorobenzene (S)					99.6	99.2	80-124		
Dibromofluoromethane (S)					92.6	92.4	75-129		
1,2-Dichloroethane - d4 (S)					93.6	91.6	63-136		

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27267	QC Analytical Batch(es): V27268
QC Prep Batch Method: 5030B	Analysis Method: 8260D
	Analysis Description: Volatile Organic Compounds - GC/MS

Laboratory Control Sample & LCSD LCS-V27267 LCSD-V27267

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD
Toluene-d8 (S)					98.6	98.4	77-123	

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27269 **QC Analytical Batch(es):** V27270
QC Prep Batch Method: 5030B **Analysis Method:** 8260D
Analysis Description: Volatile Organic Compounds - GC/MS

Lab Reagent Blank LRB-V27269 Matrix: AQU
 Associated Lab Samples: 94504, 94505, 94506, 94507, 94508, 94509, 94510, 94511, 94512, 94513

Parameter	Units	Blank Result	MDL	MQL	Analyzed	% Recovery	% Rec Limits
Acetone	µg/L	<1.80	1.80	5.00	12/03/22 09:10		
Acrylonitrile	µg/L	<0.230	0.230	5.00	12/03/22 09:10		
Benzene	µg/L	<0.180	0.180	0.500	12/03/22 09:10		
Bromochloromethane	µg/L	<0.420	0.420	1.00	12/03/22 09:10		
Bromodichloromethane	µg/L	<0.160	0.160	0.500	12/03/22 09:10		
Bromoform	µg/L	<1.50	1.50	5.00	12/03/22 09:10		
Bromomethane	µg/L	<0.280	0.280	1.00	12/03/22 09:10		
Carbon Disulfide	µg/L	<0.150	0.150	5.00	12/03/22 09:10		
Carbon Tetrachloride	µg/L	<0.180	0.180	0.500	12/03/22 09:10		
Chlorobenzene	µg/L	<0.190	0.190	0.500	12/03/22 09:10		
Chlorodibromomethane	µg/L	<0.190	0.190	0.500	12/03/22 09:10		
Chloroethane	µg/L	<0.430	0.430	1.00	12/03/22 09:10		
Chloroform	µg/L	<0.220	0.220	0.500	12/03/22 09:10		
Chloromethane	µg/L	<0.220	0.220	0.500	12/03/22 09:10		
1,2-Dibromoethane	µg/L	<0.200	0.200	0.500	12/03/22 09:10		
Dibromomethane	µg/L	<0.230	0.230	0.500	12/03/22 09:10		
trans-1,4-Dichloro-2-butene	µg/L	<1.30	1.30	10.0	12/03/22 09:10		
1,2-Dichlorobenzene	µg/L	<0.220	0.220	0.500	12/03/22 09:10		
1,4-Dichlorobenzene	µg/L	<0.210	0.210	0.500	12/03/22 09:10		
1,1-Dichloroethane	µg/L	<0.240	0.240	0.500	12/03/22 09:10		
1,2-Dichloroethane	µg/L	<0.150	0.150	0.500	12/03/22 09:10		
1,1-Dichloroethene	µg/L	<0.150	0.150	0.500	12/03/22 09:10		
cis-1,2-Dichloroethene	µg/L	<0.200	0.200	0.500	12/03/22 09:10		
trans-1,2-Dichloroethene	µg/L	<0.180	0.180	0.500	12/03/22 09:10		
1,2-Dichloropropane	µg/L	<0.190	0.190	0.500	12/03/22 09:10		
cis-1,3-Dichloropropene	µg/L	<0.210	0.210	0.500	12/03/22 09:10		
trans-1,3-Dichloropropene	µg/L	<0.150	0.150	0.500	12/03/22 09:10		

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27269 **QC Analytical Batch(es):** V27270
QC Prep Batch Method: 5030B **Analysis Method:** 8260D
Analysis Description: Volatile Organic Compounds - GC/MS

Lab Reagent Blank LRB-V27269 Matrix: AQU
Associated Lab Samples: 94504, 94505, 94506, 94507, 94508, 94509, 94510, 94511, 94512, 94513

Parameter	Units	Blank Result	MDL	MQL	Analyzed	% Recovery	% Rec Limits
Ethylbenzene	µg/L	<0.170	0.170	0.500	12/03/22 09:10		
2-Hexanone	µg/L	<0.380	0.380	5.00	12/03/22 09:10		
Iodomethane	µg/L	<0.054	0.054	0.500	12/03/22 09:10		
Methyl Ethyl Ketone (MEK)	µg/L	<0.710	0.710	5.00	12/03/22 09:10		
4-Methyl-2-Pentanone	µg/L	<1.00	1.00	5.00	12/03/22 09:10		
Methylene Chloride	µg/L	<0.330	0.330	1.00	12/03/22 09:10		
Styrene	µg/L	<0.220	0.220	0.500	12/03/22 09:10		
1,1,1,2-Tetrachloroethane	µg/L	<0.160	0.160	0.500	12/03/22 09:10		
1,1,2,2-Tetrachloroethane	µg/L	<0.160	0.160	0.500	12/03/22 09:10		
Tetrachloroethene	µg/L	<0.220	0.220	0.500	12/03/22 09:10		
Tetrahydrofuran	µg/L	<1.50	1.50	10.0	12/03/22 09:10		
Toluene	µg/L	<0.220	0.220	0.500	12/03/22 09:10		
1,1,1-Trichloroethane	µg/L	<0.160	0.160	0.500	12/03/22 09:10		
1,1,2-Trichloroethane	µg/L	<0.096	0.096	0.500	12/03/22 09:10		
Trichloroethene	µg/L	<0.180	0.180	0.500	12/03/22 09:10		
Trichlorofluoromethane	µg/L	<0.180	0.180	0.500	12/03/22 09:10		
1,2,3-Trichloropropane	µg/L	<0.270	0.270	1.00	12/03/22 09:10		
Vinyl Acetate	µg/L	<1.00	1.00	2.00	12/03/22 09:10		
Vinyl Chloride	µg/L	<0.170	0.170	0.500	12/03/22 09:10		
o-Xylene	µg/L	<0.210	0.210	0.500	12/03/22 09:10		
m,p-Xylene	µg/L	<0.420	0.420	1.00	12/03/22 09:10		
4-Bromofluorobenzene (S)					12/03/22 09:10	99.6	80-124
Dibromofluoromethane (S)					12/03/22 09:10	93.6	75-129
1,2-Dichloroethane - d4 (S)					12/03/22 09:10	91.6	63-136
Toluene-d8 (S)					12/03/22 09:10	96.0	77-123

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27269 **QC Analytical Batch(es):** V27270
QC Prep Batch Method: 5030B **Analysis Method:** 8260D
Analysis Description: Volatile Organic Compounds - GC/MS

Laboratory Control Sample & LCSD LCS-V27269 LCSD-V27269

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD
Acetone	µg/L	40.0	32.1	33.0	80.2	82.5	40-166	2.7	20.0
Acrylonitrile	µg/L	40.0	37.3	37.1	93.2	92.7	81-127	0.5	20.0
Benzene	µg/L	20.0	18.4	18.3	92.0	91.5	77-128	0.5	20.0
Bromochloromethane	µg/L	20.0	17.2	17.5	86.0	87.5	78-135	1.7	20.0
Bromodichloromethane	µg/L	20.0	16.4	16.3	82.0	81.5	76-138	0.6	20.0
Bromoform	µg/L	20.0	16.8	16.9	84.0	84.5	71-135	0.5	20.0
Bromomethane	µg/L	20.0	16.6	16.7	83.0	83.5	41-168	0.6	20.0
Carbon Disulfide	µg/L	20.0	18.7	18.3	93.5	91.5	59-135	2.1	20.0
Carbon Tetrachloride	µg/L	20.0	18.3	17.9	91.5	89.5	72-142	2.2	20.0
Chlorobenzene	µg/L	20.0	17.8	17.2	89.0	86.0	78-119	3.4	20.0
Chlorodibromomethane	µg/L	20.0	16.5	16.1	82.5	80.5	75-134	2.4	20.0
Chloroethane	µg/L	20.0	18.5	18.4	92.5	92.0	57-142	0.5	20.0
Chloroform	µg/L	20.0	18.0	17.6	90.0	88.0	77-130	2.2	20.0
Chloromethane	µg/L	20.0	16.9	17.3	84.5	86.5	47-145	2.3	20.0
1,2-Dibromoethane	µg/L	20.0	17.4	17.0	87.0	85.0	77-135	2.3	20.0
Dibromomethane	µg/L	20.0	17.5	17.6	87.5	88.0	76-138	0.5	20.0
trans-1,4-Dichloro-2-butene	µg/L	20.0	17.7	21.5	88.5	108	70-130	19.3	20.0
1,2-Dichlorobenzene	µg/L	20.0	18.5	18.0	92.5	90.0	78-128	2.7	20.0
1,4-Dichlorobenzene	µg/L	20.0	18.2	17.2	91.0	86.0	75-126	5.6	20.0
1,1-Dichloroethane	µg/L	20.0	18.0	18.0	90.0	90.0	70-130	0.0	20.0
1,2-Dichloroethane	µg/L	20.0	17.6	17.5	88.0	87.5	68-131	0.5	20.0
1,1-Dichloroethene	µg/L	20.0	18.1	17.5	90.5	87.5	70-154	3.3	20.0
cis-1,2-Dichloroethene	µg/L	20.0	17.6	17.6	88.0	88.0	76-141	0.0	20.0
trans-1,2-Dichloroethene	µg/L	20.0	17.5	16.9	87.5	84.5	76-135	3.4	20.0
1,2-Dichloropropane	µg/L	20.0	18.6	18.2	93.0	91.0	77-130	2.1	20.0
cis-1,3-Dichloropropene	µg/L	20.0	16.7	16.8	83.5	84.0	65-140	0.5	20.0

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27269 **QC Analytical Batch(es):** V27270
QC Prep Batch Method: 5030B **Analysis Method:** 8260D
Analysis Description: Volatile Organic Compounds - GC/MS

Laboratory Control Sample & LCSD LCS-V27269 LCSD-V27269

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD
trans-1,3-Dichloropropene	µg/L	20.0	17.7	17.6	88.5	88.0	67-140	0.5	20.0
Ethylbenzene	µg/L	20.0	17.7	17.2	88.5	86.0	80-127	2.8	20.0
2-Hexanone	µg/L	20.0	16.7	16.0	83.5	80.0	64-137	4.2	20.0
Iodomethane	µg/L	20.0	15.7	15.9	78.5	79.5	70-130	1.2	20.0
Methyl Ethyl Ketone (MEK)	µg/L	20.0	19.8	18.5	99.0	92.5	71-134	6.7	20.0
4-Methyl-2-Pentanone	µg/L	20.0	17.8	17.7	89.0	88.5	69-134	0.5	20.0
Methylene Chloride	µg/L	20.0	19.2	19.0	96.0	95.0	73-131	1.0	20.0
Styrene	µg/L	20.0	17.3	17.0	86.5	85.0	78-129	1.7	20.0
1,1,1,2-Tetrachloroethane	µg/L	20.0	16.9	16.9	84.5	84.5	79-134	0.0	20.0
1,1,2,2-Tetrachloroethane	µg/L	20.0	17.4	15.6	87.0	78.0	62-127	10.9	20.0
Tetrachloroethene	µg/L	20.0	17.4	16.7	87.0	83.5	80-129	4.1	20.0
Tetrahydrofuran	µg/L	20.0	18.0	19.0	90.0	95.0	70-130	5.4	20.0
Toluene	µg/L	20.0	18.5	18.3	92.5	91.5	76-131	1.0	20.0
1,1,1-Trichloroethane	µg/L	20.0	17.6	17.5	88.0	87.5	75-135	0.5	20.0
1,1,2-Trichloroethane	µg/L	20.0	18.0	18.3	90.0	91.5	70-140	1.6	20.0
Trichloroethene	µg/L	20.0	18.3	19.3	91.5	96.5	77-133	5.3	20.0
Trichlorofluoromethane	µg/L	20.0	18.5	18.2	92.5	91.0	62-148	1.6	20.0
1,2,3-Trichloropropane	µg/L	20.0	18.3	17.5	91.5	87.5	71-127	4.4	20.0
Vinyl Acetate	µg/L	20.0	12.6	9.82	63.0	49.1	34-167	24.7*	20.0
Vinyl Chloride	µg/L	20.0	18.7	18.6	93.5	93.0	57-141	0.5	20.0
o-Xylene	µg/L	20.0	17.4	16.8	87.0	84.0	78-128	3.5	20.0
m,p-Xylene	µg/L	40.0	37.3	36.4	93.2	91.0	77-133	2.4	20.0
4-Bromofluorobenzene (S)					100	98.0	80-124		
Dibromofluoromethane (S)					92.4	92.2	75-129		
1,2-Dichloroethane - d4 (S)					91.4	92.4	63-136		

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27269	QC Analytical Batch(es): V27270
QC Prep Batch Method: 5030B	Analysis Method: 8260D
	Analysis Description: Volatile Organic Compounds - GC/MS

Laboratory Control Sample & LCSD LCS-V27269 LCSD-V27269

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD
Toluene-d8 (S)					97.8	95.4	77-123	

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27336 **QC Analytical Batch(es):** V27337
QC Prep Batch Method: 5030B **Analysis Method:** 8260D
Analysis Description: Volatile Organic Compounds - GC/MS

Lab Reagent Blank LRB-V27336 Matrix: AQU
Associated Lab Samples: 94482, 94483, 94484, 94485, 94486, 94487, 94488, 94489, 94490, 94491, 94492, 94493, 94494, 94495, 94496, 94497, 94498, 94499, 94500, 94502

Parameter	Units	Blank Result	MDL	MQL	Analyzed	% Recovery	% Rec Limits
Acetone	µg/L	<1.80	1.80	5.00	12/02/22 20:25		
Acrylonitrile	µg/L	<0.230	0.230	5.00	12/02/22 20:25		
Benzene	µg/L	<0.180	0.180	0.500	12/02/22 20:25		
Bromochloromethane	µg/L	<0.420	0.420	1.00	12/02/22 20:25		
Bromodichloromethane	µg/L	<0.160	0.160	0.500	12/02/22 20:25		
Bromoform	µg/L	<1.50	1.50	5.00	12/02/22 20:25		
Bromomethane	µg/L	<0.280	0.280	1.00	12/02/22 20:25		
Carbon Disulfide	µg/L	<0.150	0.150	5.00	12/02/22 20:25		
Carbon Tetrachloride	µg/L	<0.180	0.180	0.500	12/02/22 20:25		
Chlorobenzene	µg/L	<0.190	0.190	0.500	12/02/22 20:25		
Chlorodibromomethane	µg/L	<0.190	0.190	0.500	12/02/22 20:25		
Chloroethane	µg/L	<0.430	0.430	1.00	12/02/22 20:25		
Chloroform	µg/L	<0.220	0.220	0.500	12/02/22 20:25		
Chloromethane	µg/L	<0.220	0.220	0.500	12/02/22 20:25		
1,2-Dibromoethane	µg/L	<0.200	0.200	0.500	12/02/22 20:25		
Dibromomethane	µg/L	<0.230	0.230	0.500	12/02/22 20:25		
trans-1,4-Dichloro-2-butene	µg/L	<1.30	1.30	10.0	12/02/22 20:25		
1,2-Dichlorobenzene	µg/L	<0.220	0.220	0.500	12/02/22 20:25		
1,4-Dichlorobenzene	µg/L	<0.210	0.210	0.500	12/02/22 20:25		
1,1-Dichloroethane	µg/L	<0.240	0.240	0.500	12/02/22 20:25		
1,2-Dichloroethane	µg/L	<0.150	0.150	0.500	12/02/22 20:25		
1,1-Dichloroethene	µg/L	<0.150	0.150	0.500	12/02/22 20:25		
cis-1,2-Dichloroethene	µg/L	<0.200	0.200	0.500	12/02/22 20:25		
trans-1,2-Dichloroethene	µg/L	<0.180	0.180	0.500	12/02/22 20:25		
1,2-Dichloropropane	µg/L	<0.190	0.190	0.500	12/02/22 20:25		
cis-1,3-Dichloropropene	µg/L	<0.210	0.210	0.500	12/02/22 20:25		
trans-1,3-Dichloropropene	µg/L	<0.150	0.150	0.500	12/02/22 20:25		

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27336 **QC Analytical Batch(es):** V27337
QC Prep Batch Method: 5030B **Analysis Method:** 8260D
Analysis Description: Volatile Organic Compounds - GC/MS

Lab Reagent Blank LRB-V27336 Matrix: AQU
 Associated Lab Samples: 94482, 94483, 94484, 94485, 94486, 94487, 94488, 94489, 94490, 94491, 94492, 94493, 94494, 94495, 94496, 94497, 94498, 94499, 94500, 94502

Parameter	Units	Blank Result	MDL	MQL	Analyzed	% Recovery	% Rec Limits
Ethylbenzene	µg/L	<0.170	0.170	0.500	12/02/22 20:25		
2-Hexanone	µg/L	<0.380	0.380	5.00	12/02/22 20:25		
Iodomethane	µg/L	<0.054	0.054	0.500	12/02/22 20:25		
Methyl Ethyl Ketone (MEK)	µg/L	<0.710	0.710	5.00	12/02/22 20:25		
4-Methyl-2-Pentanone	µg/L	<1.00	1.00	5.00	12/02/22 20:25		
Methylene Chloride	µg/L	<0.330	0.330	1.00	12/02/22 20:25		
Styrene	µg/L	<0.220	0.220	0.500	12/02/22 20:25		
1,1,1,2-Tetrachloroethane	µg/L	<0.160	0.160	0.500	12/02/22 20:25		
1,1,2,2-Tetrachloroethane	µg/L	<0.160	0.160	0.500	12/02/22 20:25		
Tetrachloroethene	µg/L	<0.220	0.220	0.500	12/02/22 20:25		
Tetrahydrofuran	µg/L	<1.50	1.50	10.0	12/02/22 20:25		
Toluene	µg/L	<0.220	0.220	0.500	12/02/22 20:25		
1,1,1-Trichloroethane	µg/L	<0.160	0.160	0.500	12/02/22 20:25		
1,1,2-Trichloroethane	µg/L	<0.096	0.096	0.500	12/02/22 20:25		
Trichloroethene	µg/L	<0.180	0.180	0.500	12/02/22 20:25		
Trichlorofluoromethane	µg/L	<0.180	0.180	0.500	12/02/22 20:25		
1,2,3-Trichloropropane	µg/L	<0.270	0.270	1.00	12/02/22 20:25		
Vinyl Acetate	µg/L	<1.00	1.00	2.00	12/02/22 20:25		
Vinyl Chloride	µg/L	<0.170	0.170	0.500	12/02/22 20:25		
o-Xylene	µg/L	<0.210	0.210	0.500	12/02/22 20:25		
m,p-Xylene	µg/L	<0.420	0.420	1.00	12/02/22 20:25		
4-Bromofluorobenzene (S)					12/02/22 20:25	98.8	80-124
Dibromofluoromethane (S)					12/02/22 20:25	94.2	75-129
1,2-Dichloroethane - d4 (S)					12/02/22 20:25	91.2	63-136
Toluene-d8 (S)					12/02/22 20:25	97.0	77-123

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27336 **QC Analytical Batch(es):** V27337
QC Prep Batch Method: 5030B **Analysis Method:** 8260D
Analysis Description: Volatile Organic Compounds - GC/MS

Laboratory Control Sample & LCSD LCS-V27336 LCSD-V27336

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD
Acetone	µg/L	40.0	33.1	30.0	82.7	75.0	40-166	9.8	20.0
Acrylonitrile	µg/L	40.0	38.7	36.3	96.7	90.7	81-127	6.4	20.0
Benzene	µg/L	20.0	19.0	18.6	95.0	93.0	77-128	2.1	20.0
Bromochloromethane	µg/L	20.0	18.3	17.9	91.5	89.5	78-135	2.2	20.0
Bromodichloromethane	µg/L	20.0	17.0	16.8	85.0	84.0	76-138	1.1	20.0
Bromoform	µg/L	20.0	18.5	17.4	92.5	87.0	71-135	6.1	20.0
Bromomethane	µg/L	20.0	17.3	17.6	86.5	88.0	41-168	1.7	20.0
Carbon Disulfide	µg/L	20.0	19.4	19.1	97.0	95.5	59-135	1.5	20.0
Carbon Tetrachloride	µg/L	20.0	18.6	18.6	93.0	93.0	72-142	0.0	20.0
Chlorobenzene	µg/L	20.0	18.5	18.1	92.5	90.5	78-119	2.1	20.0
Chlorodibromomethane	µg/L	20.0	18.0	16.9	90.0	84.5	75-134	6.3	20.0
Chloroethane	µg/L	20.0	18.6	18.5	93.0	92.5	57-142	0.5	20.0
Chloroform	µg/L	20.0	18.4	18.1	92.0	90.5	77-130	1.6	20.0
Chloromethane	µg/L	20.0	17.0	16.6	85.0	83.0	47-145	2.3	20.0
1,2-Dibromoethane	µg/L	20.0	18.1	17.4	90.5	87.0	77-135	3.9	20.0
Dibromomethane	µg/L	20.0	19.2	18.1	96.0	90.5	76-138	5.8	20.0
trans-1,4-Dichloro-2-butene	µg/L	20.0	18.1	16.1	90.5	80.5	70-130	11.6	20.0
1,2-Dichlorobenzene	µg/L	20.0	19.6	18.5	98.0	92.5	78-128	5.7	20.0
1,4-Dichlorobenzene	µg/L	20.0	19.0	18.2	95.0	91.0	75-126	4.3	20.0
1,1-Dichloroethane	µg/L	20.0	18.6	18.4	93.0	92.0	70-130	1.0	20.0
1,2-Dichloroethane	µg/L	20.0	18.5	17.6	92.5	88.0	68-131	4.9	20.0
1,1-Dichloroethene	µg/L	20.0	18.1	18.0	90.5	90.0	70-154	0.5	20.0
cis-1,2-Dichloroethene	µg/L	20.0	18.3	17.8	91.5	89.0	76-141	2.7	20.0
trans-1,2-Dichloroethene	µg/L	20.0	17.9	17.7	89.5	88.5	76-135	1.1	20.0
1,2-Dichloropropane	µg/L	20.0	18.9	18.4	94.5	92.0	77-130	2.6	20.0
cis-1,3-Dichloropropene	µg/L	20.0	18.2	17.9	91.0	89.5	65-140	1.6	20.0

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27336 **QC Analytical Batch(es):** V27337
QC Prep Batch Method: 5030B **Analysis Method:** 8260D
Analysis Description: Volatile Organic Compounds - GC/MS

Laboratory Control Sample & LCSD LCS-V27336 LCSD-V27336

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD
trans-1,3-Dichloropropene	µg/L	20.0	19.5	19.0	97.5	95.0	67-140	2.5	20.0
Ethylbenzene	µg/L	20.0	18.5	18.3	92.5	91.5	80-127	1.0	20.0
2-Hexanone	µg/L	20.0	17.2	15.9	86.0	79.5	64-137	7.8	20.0
Iodomethane	µg/L	20.0	16.0	16.2	80.0	81.0	70-130	1.2	20.0
Methyl Ethyl Ketone (MEK)	µg/L	20.0	19.5	17.4	97.5	87.0	71-134	11.3	20.0
4-Methyl-2-Pentanone	µg/L	20.0	18.3	17.2	91.5	86.0	69-134	6.1	20.0
Methylene Chloride	µg/L	20.0	19.6	19.5	98.0	97.5	73-131	0.5	20.0
Styrene	µg/L	20.0	18.6	18.0	93.0	90.0	78-129	3.2	20.0
1,1,1,2-Tetrachloroethane	µg/L	20.0	18.2	17.7	91.0	88.5	79-134	2.7	20.0
1,1,2,2-Tetrachloroethane	µg/L	20.0	19.8	18.8	99.0	94.0	62-127	5.1	20.0
Tetrachloroethene	µg/L	20.0	18.5	18.2	92.5	91.0	80-129	1.6	20.0
Tetrahydrofuran	µg/L	20.0	18.6	17.8	93.0	89.0	70-130	4.3	20.0
Toluene	µg/L	20.0	18.9	18.5	94.5	92.5	76-131	2.1	20.0
1,1,1-Trichloroethane	µg/L	20.0	17.9	17.9	89.5	89.5	75-135	0.0	20.0
1,1,2-Trichloroethane	µg/L	20.0	18.5	18.0	92.5	90.0	70-140	2.7	20.0
Trichloroethene	µg/L	20.0	17.7	17.4	88.5	87.0	77-133	1.7	20.0
Trichlorofluoromethane	µg/L	20.0	18.3	17.9	91.5	89.5	62-148	2.2	20.0
1,2,3-Trichloropropane	µg/L	20.0	18.8	17.7	94.0	88.5	71-127	6.0	20.0
Vinyl Acetate	µg/L	20.0	21.6	20.8	108	104	34-167	3.7	20.0
Vinyl Chloride	µg/L	20.0	18.2	18.2	91.0	91.0	57-141	0.0	20.0
o-Xylene	µg/L	20.0	18.2	17.7	91.0	88.5	78-128	2.7	20.0
m,p-Xylene	µg/L	40.0	39.3	38.5	98.2	96.2	77-133	2.0	20.0
4-Bromofluorobenzene (S)					99.6	99.2	80-124		
Dibromofluoromethane (S)					92.6	92.4	75-129		
1,2-Dichloroethane - d4 (S)					93.6	91.6	63-136		

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27336	QC Analytical Batch(es): V27337
QC Prep Batch Method: 5030B	Analysis Method: 8260D
	Analysis Description: Volatile Organic Compounds - GC/MS

Laboratory Control Sample & LCSD LCS-V27336 LCSD-V27336

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS %Rec	LCSD % Rec	% Rec Limits	RPD
Toluene-d8 (S)					98.6	98.4	77-123	

Quality Control Data

Client ID: EFM, Inc.
Project Description: Georgetown County SWF
Report No: 22-335-0008

QC Prep: V27183 **QC Analytical Batch(es):** V27195
QC Prep Batch Method: SW-9056A (PREP) **Analysis Method:** 9056A
Analysis Description: Anions by Ion Chromatography

Lab Reagent Blank LRB-V27183 Matrix: AQU
 Associated Lab Samples: 94510, 94511, 94512, 94513

Parameter	Units	Blank Result	MDL	MQL	Analyzed
Chloride	µg/L	<370	370	1000	12/01/22 09:52
Nitrate (NO3-N)	µg/L	<76.0	76.0	200	12/01/22 09:52
Sulfate	µg/L	<650	650	2000	12/01/22 09:52

Laboratory Control Sample LCS-V27183

Parameter	Units	Spike Conc.	LCS Result	LCS %Rec	% Rec Limits
Chloride	µg/L	40000	41000	103	80-120
Nitrate (NO3-N)	µg/L	4000	4250	106	80-120
Sulfate	µg/L	40000	37200	93.0	80-120

Matrix Spike & Matrix Spike Duplicate V 94510-MS-V27183 V 94510-MSD-V27183

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Chloride	µg/L	14100	40000	40000	59700	54800	114	102	80-120	8.5	20
Nitrate (NO3-N)	µg/L	<79.0	4000	4000	4270	4160	107	104	80-120	2.6	20
Sulfate	µg/L	958	40000	40000	42900	41500	105	101	80-120	3.3	20

Matrix Spike & Matrix Spike Duplicate V 94588-MS-V27183 V 94588-MSD-V27183

Parameter	Units	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS %Rec	MSD %Rec	%Rec Limits	RPD	Max RPD
Chloride	µg/L	27800	40000	40000	68600	68900	102	103	80-120	0.4	20
Nitrate (NO3-N)	µg/L	168	4000	4000	4340	4400	104	106	80-120	1.3	20
Sulfate	µg/L	59400	40000	40000	97600	97700	95.0	96.0	80-120	0.1	20

Shipment Receipt Form

Customer Number: **00093**
 Customer Name: **EFM, Inc.**
 Report Number: **22-335-0008**

Shipping Method

Fed Ex
 US Postal
 Lab
 Other :
 UPS
 Client
 Courier
 Thermometer ID:

Shipping container/cooler uncompromised?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Number of coolers/boxes received	<input type="text" value="1"/>		
Custody seals intact on shipping container/cooler?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> Not Present
Custody seals intact on sample bottles?	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> Not Present
Chain of Custody (COC) present?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
COC agrees with sample label(s)?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
COC properly completed	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Samples in proper containers?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sample containers intact?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Sufficient sample volume for indicated test(s)?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
All samples received within holding time?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Cooler temperature in compliance?	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Cooler/Samples arrived at the laboratory on ice. Samples were considered acceptable as cooling process had begun.	<input checked="" type="radio"/> Yes	<input type="radio"/> No	
Water - Sample containers properly preserved	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
Water - VOA vials free of headspace	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
Trip Blanks received with VOAs	<input checked="" type="radio"/> Yes	<input type="radio"/> No	<input type="radio"/> N/A
Soil VOA method 5035 – compliance criteria met	<input type="radio"/> Yes	<input type="radio"/> No	<input checked="" type="radio"/> N/A
<input type="checkbox"/> High concentration container (48 hr)		<input type="checkbox"/> Low concentration EnCore samplers (48 hr)	
<input type="checkbox"/> High concentration pre-weighed (methanol -14 d)		<input type="checkbox"/> Low conc pre-weighed vials (Sod Bis -14 d)	
Special precautions or instructions included?	<input type="radio"/> Yes	<input checked="" type="radio"/> No	

Comments:

Signature:

Date & Time:

CHAIN OF CUSTODY RECORD

Page 1 of 4 QUOTE # TO ENSURE PROPER BILLING:
Project Name: Georgetown SWF
Short Hold Analysis: (Yes) (No) SWF UST Project: (Yes) (No) (No)
*Please ATTACH any project specific reporting (QC LEVEL III IITV) provisions and/or QC Requirements
Invoice To: SWF
Address: SWF

Client Company Name: EFM
Report To/Contact Name: Tiff Weaver
Reporting Address: 2300 Ireland St. S.E. Salisbury, NC 28412
Phone: 919-524-6129 Fax (Yes)(No):
Email Address: Jeff Weaver, efma@gmail.com
EDD Type: PDF Excel Other
Site Location Name: Georgetown SWF
Site Location Physical Address: Georgetown SC

Purchase Order No./Billing Reference
Requested Due Date 1 Day 2 Days 3 Days 4 Days 5 Days
"Working Days" 6-9 Days Standard 10 days Rush Work Must Be Pre Approved
Samples received after 15:00 will be processed next business day.
Turnaround time is based on business days, excluding weekends and holidays.
(SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY WAYPOINT ANALYTICAL, LLC TO CLIENT)

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL
Certification: NC SC VA
Water Chlorinated: YES NO VA
Samples Iced Upon Collection: YES NO

LAB USE ONLY	YES	NO	N/A
Samples INTACT upon arrival?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received IN ICE?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROPER PRESERVATIVES indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received WITHIN HOLDING TIMES?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CUSTODY SEALS INTACT?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VOLATILES rec'd W/O/T HEADSPACE?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROPER CONTAINERS used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEMP: Therm ID: <u>2015</u> Observed <u>0.6</u> °C/Corr. <u>0.6</u> °C			

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER, OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSIS REQUESTED			REMARKS	ID NO.		
				*TYPE SEE BELOW	NO.	SIZE		APP IV	VOCs	APP IV metals			COB/ORG	SOIL
TRIPBLK-01	-	-	WT	Various	-	-	-	2	3	1	3	1		
SW/SPMC-1	11/25/22	0628						3	1	3	1	1		
SW/TW-5		0657						3	1	3	1	1		
SW/TW-1		0722						3	1	3	1	1		
FB-01		0731						3	1	3	1	1		
MW-4V		0750						3	1	3	1	1		
SW/TW-4		0808						3	1	3	1	1		
MW-2VR		1003						3	1	3	1	1		
MW-8V		1616						3	1	3	1	1		

PRESS DOWN FIRMLY - 2 COPIES

Sampler's Signature: De-H Sampled By (Print Name): Aaron H 11 Affiliation: EFM

Upon relinquishing, this Chain of Custody is your authorization for Waypoint Analytical to proceed with the analyses as requested above. Any changes must be submitted in writing for the Waypoint Analytical Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature) De-H Received By: (Signature) Felix Date: 11/25/22 Military/Hours: _____

Relinquished By: (Signature) _____ Received By: (Signature) _____ Date: 11/25/22 Military/Hours: 1030

Relinquished By: (Signature) _____ Received For Waypoint Analytical By: _____ Date: _____ Military/Hours: _____

Method of Shipment: Fed Ex UPS Hand-delivered Waypoint Analytical Field Service Other

NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

MADES: NC SC VA Other

UST: NC SC VA Other

GROUNDWATER: DRINKING WATER: SOLID WASTE: RCRA: NC SC VA Other

BRWNFLD LANDFILL OTHER: NC SC VA Other

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

LAB USE ONLY

Site Arrival Time: _____

Site Departure Time: _____

Field Tech Fee: _____

Mileage: _____

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL



22-335-0008
00093
12-01-2022
13:04:31

EFM, Inc.
Georgetown County SWF

CHAIN OF CUSTODY RECORD

PAGE 2 OF 4 QUOTE # TO ENSURE PROPER BILLING:

Project Name: Georgetown SWF

Short Hold Analysis (Yes) (No) (No) UST Project: (Yes) (No) (No)

*Please ATTACH any project specific reporting (QC LEVEL I III III IV) provisions and/or QC Requirements

Invoice To: SOME

Address: SOME

Purchase Order No./Billing Reference _____

Requested Due Date 1 Day 2 Days 3 Days 4 Days 5 Days

"Working Days" 6-9 Days Standard 10 days Rush Work. Must Be Samples received after 15:00 will be processed next business day.

Turnaround time is based on business days, excluding weekends and holidays. (SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY WAYPOINT ANALYTICAL, LLC TO CLIENT)

LAB USE ONLY

Samples INTACT upon arrival?	YES	NO	N/A
Received IN ICE?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROPER PRESERVATIVES indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Received WITHIN HOLDING TIMES?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
CUSTODY SEALS INTACT?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
VOLATILES rec'd W/OUT HEADSPACE?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
PROPER CONTAINERS used?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
TEMP: Therm ID: <u>161-75</u> Observed <u>0.6</u> °C / Corr. <u>0.6</u> °C			

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NC SC Other N/A

Water Chlorinated: YES NO

Samples Iced Upon Collection: YES NO

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER, OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSIS REQUESTED			REMARKS	ID NO.
				*TYPE SEE BELOW	NO.	SIZE		APPL	TEST	REQ		
SW/FTW-SMC-2	11/28/22	1033	WT	Various				APPL	TEST	REQ		
SW/FTW-3		1054										
MW-GVR		1138										
MW-SV		1258										
MW-TVPR		1310										
SW/FTW-2		1327										
MW-AM4R		1435										
MW-11H		1558										
MW-SHR		1617										

PRESS DOWN FIRMLY - 2 COPIES

Sampler's Signature: Carillo

Sampled By (Print Name): Aaron Hill

Affiliation: EFM

Upon relinquishing, this Chain of Custody is your authorization for Waypoint Analytical to proceed with the analyses as requested above. Any changes must be submitted in writing to the Waypoint Analytical Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature) Carillo

Received By: (Signature) Carillo

Received By: (Signature) Carillo

Date: 11/28/22

Military/Hours: 030

Relinquished By: (Signature)

Received For Waypoint Analytical By: Carillo

Date: 11/28/22

COC Group No.

Additional Comments:

LAB USE ONLY
Site Arrival Time:
Site Departure Time:
Field Tech Fee:
Mileage:

Method of Shipment: Fed Ex UPS Hand-delivered Groundwater: Waypoint Analytical Field Service Other

NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

NPDES: NC SC GROUNDWATER: NC SC DRINKING WATER: NC SC SOLID WASTE: NC SC RCRA: NC SC BRWNFLD: NC SC LANDFILL: NC SC OTHER: NC SC

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL

CHAIN OF CUSTODY RECORD

PAGE 3 OF 4 QUOTE # TO ENSURE PROPER BILLING:

Project Name: Georgetown SWF UST Project: (Yes) (No)
 Short Hold Analysis (Yes) (No)
 *Please ATTACH any project specific reporting (QC LEVEL I II III IV)
 provisions and/or QC Requirements
 Invoice To: _____
 Address: Seale

LAB USE ONLY	
Samples INTACT upon arrival?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>
Received IN ICE?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>
PROPER PRESERVATIVES indicated?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>
Received WITHIN HOLDING TIMES?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>
CUSTODY SEALS INTACT?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>
VOLATILES rec'd W/OUT HEADSPACE?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>
PROPER CONTAINERS used?	YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> N/A <input type="checkbox"/>
TEMP: Therm ID: <u>11115</u> Observed <u>8.6</u> °C / Corr. <u>0.6</u> °C	

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NC SC Other N/A
 Water Chlorinated: YES NO
 Samples Iced Upon Collection: YES NO

Purchase Order No./Billing Reference _____
 Requested Due Date 1 Day 2 Days 3 Days 4 Days 5 Days
 "Working Days" 6-9 Days Standard 10 days Rush Work Must Be Pre Approved
 Samples received after 15:00 will be processed next business day.
 Turnaround time is based on business days, excluding weekends and holidays.
 (SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY WAYPOINT ANALYTICAL, LLC TO CLIENT)

Client Company Name: EEM
 Report To/Contact Name: 2300 Ireland ST. SE
 Reporting Address: Seale Ga 31762
 Phone: 919-524-6128 Fax (Yes/No):
 Email Address: jeff@waypoint-analytical.com
 EDD Type: PDF Excel Other
 Site Location Name: Georgetown SWF
 Site Location Physical Address: Georgetown, SC

CLIENT SAMPLE DESCRIPTION	DATE COLLECTED	TIME COLLECTED MILITARY HOURS	MATRIX (SOIL, WATER, OR SLUDGE)	SAMPLE CONTAINER			PRESERVATIVES	ANALYSIS REQUESTED			REMARKS	ID NO.	
				*TYPE SEE BELOW	NO.	SIZE		APPLY VOCs	APPLY Metals	600 800 pH Cond			
MW-8H	11/20/22	1705	WT	Various				3	1	3	1		
MW-60H	11/20/22	1814						3	1	3	1		
TEAR BLK-02	-	-						2					
MW-14R	11/29/22	0814						3	1	3	1		
MW-9HR		0902						3	1	3	1		
MW-25H		1020						3	1	3	1		
MW-AM6		1057						3	1	3	1		
MW-26H		1300						3	1	3	1		
MW-27H		1240						3	1	3	1		

PRESS DOWN FIRMLY - 2 COPIES

Sampler's Signature: [Signature] Sampled By (Print Name): Aaron Hill Affiliation: EEM

Upon relinquishing, this Chain of Custody is your authorization for Waypoint Analytical to proceed with the analyses as requested above. Any changes must be submitted in writing to the Waypoint Analytical Project Manager. There will be charges for any changes after analyses have been initialized.

Relinquished By: (Signature) [Signature] Received By: (Signature) [Signature] Date: 11/30/22 Military/Hours: _____
 Relinquished By: (Signature) _____ Received By: (Signature) [Signature] Date: _____ Military/Hours: _____
 Relinquished By: (Signature) _____ Received For Waypoint Analytical By: [Signature] Date: 12/1/22 Military/Hours: 1050

Method of Shipment: Fed Ex UPS Hand-delivered Waypoint Analytical Field Service Other _____
 NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.
 NPDES: NC SC UST: NC SC GROUNDWATER: NC SC DRINKING WATER: NC SC SOLID WASTE: NC SC RCRA: NC SC BRWNFLD: NC SC LANDFILL: NC SC OTHER: NC SC
 *CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-lined Cap VOA = Volatile Organics Analyte (Zero Head Space)

LAB USE ONLY	
Site Arrival Time:	
Site Departure Time:	
Field Tech Fee:	
Mileage:	

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL



22-335-0008
000093
12-01-2022
13:04:31

EFM, Inc.
Georgetown County SWF

CHAIN OF CUSTODY RECORD

LAB USE ONLY

Client Company Name: EFM

Report To/Contact Name: Jeff Leavitt

Reporting Address: 2300 Ireland St SE

Bellevue, NC 28012

Phone: 919-524-6128 Fax (Yes/No):

Email Address: jeffleavitt@efmgeopoint.com

EDD Type: PDF Excel Other

Site Location Name: Georgetown SWF

Site Location Physical Address: Georgetown, SC

PAGE 4 OF 4 QUOTE # TO ENSURE PROPER BILLING:

Project Name: Georgetown SWF

Short Hold Analysis (Yes) (No) UST Project: (Yes) (No)

*Please ATTACH any project specific reporting (QC LEVEL I III IIII IV) provisions and/or QC Requirements

Invoice To:

Address: same

Purchase Order No./Billing Reference

Requested Due Date 1 Day 2 Days 3 Days 4 Days 5 Days

"Working Days" 6-9 Days Standard 10 days Rush Work Must Be Pre Approved

Samples received after 15:00 will be processed next business day. Turnaround time is based on business days, excluding weekends and holidays. (SEE REVERSE FOR TERMS & CONDITIONS REGARDING SERVICES RENDERED BY WAYPOINT ANALYTICAL, LLC TO CLIENT)

ANALYSIS REQUESTED

AP Vocs AP IV Metals EDB DOC SOIL pH Cond

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YES NO N/A

Samples INTACT upon arrival?

Received IN ICE?

PROPER PRESERVATIVES indicated?

Received WITHIN HOLDING TIMES?

CUSTODY SEALS INTACT?

VOLATILES rec'd W/OUT HEADSPACE?

PROPER CONTAINERS used?

TEMP: Therm 16.6 °C / Observed 62.5 °C / Corr. 0.6 °C

TO BE FILLED IN BY CLIENT/SAMPLING PERSONNEL

Certification: NC SC Other

Water Chlorinated: YES NO

Samples Iced Upon Collection: YES NO

REMARKS

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LAB USE ONLY

Site Arrival Time:

Site Departure Time:

Field Tech Fee:

Mileage:

Additional Comments:

Date

Date

Date

Date

Date

Date

Date

PRESS DOWN FIRMLY - 2 COPIES

Sampler's Signature [Signature]

Sampled By (Print Name) Adam Hill

Affiliation EFM

Relinquished By (Signature) [Signature]

Received By (Signature) Felix

Date 11/30/22

Date 12/1/22

Date 11/30/22

Date 12/1/22

Date 11/30/22

Date 12/1/22

Date 11/30/22

Method of Shipment: Fed Ex UPS Hand-delivered Waypoint Analytical Field Service Other

NOTE: ALL SAMPLE COOLERS SHOULD BE TAPED SHUT WITH CUSTODY SEALS FOR TRANSPORTATION TO THE LABORATORY. SAMPLES ARE NOT ACCEPTED AND VERIFIED AGAINST COC UNTIL RECEIVED AT THE LABORATORY.

NPDES: NC SC SC SC SC SC

UST: NC SC SC SC SC

GROUNDWATER: NC SC SC SC

DRINKING WATER: NC SC SC

SOLID WASTE: NC SC SC

RCRA: NC SC SC

BROWNFIELD: NC SC SC

LANDFILL: NC SC SC

OTHER: NC SC SC

*CONTAINER TYPE CODES: A = Amber C = Clear G = Glass P = Plastic; TL = Teflon-Lined Cap VOA = Volatile Organics Analysis (Zero Head Space)

SEE REVERSE FOR TERMS & CONDITIONS

ORIGINAL



S.C. Department of Health and
Environmental Control

**NPDES GENERAL PERMIT
FOR
STORM WATER DISCHARGES
ASSOCIATED
WITH
INDUSTRIAL ACTIVITIES
(EXCEPT CONSTRUCTION)**

In compliance with the provisions of the Clean Water Act (CWA), as amended (33 U.S.C. 1251 *et seq.*) and the South Carolina Pollution Control Act, (S.C. Code 48-1-10, *et seq.*), operators of storm water discharges associated with industrial activity located in South Carolina are authorized to discharge to waters of the State and the United States in accordance with the eligibility and Notice of Intent (NOI) requirements, effluent limitations, inspection requirements, and other conditions set forth in this permit. This permit consists of general requirements that apply to all facilities, found in Parts 1 through 7, and industry-sector-specific requirements, found in Part 8. Appendices (A through K), contain additional permit conditions that apply to all operators covered under this permit.

Jill C. Stewart, P.E., Director
Dam Safety and Stormwater Permitting Division
Bureau of Water

Permit No.: SCR000000

Issued: September 1, 2016

Effective: October 1, 2016

Expires: September 30, 2021

**NPDES GENERAL PERMIT FOR
STORM WATER DISCHARGES ASSOCIATED WITH INDUSTRIAL ACTIVITY
TABLE OF CONTENTS**

1. Coverage under this Permit.	5
1.1 Eligibility.	5
1.1.1 Facilities Covered.	5
1.1.2 Allowable Stormwater Discharges.	5
1.1.3 Allowable Non-Stormwater Discharges.	6
1.1.4 Limitations on Coverage.	8
1.1.4.1 Discharges Mixed with Non-Stormwater.	8
1.1.4.2 Stormwater Discharges Associated with Construction Activity.	8
1.1.4.3 Discharges Currently or Previously Covered by Another Permit.	8
1.1.4.4 Stormwater Discharges Subject to Effluent Limitations Guidelines.	8
1.1.4.5 Consistency with Municipal Separate Storm Sewer Systems (MS4).	8
1.1.4.6 [Reserved]	9
1.1.4.7 New Discharges to Water Quality Impaired Waters.	9
1.1.4.8 New Discharges to Waters Designated as ONRW for Antidegradation Purposes.	9
1.2 Permit Compliance.	9
1.3 Authorization under this Permit.	9
1.3.1 How to Obtain Authorization.	10
1.3.2 Continuation of this Permit.	12
1.4 Terminating Coverage.	12
1.4.1 Submitting a Notice of Termination.	12
1.4.2 When to Submit a Notice of Termination.	12
1.5 Conditional Exclusion for No Exposure.	13
1.6 Alternative Permits.	13
1.6.1 Department Requiring Coverage under an Alternative Permit.	13
1.6.2 Permittee Requesting Coverage under an Alternative Permit.	14
1.7 Severability.	14
2. Control Measures and Effluent Limits.	14
2.1 Control Measures.	15
2.1.1 Control Measure Selection and Design Considerations	15
2.1.2 Non-Numeric Technology-Based Effluent Limits (BPT/BAT/BCT).	15
2.1.2.1 Minimize Exposure.	15
2.1.2.2 Good Housekeeping.	16
2.1.2.3 Maintenance.	16
2.1.2.4 Spill Prevention and Response Procedures.	17
2.1.2.5 Erosion and Sediment Controls.	18
2.1.2.6 Management of Runoff.	18
2.1.2.7 Salt Storage Piles or Piles Containing Salt/Pavement Deicing Activities	18
2.1.2.8 Sector Specific Non-Numeric Effluent Limits.	19
2.1.2.9 Employee Training.	19
2.1.2.10 Non-Stormwater Discharges.	19
2.1.2.11 Waste, Garbage and Floatable Debris.	20
2.1.2.12 Dust Generation and Vehicle Tracking of Industrial Materials.	20
2.1.3 Numeric Effluent Limitations Based on Effluent Limitations Guidelines	20
2.2 Water Quality-Based Effluent Limitations.	20
2.2.1 Water Quality Standards	20
2.2.2 Discharges to Water Quality Impaired Waters.	21
2.2.2.1 Existing Discharge to an Impaired Water with an EPA Approved or Established TMDL.	21
2.2.2.2 Existing Discharge to an Impaired Water without an EPA Approved or Established TMDL.	21
2.2.2.3 New Discharge to an Impaired Water.	21
2.2.3 Antidegradation Requirements for New or Increased Dischargers	21
2.3 [Reserved]	22

3. Corrective Actions	22
3.1 Conditions Requiring Review and Revision to Eliminate Problem	22
3.2 Conditions Requiring Review to Determine if Modifications Are Necessary	22
3.3 Corrective Action Deadlines	23
3.4 Corrective Action Report	24
3.5 Effect of Corrective Action	24
3.6 Substantially Identical Outfalls	24
4. Inspections	24
4.1 Routine Facility Inspections.	24
4.1.1 Routine Facility Inspection Procedures.	25
4.1.2 Routine Facility Inspection Documentation.	25
4.1.3 Exceptions to Routine Facility Inspections.	25
4.2 Quarterly Visual Assessment of Stormwater Discharges.	26
4.2.1 Quarterly Visual Assessment Procedures.	26
4.2.2 Quarterly Visual Assessment Documentation.	27
4.2.3 Exceptions to Quarterly Visual Assessments.	27
4.3 Comprehensive Site Inspections.	28
4.3.1 Comprehensive Site Inspection Procedures.	31
4.3.2 Comprehensive Site Inspection Documentation.	31
5. Stormwater Pollution Prevention Plan (SWPPP).	30
5.1 Contents of Your SWPPP.	31
5.1.1 Stormwater Pollution Prevention Team.	31
5.1.2 Site Description.	31
5.1.3 Summary of Potential Pollutant Sources.	33
5.1.3.1 <i>Activities in the area.</i>	33
5.1.3.2 <i>Pollutants.</i>	33
5.1.3.3 <i>Spills and Leaks.</i>	33
5.1.3.4 <i>Non-Stormwater Discharges.</i>	33
5.1.3.5 <i>Salt Storage.</i>	34
5.1.3.6 <i>Sampling Data.</i>	34
5.1.4 Description of Control Measures.	34
5.1.4.1 <i>Control Measures to Meet Technology-Based and Water Quality-Based Effluent Limits.</i>	34
5.1.5 Schedules and Procedures	34
5.1.5.1 <i>Pertaining to Control Measures Used to Comply with the Effluent Limits in Part 2.</i>	34
5.1.5.2 <i>Pertaining to Monitoring and Inspection.</i>	35
5.1.6 [Reserved].	35
5.1.7 Signature Requirements.	36
5.2 Required SWPPP Modifications.	36
5.3 SWPPP Availability.	37
5.4 Additional Documentation Requirements.	37
6. Monitoring.	38
6.1 Monitoring Procedures	38
6.1.1 Monitored Outfalls.	38
6.1.2 Commingled Discharges.	39
6.1.3 Measurable Storm Events.	39
6.1.4 Sample Type.	39
6.1.5 Adverse Weather Conditions.	39
6.1.6 Climates with Irregular Stormwater Runoff.	40
6.1.7 Monitoring Periods.	40
6.1.8 Monitoring for Allowable Non-Stormwater Discharges	40
6.1.9 Parameter Codes for Reports of Monitoring Data	39
6.2 Required Monitoring.	41
6.2.1 Benchmark Monitoring.	42
6.2.1.1 <i>Applicability of Benchmark Monitoring.</i>	42
6.2.1.2 <i>Benchmark Monitoring Schedule.</i>	42

6.2.1.3	<i>Exception for Inactive and Unstaffed Sites.</i>	44
6.2.2	Effluent Limitations Monitoring.	45
6.2.2.1	<i>Monitoring Based on Effluent Limitations Guidelines.</i>	45
6.2.2.2	<i>Substantially Identical Outfalls.</i>	45
6.2.3	[Reserved]	45
6.2.4	Discharges to Impaired Waters Monitoring.	45
6.2.4.1	<i>Permittees Required to Monitor Discharges to Impaired Waters.</i>	46
6.2.4.2	<i>Impaired Waters Monitoring Schedule.</i>	47
6.2.5	Additional Monitoring Required by the Department.	49
6.3	Follow-up Actions if Discharge Exceeds Numeric Effluent Limit.	49
6.3.1	Submit an Exceedance Report.	49
6.3.2	Continue to Monitor.	50
7.	Reporting and Recordkeeping	50
7.1	Reporting Monitoring Data to the Department.	50
7.2	[Reserved]	50
7.3	Exceedance Report for Numeric Effluent Limits	50
7.4	Additional Reporting.	51
7.5	Recordkeeping.	52
7.6	Addresses for Reports	52
8.	Sector Specific Requirements	54
8A.	Sector A: Timber Products	54
8B.	Sector B: Paper and Allied Products	58
8C.	Sector C: Chemicals and Allied Products Manufacturing	59
8D.	Sector D: Asphalt Paving and Roofing Materials and Lubricant Manufacturing	61
8E.	Sector E: Glass, Clay, Cement, Concrete, and Gypsum Products	63
8F.	Sector F: Primary Metals	65
8G.	Sector G: Metal Mining (Ore Mining and Dressing)	67
8H.	Sector H: Coal Mines and Coal Mining-Related Facilities	86
8I.	Sector I: Oil and Gas Extraction and Refining	86
8J.	Sector J: Mineral Mining and Dressing	86
8K.	Sector K: Hazardous Waste Treatment, Storage, or Disposal Facilities	87
8L.	Sector L: Landfills, Land Application Sites, and Open Dumps	91
8M.	Sector M: Automobile Salvage Yards	95
8N.	Sector N: Scrap Recycling Facilities	97
8O.	Sector O: Steam Electric Generating Facilities	102
8P.	Sector P: Land Transportation and Warehousing	105
8Q.	Sector Q: Water Transportation	107
8R.	Sector R: Ship and Boat Building and Repairing Yards	110
8S.	Sector S: Air Transportation Facilities	113
8T.	Sector T: Treatment Works	119
8U.	Sector U: Food and Kindred Products	121
8V.	Sector V: Textile Mills, Apparel, and Other Fabric Product Manufacturing; Leather and Leather Products	123
8W.	Sector W: Furniture and Fixtures	125
8X.	Sector X: Printing and Publishing	126
8Y.	Sector Y: Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries	128
8Z.	Sector Z: Leather Tanning and Finishing	130
8AA.	Sector AA: Fabricated Metal Products	132
8AB.	Sector AB: Transportation Equipment, Industrial or Commercial Machinery	135
8AC.	Sector AC: Electronic, Electrical, Photographic, and Optical Goods	136
8AD.	Sector AD: Non-Classified Facilities	137

Appendices

Appendix A	Definitions and Acronyms
Appendix B	Standard Permit Conditions
Appendix C	Areas Covered
Appendix D	Activities Covered
Appendix E	Procedures relating to Endangered Species
Appendix F	National Historic Preservation Act Procedures
Appendix G	Notice of Intent
Appendix H	Notice of Termination
Appendix I	Comprehensive Site Inspection and Reporting Form
Appendix J	Calculating Hardness in Receiving Waters for Hardness Dependent Metals
Appendix K	No Exposure Certification

**NPDES GENERAL PERMIT FOR STORM WATER DISCHARGES
ASSOCIATED WITH INDUSTRIAL ACTIVITY (IGP) (Except Construction)
SCR000000**

1. Coverage under this Permit.

1.1 Eligibility.

1.1.1 Facilities Covered.

To be eligible to discharge under this permit, you must (1) have a storm water discharge associated with industrial activity from your primary industrial activity, as defined in Appendix A, provided your primary industrial activity is included in Appendix D, or (2) be notified by the Department that you are eligible for coverage under Sector AD of this permit. This permit also authorizes storm water discharges from any industrial activity designated by the Department where the designation is based on the potential for contribution to a violation of a water quality standard or for significant contribution of pollutants to Waters of the State.

1.1.2 Allowable Storm Water Discharges.

Unless otherwise made ineligible under Part 1.1.4, the following discharges are eligible for coverage under this permit:

1.1.2.1 Storm water discharges associated with industrial activity for any primary industrial activity and co-located industrial activities, as defined in Appendix A;

1.1.2.2 Discharges designated by the Department as needing a storm water permit as provided in Part 8 Sector AD;

1.1.2.3 Discharges that are not otherwise required to obtain NPDES permit authorization but are commingled with discharges that are authorized under this permit;

1.1.2.4 Discharges subject to any of the national storm water-specific effluent limitations guidelines listed in Table 1-1; and

Table 1-1. Storm Water-specific Effluent Limitations Guidelines

Regulated Discharge	40 CFR Section	Part 8 Sector	New Source Performance Standard (NSPS)	New Source Date
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 429, Subpart I	A	Yes	1/26/81
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	Part 418, Subpart A	C	Yes	4/8/74

Table 1-1. Storm Water-specific Effluent Limitations Guidelines

Regulated Discharge	40 CFR Section	Part 8 Sector	New Source Performance Standard (NSPS)	New Source Date
Runoff from asphalt emulsion facilities	Part 443, Subpart A	D	Yes	7/28/75
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C	E	Yes	2/20/74
Runoff from hazardous waste and non-hazardous waste landfills	Part 445, Subparts A and B	K, L	Yes	2/2/00
Runoff from coal storage piles at steam electric generating facilities	Part 423	O	Yes	11/19/82 (10/8/74) ¹
Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	Part 449	S	Yes	6/15/12

1.1.2.5 Discharges subject to any New Source Performance Standards (NSPS) identified in Table 1-1, provided that you consider the requirements of and develop and retain documentation showing that you have complied with requirements of S.C. R.61-68.D, Antidegradation Rules, except that you are not required to submit your alternatives analysis to the Department;

1.1.2.6 Discharges composed of allowable discharges listed in Parts 1.1.2 and 1.1.3 commingled with a stormwater discharge authorized by a different NPDES permit.

1.1.3 Allowable Non-Storm Water Discharges.

The following are the non-storm water discharges authorized under this permit, provided the non-storm water component of your discharge is in compliance with Part 2.1.2.10:

- a. Discharges from emergency/unplanned fire-fighting activities;
- b. Fire hydrant flushings
- c. Potable water, including water line flushings;
- d. Uncontaminated condensate from air conditioners, coolers, and other compressors and from the outside storage of refrigerated gases or liquids;
- e. Irrigation drainage;
- f. Landscape watering, provided all pesticides, herbicides, and fertilizer have been applied in accordance with the approved labeling;
- g. Pavement wash waters where no detergents or cleaning products are used (e.g., bleach,

¹ NSPS promulgated in 1974 were not removed via the 1982 regulation; therefore wastewaters generated by Part 423-applicable sources that were New Sources under the 1974 regulations are subject to the 1974 NSPS.

- hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols), and the wash waters do not come into contact with oil and grease deposits, sources of pollutants associated with industrial activities (see Part 5.1.3), or any other toxic or hazardous materials, unless residues are first cleaned up using dry clean-up methods (e.g., applying absorbent materials and sweeping, using hydrophobic mops/rags) and you have implemented appropriate control measures to minimize discharges of mobilized solids and other pollutants (e.g., filtration, detention or settlement)
- h. Routine external building washdown/power wash water that does not use detergents or cleaning products such as bleach, hydrofluoric acid, muriatic acid, sodium hydroxide, nonylphenols;
 - i. Uncontaminated ground water or spring water;
 - j. Foundation or footing drains where flows are not contaminated with process materials;
 - k. Incidental windblown mist from cooling towers that collects on rooftops or adjacent portions of your facility, but not intentional discharges from the cooling tower (e.g., piped cooling tower blowdown or drains). The NPDES General Permit for Utility Water Discharges (SCG250000) covers intentional discharges; and
 - l. Discharges from the spray down of lumber and wood product storage yards where no chemical additives are used in the spray-down waters and no chemicals are applied to the wood during storage (applicable only to Sector A facilities provided the non-stormwater component of the discharge is in compliance with the non-numeric effluent limits requirements in Part 2.1.2).

Unless such discharges are covered under another permit, discharges from fire hydrant and water line flushing must not exceed a total residual chlorine (TRC) concentration at the outfall of 0.5 mg/l.

1.1.3.1 Allowable Non-Stormwater Discharges for Sector G Metal Mining-related Construction Activities Occurring during the Exploration and Construction Phases of Mine Development:

- a. Water used to wash vehicles and equipment, provided that there is no discharge of soaps, solvents, or detergents used for such purposes;
- b. Water used to control dust; and
- c. Construction dewatering water that has been treated by an appropriate control under Part 8.G.4.2.9.

These non-stormwater discharges are only authorized for earth-disturbing activities conducted prior to active mining activities, as defined in Part 8.G.3.2. Once the earth-disturbing activities conducted prior to active mining activities have ceased, the only allowable non-stormwater discharges for Sectors G are those listed in Part 1.1.3.

1.1.3.2 Allowable Non-Stormwater Discharges at the Department's Discretion

The Department reserves the right to allow certain non-stormwater discharges not explicitly stated in Part 1.1.3 to be authorized by this permit. A written request explaining the nature of the discharges by the permittee must be submitted to the Department and a written approval received by the permittee before the discharges can be treated as "allowable non-stormwater."

1.1.4 Limitations on Coverage.

Any discharges not expressly authorized in this permit cannot become authorized or shielded from liability under Clean Water Act (CWA) section 402(k) by disclosure to EPA, state, or local authorities after issuance of this permit via any means, including the Notice of Intent (NOI) to be covered by the permit, the Stormwater Pollution Prevention Plan (SWPPP), or during an inspection.

1.1.4.1 Discharges Mixed with Non-Storm Water. Storm water discharges that are mixed with non-storm water, other than those non-storm water discharges listed in Part 1.1.3, are not eligible for coverage under this permit.

1.1.4.2 Storm Water Discharges Associated with Construction Activity. Storm water discharges associated with construction activity disturbing one acre or more, statewide, or disturbing 0.5 acres or more in Horry, Georgetown, Berkeley, Charleston, Dorchester, Colleton, Beaufort, or Jasper County are not eligible for coverage under this permit. These discharges are subject to the requirements found in the NPDES General Permit for Storm Water Discharges from Construction Activities (SCR100000).

1.1.4.3 Discharges Currently or Previously Covered by Another Permit. Unless you received written notification from the Department specifically allowing these discharges to be covered under this permit, you are not eligible for coverage under this permit for any of the following:

- a. Storm water discharges associated with industrial activity that are either standalone or are a component of a discharge currently covered under an individual NPDES permit or an alternative NPDES general permit;
- b. Discharges covered within five years prior to the effective date of this permit by an individual permit or alternative general permit where that permit established site-specific, numeric water-quality-based limitations developed for the storm water component of the discharge; or
- c. Discharges from facilities where any NPDES permit has been or is in the process of being denied, terminated, or revoked by the Department (this does not apply to the routine reissuance of permits).

1.1.4.4 Storm Water Discharges Subject to Effluent Limitations Guidelines. For discharges subject to storm water effluent limitation guidelines under 40 CFR, Subchapter N, only those storm water discharges identified in Table 1-1 are eligible for coverage under this permit.

1.1.4.5 Consistency with Municipal Separate Storm Sewer Systems (MS4). In addition to the applicable requirements of this permit, dischargers covered by this permit must comply with applicable requirements in municipal storm water management programs developed under NPDES permits issued for the discharge of the MS4 that receives the facility's discharge, provided the discharger has been notified of such conditions.

1.1.4.6 [Reserved.]

1.1.4.7 New Discharges to Water-Quality Impaired Waters. If you are a new discharger you are not eligible for coverage under this permit to discharge to an “impaired water”, as defined in Appendix A, unless you:

- a. minimize exposure to storm water of the pollutant(s) for which the water body is impaired, and retain documentation of the procedures taken with your SWPPP;
- b. document that the pollutant(s) for which the water body is impaired is not present at your site or present above natural background levels, and retain documentation of this finding with your SWPPP; or
- c. in advance of submitting your NOI, prepare data to support a showing that the discharge is not expected to cause or contribute to an exceedance of a water quality standard, and retain such data onsite with your SWPPP. To do this, you must include data and other technical information to demonstrate:
 - i. For discharges to waters without an EPA approved or established TMDL, that the discharge of the pollutant for which the water is impaired will meet in-stream water quality criteria at the point of discharge to the waterbody; or
 - ii. For discharges to waters with an EPA approved or established TMDL, that there are sufficient remaining wasteload allocations in an EPA approved or established TMDL to allow your discharge and that existing dischargers to the water body are subject to compliance schedules designed to bring the water body into attainment with water quality standards.

Also reference 6.2.4. for further information on Impaired Waters monitoring.

1.1.4.8 New Discharges to Waters Designated as ONRW for Anti-degradation Purposes. If you are a new discharger, you are not eligible for coverage under this permit for discharges to waters designated by the Department as ONRW (outstanding national resource waters) for anti-degradation purposes under S.C. R. 61-68 and 61-69.

1.2 Permit Compliance.

Any noncompliance with any of the requirements of this permit constitutes a violation of the Clean Water Act (CWA) and the S.C. Pollution Control Act (PCA). As detailed in Part 3 (Corrective Actions) of this permit, failure to take any required corrective actions constitute an independent, additional violation of this permit, CWA, and PCA. As such, any actions and time periods specified for remedying noncompliance do not absolve parties of the initial, underlying noncompliance. However, where corrective action is triggered by an event that does not itself constitute permit noncompliance, such as an exceedance of an applicable benchmark, there is no permit violation, provided you take the required corrective action within the relevant deadlines established in Part 3.3.

1.3 Authorization under this Permit.

All Existing Discharges, New Discharges or Sources, New Owner/Operators of Existing Dischargers, and Other Eligible Discharges are required to meet the requirements outlined in

Section 1.3.1 in order to obtain authorization to discharge under this permit.

1.3.1 How to Obtain Authorization.

- a. To obtain authorization under this permit, you must:
 - i. Be located in South Carolina;
 - ii. Meet the Part 1.1 eligibility requirements;
 - iii. Select, design, install, and implement control measures in accordance with Parts 2.1 and 8 to meet numeric and non-numeric effluent limits;
 - iv. Submit a complete and accurate Notice of Intent (NOI) in writing* and submit the form to the address listed in Part 7.6.1; and
 - v. Develop a SWPPP according to the requirements in Part 5 of this permit.

* The Department is transitioning from paper submittals in order to comply with the Cross Media Electronic Reporting Rule (CROMERR). Please refer to the Stormwater website (www.scdhec.gov/stormwater) for instructions and guidance as we develop them.

b. Late Notifications from Existing Operations: Operators are not prohibited from submitting NOI after initiating industrial activities. When a late NOI is submitted, authorization for discharges occurs as for new dischargers. DHEC may take enforcement action for any un-permitted discharge or noncompliance with the PCA or S.C. regulation that occurs between the commencement of the industrial operation and discharge authorization.

c. Timeframes for discharge authorization are contained in Table 1-2.

Table 1-2. NOI Submittal Deadlines/Discharge Authorization Dates		
Category	NOI Submission Deadline	Discharge Authorization Date¹
<u>Existing Dischargers</u> – Having submitted an NOI before the effective date of this permit.	If requested by the Department, no later than 90 days after the effective date of this permit.	17 days after the NOI is received by the Department. If no NOI is requested by the Department, your authorization under the IGP is automatically continued. See 1.3.2 below. A letter will be sent to all permitted existing dischargers extending coverage under the permit and requiring them to evaluate SWPPP updates.
<u>New Dischargers or New Sources</u> - commencing discharge on or after the effective date of this permit.	A minimum of 17 days prior to commencing discharge.	17 days after the NOI is received by the Department.

Table 1-2. NOI Submittal Deadlines/Discharge Authorization Dates		
Category	NOI Submission Deadline	Discharge Authorization Date ¹
<u>New Owner/Operator of Existing Discharger</u> - transfer of ownership and/or operation of a facility whose discharge is authorized under this permit	A minimum of 17 days prior to date that the transfer will take place to the new owner/operator.	17 days after the NOI is received by the Department.
<u>Other Eligible Dischargers</u> - in operation prior to the effective date of this permit, but not covered under the IGP or another NPDES permit.	Immediately, to minimize the time discharges from the facility will continue to be unauthorized.	17 days after the NOI is received by the Department.

¹Based on a review of your NOI or other information, the Department may delay your authorization for further review, may notify you that additional effluent limitations are necessary, or may deny coverage under this permit and require submission of an application for an individual NPDES permit, as detailed in Part 1.6. In these instances, the Department will notify you in writing of the delay, of the need for additional effluent limits, or of the request for submission of an individual NPDES permit application.

d. Contents of the NOI.

Provide information as follows and as requested in the form provided by the Department:

- i. Name and address of the entity (owner or operator) applying for permit coverage;
- ii. Name and location of the facility and a U.S.G.S. 7-1/2 minute quadrant map (or 8 1/2" x 11" section of such map or copy) with the site location marked;
- iii. Contact information for the SWPPP;
- iv. Whether the facility is a Federal facility;
- v. Whether the facility is on Indian land;
- vi. Description of receiving waters (each stream, if more than one);
- vii. The name of any municipal separate storm sewer system (MS4) which receives the storm water discharge;
- viii. The Standard Industrial Classification code and the permit sector (see Appendix D of this permit) of the facility. Also reference the following US Department of Labor site: https://www.osha.gov/pls/imis/sic_manual.html
- ix. Signature per S.C. R.61-9.122.22(a) certifying:
 - a. That the applicant is requesting coverage under the IGP, SCR000000;
 - b. That a SWPPP in accordance with Part 3 of this permit has been prepared and implemented for the facility, signed, and dated by an authorized representative as defined in Appendix B, R.61-9.122.22 and 122.41(k). Also, provide the name and address of the person signing the NOI;
 - c. That the NOI was properly completed.
 - d. The signature on the submitted NOI must be original.
- x. The following must also be submitted with the NOI form for the NOI application to be complete: The fee for coverage under this IGP, a check made payable to S.C. DHEC Bureau of Finance or credit card payment. S.C. R.61-30, Environmental Protection Fees, governs this fee. This fee consists of the first

year's fee for an annual fee, the cycle of which is July 1 of each year through June 30 of the following year.

- xi. Any other information the Department requires on the NOI form.

This form is available on our website at: <http://www.scdhec.gov/stormwater>

1.3.2 Continuation of this Permit.

If this permit is not reissued or replaced prior to the expiration date, it will be administratively continued in accordance with S.C. R.61-9.122.6 and remain in force and effect. If you were authorized to discharge under this permit, any discharges authorized under this permit will automatically remain covered by this permit until the earliest of:

- a. Your authorization for coverage under a reissued permit or a replacement of this permit at which time compliance with the conditions and requirements of the new permit must be met. A timely and appropriate submittal of a complete NOI requesting authorization to discharge under the new permit and compliance with the requirements of the new permit may be requested by the Department; or
- b. Your submittal of a Notice of Termination; or
- c. Issuance or denial of an individual permit for the facility's discharges; or
- d. A formal permit decision by EPA not to reissue this general permit, at which time EPA will identify a reasonable time period for covered dischargers to seek coverage under an alternative general permit or an individual permit. Coverage under this permit will cease at the end of this time period.

The Department reserves the right to modify or revoke and reissue this permit under SC R.61-9.122.62 and 63, in which case you will be notified of any relevant changes or procedures to which you may be subject.

1.4 Terminating Coverage.

1.4.1 Submitting a Notice of Termination.

To terminate permit coverage, you must submit a complete and accurate Notice of Termination (NOT) using the NOT form provided by the Department to the address listed in Part 7.6. Your authorization to discharge under this permit terminates at midnight of the day that a complete NOT is received by the Department. If you submit a NOT without meeting one or more of the conditions identified in Part 1.4.2, then your NOT is not valid. You are responsible for meeting the terms of this permit until your authorization is terminated.

1.4.2 When to Submit a Notice of Termination.

You must submit a NOT within 30 days after one or more of the following conditions have been met:

- a. A new owner or operator has taken over responsibility for the facility;
- b. You have ceased operations at the facility, there are not or no longer will be discharges of storm water associated with industrial activity from the facility, and

you have already implemented necessary sediment and erosion controls as required by Part 2.1.2.5;

- c. You are a Sector G facility and you have met the applicable termination requirements stated in Part 8.G; or
- d. You have obtained coverage under an individual or alternative general permit for all discharges required to be covered by an NPDES permit, unless the Department has required that you obtain such coverage under authority of Part 1.6.1, in which case coverage under this permit will terminate automatically.

1.4.3 Information to Be Included in the Notice of Termination.

Provide information as follows and as requested in the form provided by the Department for this permit:

- a. Name and address of the entity holding permit coverage to be terminated.
- b. Name and location of the facility.
- c. Certification number of coverage under the permit.
- d. Signature per S.C. R.61-9.122.22(a) certifying proper closure. Also, provide the typed or printed name, position, and address of the person signing the NOT.
- e. Any other information the Department requires on the NOI form.

1.5 Conditional Exclusion for No Exposure.

- a. If you are covered by this permit, and become eligible for a no-exposure exclusion from permitting under S.C. R.61-9.122.26(g), you may file a No Exposure Certification. You are no longer required to have a permit upon submission and approval by the Department of a complete and accurate no-exposure certification to the Department. The No Exposure Certification must be submitted with the fee stated on the S.C. DHEC application and in S.C. R.61-30. If you are no longer required to have permit coverage because of a no-exposure exclusion and have submitted a No Exposure Certification form to the Department, you are not required to submit a NOT. You must submit a No Exposure Certification to the Department once every five years. Existing No Exposure Certifications remain valid until their five-year certification period has expired, at which time you may file for a new Certification. File your No Exposure Certification using the S.C. DHEC form, found at: <http://www.scdhec.gov/stormwater>
- b. There is a fee required by S.C. R. 61-30, Environmental Protection Fees, for submittal of the No-exposure Certification for each five-year period. The fee is presently \$350 for each five-year period.

1.6 Alternative Permits.

1.6.1 The Department Requiring Coverage under an Alternative Permit.

The Department may require you to apply for and/or obtain authorization to discharge

under either an individual NPDES permit or an alternative NPDES general permit in accordance with S.C. R.61-9.122.64 and 124.5. Any interested person may petition the Department to take action under this paragraph. If the Department requires you to apply for an individual NPDES permit, the Department will notify you in writing that a permit application is required. This notification will include a brief statement of the reasons for this decision and will provide application information. In addition, if you are an existing discharger authorized to discharge under this permit, the notice will set a deadline to file the permit application, and will include a statement that on the effective date of the individual NPDES permit, or the alternative general permit as it applies to you, coverage under this general permit will terminate. The Department may grant additional time to submit the application if you request it. If you are covered under this permit and fail to submit an individual NPDES permit application as required by the Department, then the applicability of this permit to you is terminated at the end of the day specified by the Department as the deadline for application submittal. The Department may take appropriate enforcement action for any unpermitted discharge.

1.6.2 Permittee Requesting Coverage under an Alternative Permit.

- a. You may request to be excluded from coverage under this general permit by applying for an individual permit. In such a case, you must submit an individual permit application in accordance with the requirements of S.C. R.61-9.122.26(c)(1)(ii), with reasons supporting the request, to the Department at the address listed in Part 7.6.1 of this permit. The request may be granted by issuance of an individual permit or authorization of coverage under an alternative general permit, if your reasons are adequate to support the request.
- b. When an individual NPDES permit is issued to you or you are authorized to discharge under an alternative NPDES general permit, your authorization to discharge under this permit is terminated on the effective date of the individual permit or the date of authorization of coverage under the alternative general permit.

1.7 Severability.

Invalidation of a portion of this permit does not necessarily render the whole permit invalid. The Department's intent is that the permit remain in effect to the extent possible; in the event that any part of this permit is invalidated, the Department will advise the regulated community as to the effect of such invalidation.

2. Control Measures and Effluent Limits.

In the technology-based limits included in Part 2.1 and in Part 8, the term "minimize" means reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practice.

2.1 Control Measures.

You must select, design, install, and implement control measures (including best management practices [BMP]) to address the selection and design considerations in Part 2.1.1, meet the non-numeric effluent limits in Part 2.1.2, and meet limits contained in applicable effluent limitations guidelines in Part 2.1.3. The selection, design, installation, and implementation of these control measures must be in accordance with good engineering practices and manufacturer's specifications. Note that you may deviate from such manufacturer's specifications where you provide justification for such deviation and include documentation of your rationale in the part of your SWPPP that describes your control measures, consistent with Part 5.1.4. If you find that your control measures are not achieving their intended effect of minimizing pollutant discharges, you must modify these control measures as expeditiously as practicable. Regulated storm water discharges from your facility include storm water run-on that commingles with storm water discharges associated with industrial activity at your facility.

2.1.1 Control Measure Selection and Design Considerations

You must consider the following when selecting and designing control measures:

- a. preventing storm water from coming into contact with polluting materials is generally more effective and less costly than trying to remove pollutants from storm water;
- b. using control measures in combination is more effective than using control measures in isolation for minimizing pollutants in your storm water discharge;
- c. assessing the type and quantity of pollutants, including their potential to impact receiving water quality, is critical to designing effective control measures that will achieve the limits in this permit;
- d. minimizing impervious areas at your facility and infiltrating runoff onsite (including bioretention cells, green roofs, and pervious pavement, among other approaches) can reduce runoff and improve groundwater recharge and stream base flows in local streams; although, care must be taken to avoid groundwater contamination;
- e. attenuating flow using open, vegetated swales and natural depressions can reduce in-stream impacts of erosive flows;
- f. conserving and/or restoring riparian buffers will help protect streams from storm water runoff and improve water quality; and
- g. using treatment interceptors (e.g., swirl separators and sand filters) may be appropriate in some instances to minimize the discharge of pollutants.

2.1.2 Non-Numeric Technology-Based Effluent Limits (BPT/BAT/BCT).

2.1.2.1 Minimize Exposure. You must minimize the exposure of manufacturing, processing, and material storage areas (including loading and unloading, storage, disposal, cleaning, maintenance, and fueling operations) to rain, snow, snowmelt, and runoff by either locating these industrial materials and activities inside or protecting them with storm

resistant coverings (although significant enlargement of impervious surface area is not recommended). In minimizing exposure, you should pay particular attention to the following:

- a. use grading, berming, or curbing to prevent runoff of contaminated flows and divert run-on away from these areas;
- b. locate materials, equipment, and activities so that leaks are contained in existing containment and diversion systems (confine the storage of leaky or leak-prone vehicles and equipment awaiting maintenance to protected areas);
- c. clean up spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants;
- d. use drip pans and absorbents under or around leaky vehicles and equipment or store indoors where feasible;
- e. use spill/overflow protection equipment;
- f. drain fluids from equipment and vehicles prior to on-site storage or disposal;
- g. perform all cleaning operations indoors, under cover, or in bermed areas that prevent runoff and run-on and also that capture any overspray; and
- h. ensure that all wash water drains to a proper collection system (i.e., not the storm water drainage system)

The discharge of vehicle and equipment wash water, including tank cleaning operations, is not authorized by this permit. These wastewaters must be covered under a separate NPDES permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or disposed of otherwise in accordance with applicable law.

Note: Industrial materials do not need to be enclosed or covered if storm water runoff from affected areas will not be discharged to receiving waters or if discharges are authorized under another NPDES permit.

2.1.2.2 Good Housekeeping. You must keep clean all exposed areas that are potential sources of pollutants, using such measures as sweeping at regular intervals, keeping materials orderly and labeled, and storing materials in appropriate containers.

The lids of waste containers such as but not limited to dumpsters, trash cans, and roll off boxes, should be kept closed when not in use. For these types of waste containers that do not have lids and could leak, ensure that discharges have a control (e.g., secondary containment, treatment). This permit does not authorize dry weather discharges from these types of waste containers.

Facilities that handle pre-production plastic must implement best management practices to eliminate discharges of plastic in stormwater. Examples of plastic material required to be addressed as stormwater pollutants include plastic resin pellets, powders, flakes, additives, regrind, scrap, waste and recycling.

2.1.2.3 Maintenance. You must maintain all control measures that are used to achieve the effluent limits in this permit in effective operating condition, as well as all industrial

equipment and systems, in order to minimize pollutant discharges. This includes:

- a. Performing inspections and preventive maintenance of stormwater drainage, source controls, treatment systems, and plant equipment and systems that could fail and result in contamination of stormwater.
- b. Diligently maintaining non-structural control measures (e.g., keep spill response supplies available, personnel appropriately trained).
- c. Inspecting and maintaining baghouses at least quarterly to prevent the escape of dust from the system and immediately removing any accumulated dust at the base of the exterior baghouse.
- d. Cleaning catch basins when the depth of debris reaches two-thirds (2/3) of the sump depth and keeping the debris surface at least six inches below the lowest outlet pipe.

If you find that your control measures are in need of routine maintenance, you must conduct the necessary maintenance immediately in order to minimize pollutant discharges. If you find that your control measures need to be repaired or replaced, you must immediately take all reasonable steps to prevent or minimize the discharge of pollutants until the final repair or replacement is implemented, including cleaning up any contaminated surfaces so that the material will not be discharged during subsequent storm events. Final repairs/replacement of stormwater controls should be completed as soon as feasible but must be no later than the timeframe established in Part 3.3. If a control measure was never installed, was installed incorrectly or not in accordance with Parts 2 and/or 8, or is not being properly operated or maintained, you must conduct corrective action as specified in Part 3.

2.1.2.4 Spill Prevention and Response Procedures. You must minimize the potential for leaks, spills, and other releases that may be exposed to storm water and develop plans for effective response to such spills if or when they occur. At a minimum, you must implement:

- a. Procedures for plainly labeling containers (e.g., “used oil,” “spent solvents,” “fertilizers and pesticides,” etc.) that could be susceptible to spillage or leakage to encourage proper handling and facilitate rapid response if spills or leaks occur;
- b. Preventative measures such as barriers between material storage and traffic areas, secondary containment provisions, and procedures for material storage and handling;
- c. Procedures for expeditiously stopping, containing, and cleaning up leaks, spills, and other releases. Employees who may cause, detect, or respond to a spill or leak must be trained in these procedures and have necessary spill response equipment available. If possible, one of these individuals should be a member of your storm water pollution prevention team (see Part 5.1.1); and
- d. Procedures for notification of appropriate facility personnel, emergency response agencies, and regulatory agencies. Where a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity established under either 40 CFR Part 110, 40 CFR Part 117, or 40 CFR

Part 302, occurs during a 24-hour period, you must notify the National Response Center (NRC) at (800) 424-8802 in accordance with the requirements of 40 CFR Part 110, 40 CFR Part 117, and 40 CFR Part 302 and the Department's Emergency Response Section at (803/253-6488 or 888-481-0125) as soon as you have knowledge of the discharge. State or local requirements may necessitate reporting spills or discharges to local emergency response, public health, or drinking water supply agencies. Contact information must be in locations that are readily accessible and available.

2.1.2.5 Erosion and Sediment Controls. You must stabilize exposed areas and manage runoff using structural and/or non-structural control measures to minimize onsite erosion and sedimentation and the resulting discharge of pollutants. Among other actions you must take to meet this limit, you must place flow velocity-dissipation devices at discharge locations and within outfall channels where necessary to reduce erosion and/or settle out pollutants. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with U.S. EPA's internet-based resources relating to BMP for erosion and sedimentation, including the sector-specific *Industrial Stormwater Fact Sheet Series*, (<https://www.epa.gov/npdes/stormwater-discharges-industrial-activities#factsheet>) and *Stormwater Discharges from Construction Activities* (<https://www.epa.gov/npdes/epas-2012-construction-general-permit-cgp-and-related-documents>).

2.1.2.6 Management of Runoff. You must divert, infiltrate, reuse, contain, or otherwise reduce stormwater runoff to minimize pollutants in your discharges. In selecting, designing, installing, and implementing appropriate control measures, you are encouraged to consult with EPA's Internet-based resources relating to runoff management, including the sector-specific *Industrial Stormwater Fact Sheet Series*, (<https://www.epa.gov/npdes/stormwater-discharges-industrial-activities#factsheet>), *National Menu of Stormwater BMPs*, (<https://www.epa.gov/npdes/national-menu-best-management-practices-bmps-stormwater>), in particular the Post-Construction link on this page, and *National Management Measures to Control Nonpoint Source Pollution from Urban Areas* (<http://water.epa.gov/polwaste/nps/urban/>), and any similar state or tribal resources.

2.1.2.7 Salt Storage and Pavement Deicing.

- a. **Salt Storage Piles or Piles Containing Salt.** You must enclose or cover storage piles of salt, or piles containing salt, used for deicing or other commercial or industrial purposes, including maintenance of paved surfaces. You must implement appropriate measures (e.g., good housekeeping, diversions, containment) to minimize exposure resulting from adding to or removing materials from the pile. Piles do not need to be enclosed or covered if storm water runoff from the piles is not discharged or if discharges from the piles are authorized under another NPDES permit.

- b. ***Pavement Deicing Activities.*** For any pavement deicing activities at facilities, other than airports, covered under this permit, the SWPPP must include measures to assure that no SARA 313 chemicals are used for deicing and that no deicing occurs where spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed). Deicing is to be carried out only for safety purposes during inclement weather and must meet water quality standards in compliance with permit item 2.2, and meeting MS4 permit conditions (pertinent to the discharge).

2.1.2.8 Sector Specific Non-Numeric Effluent Limits. You must achieve any additional non-numeric limits stipulated in the relevant sector-specific section(s) of Part 8.

2.1.2.9 Employee Training. You must train all employees who work in areas where industrial materials or activities are exposed to stormwater, or who are responsible for implementing activities necessary to meet the conditions of this permit (e.g., inspectors, maintenance personnel), including all members of your stormwater pollution prevention team (see Part 5). You must ensure the following personnel understand the requirements of this permit and their specific responsibilities with respect to those requirements:

- Personnel who are responsible for the design, installation, maintenance, and/or repair of controls (including pollution prevention measures);
- Personnel responsible for the storage and handling of chemicals and materials that could become contaminants in stormwater discharges;
- Personnel who are responsible for conducting and documenting monitoring and inspections as required in Parts 3 and 6; and
- Personnel who are responsible for taking and documenting corrective actions as required in Part 3.

Personnel must be trained in at least the following if related to the scope of their job duties (e.g., only personnel responsible for conducting inspections need to understand how to conduct inspections):

- An overview of what is in the SWPPP;
- Spill response procedures, good housekeeping, maintenance requirements, and material management practices;
- The location of all controls on the site required by this permit, and how they are to be maintained;
- The proper procedures to follow with respect to the permit's pollution prevention requirements; and
- When and how to conduct inspections, record applicable findings, and take corrective actions.

Training should be conducted at least annually (or more often if employee turnover is high) unless Sector-specific requirements dictate otherwise.

2.1.2.10 Non-Storm Water Discharges. You must eliminate non-storm water discharges not authorized by an NPDES permit. See Part 1.1.3 for a list of non-stormwater discharges

authorized by this permit.

2.1.2.11 Waste, Garbage, and Floatable Debris. You must ensure that waste, garbage, and floatable debris are not discharged to receiving waters by keeping exposed areas free of such materials or by intercepting them before they are discharged.

2.1.2.12 Dust Generation and Vehicle Tracking of Industrial Materials. You must minimize generation of dust and off-site tracking of raw, final, or waste materials.

2.1.3 Numeric Effluent Limitations Based on Effluent Limitations Guidelines

If your discharges fall into one of the effluent limitations guidelines identified in Table 6-1 (see Part 6.2.2.1), you must meet the effluent limits referenced in Table 2-1:

Table 2-1. Applicable Effluent Limitations Guidelines		
Regulated Activity	40 CFR Part/Subpart	Effluent Limit
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	Part 429, Subpart I	See Part 8.A.7
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	Part 418, Subpart A	See Part 8.C.4
Runoff from asphalt emulsion facilities	Part 443, Subpart A	See Part 8.D.4
Runoff from material storage piles at cement manufacturing facilities	Part 411, Subpart C	See Part 8.E.5
[Reserved.]	Part 436, Subparts B, C, or D [Reserved.]	
Runoff from hazardous waste landfills	Part 445, Subpart A	See Part 8.K.6
Runoff from non-hazardous waste landfills	Part 445, Subpart B	See Part 8.L.10
Runoff from coal storage piles at steam electric generating facilities	Part 423	See Part 8.O.7
Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	Part 449	See Part 8.S.8

2.2 Water Quality-Based Effluent Limitations.

2.2.1 Water Quality Standards

- a. Your discharge must be controlled as necessary to meet applicable water quality standards.

- b. The Department expects that compliance with the other conditions in this permit will control discharges as necessary to meet applicable water quality standards. If at any time you become aware, or the Department determines, that your discharge causes or contributes to an exceedance of applicable water quality standards, you must take corrective action as required in Part 3.1 and document the corrective actions as required in Parts 3.4 and 5.4.
- c. Additionally, the Department may impose additional water quality-based limitations on a site-specific basis, or require you to obtain coverage under an individual permit, if information in your NOI or required reports or from other sources indicates that your discharges are not controlled as necessary to meet applicable water quality standards.

2.2.2 Discharges to Water Quality Impaired Waters.

2.2.2.1 Existing Discharge to an Impaired Water with an EPA Approved or Established TMDL. If you discharge to an impaired water with an EPA approved or established TMDL, you must comply with any requirement(s) stated in the TMDL that may be applicable to industrial storm water discharges. Industrial storm water, as a point source, is subject to the wasteload allocation (WLA) of TMDL. Many existing TMDL do not contain a WLA that is specific to industrial or other storm water sources. If this is the case for a TMDL to which you discharge, your discharges are to be consistent with the pollution reduction goals of the TMDL. You must incorporate into your SWPPP any conditions applicable to your discharge(s) necessary for consistency with the assumptions and requirements of such TMDL. You must incorporate the WLA into your SWPPP and implement steps necessary to meet the WLA/WQS. If progress towards meeting the WLA/WQS has not been made within twenty four (24) months of the effective date of this permit, an individual permit may be required. If the WLA/ WQS has not been met during the term of this permit, you may not be eligible for coverage under this permit at renewal.

2.2.2.2 Existing Discharge to an Impaired Water without an EPA Approved or Established TMDL. If you discharge to an impaired water, listed in the most current 303(d) List of Impaired Waters, without an EPA approved or established TMDL, you are required to comply with Part 2.2.1 and the monitoring requirement of Part 6.2.4. Note that your discharges should not cause or contribute to a violation of WQS.

2.2.2.3 New Discharge to an Impaired Water. If your authorization to discharge under this permit relied on Part 1.1.4.7 (certification by the permittee of compliance, etc.) for a new discharge to an impaired water, you must implement and maintain any control measures or conditions on your site that enabled you to become eligible under Part 1.1.4.7, and modify such measures or conditions as necessary pursuant to any Part 3 corrective actions. You are also required to comply with Part 2.2.1 and the monitoring requirements of Parts 6.2.4.

2.2.3 Anti-degradation Requirements for New or Increased Dischargers

- a. If you are a new discharger, or an existing discharger required by Part 7.4 (i.e., a “planned changes” report) to notify the Department of an increased discharge, and you discharge directly to waters designated by the Department as ORW, the Department may notify you that additional analyses, control measures, or other permit conditions are necessary to comply with the applicable anti-degradation requirements, or notify you that an individual permit application is necessary in accordance with Part 1.6.1.
- b. No new discharge to waters classified as ONRW is allowed under this permit.

2.3 [Reserved.]

3. Corrective Actions

3.1 Conditions Requiring Review and Revision to Eliminate a Problem

If any of the following conditions occur, you must review and revise the selection, design, installation, and implementation of your control measures to ensure that the condition is eliminated and will not be repeated in the future:

- a. an unauthorized release or discharge (e.g., spill, leak, or discharge of non-storm water not authorized by this or another NPDES permit) occurs at your facility;
- b. a discharge violates a numeric effluent limit;
- c. you become aware, or the Department determines and notifies you, that your control measures are not stringent enough for the discharge to meet applicable water quality standards;
- d. an inspection or evaluation of your facility by a Department official, or local or Tribal entity, determines that modifications to the control measures are necessary to meet the non-numeric effluent limits in this permit; or
- e. you find in your routine facility inspection, quarterly visual assessment, or comprehensive site inspection that your control measures are not being properly operated and maintained.

3.2 Conditions Requiring Review to Determine if Modifications Are Necessary

If any of the following conditions occur, you must review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the effluent limits in this permit:

- a. construction or a change in design, operation, or maintenance at your facility significantly changes the nature of pollutants discharged in storm water from your facility or significantly increases the quantity of pollutants discharged or
- b. the average of 4 quarterly sampling results exceeds an applicable benchmark. If less than 4 benchmark samples have been taken, but the results are such that an exceedence of the 4 quarter average is mathematically certain (i.e., if the sum of

quarterly sample results to date is more than 4 times the benchmark level) this is considered a benchmark exceedence, triggering this review.

3.3 Corrective Action Deadlines

3.3.1 Immediate Actions.

If corrective action is needed, you must immediately take all reasonable steps necessary to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up any contaminated surfaces so that the material will not discharge in subsequent storm events.

Note: In this context, the term “immediately” requires you to, on the same day a condition requiring corrective action is found, take all reasonable steps to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational. However, if a problem is identified at a time in the work day when it is too late to initiate corrective action, over a weekend or holiday, or at an unstaffed and/or inactive site, the initiation of corrective action must begin no later than the following work day. “All reasonable steps” means that the permittee has undertaken initial actions to assess and address the condition causing the corrective action, including, for example, cleaning up any exposed materials that may be discharged in a storm event (e.g., thorough sweeping, vacuuming) or making arrangements (i.e., scheduling) for a new BMP to be installed at a later date. “All reasonable steps” for purposes of complying with Part 3.2, when you conclude a corrective action is, in fact, not necessary, could include documenting why a corrective action is unnecessary.

3.3.2 Subsequent Actions.

If you determine that additional actions are necessary beyond those implemented pursuant to Part 3.3.1, you must complete the corrective actions (e.g., install a new or modified control and make it operational, complete the repair) before the next storm event if possible, and within 14 calendar days from the time of discovery of the corrective action condition. If it is infeasible to complete the corrective action within 14 calendar days, you must document why it is infeasible to complete the corrective action within the 14-day timeframe. You must also identify your schedule for completing the work, which must be done as soon as practicable after the 14-day timeframe but no longer than 45 days after discovery. If the completion of corrective action will exceed the 45 day timeframe, you may take the minimum additional time necessary to complete the corrective action, provided that you notify the Department of your intention to exceed 45 days, your rationale for an extension, and a completion date, which you must also include in your corrective action documentation (see Part 3.4). Where your corrective actions result in changes to any of the controls or procedures documented in your SWPPP, you must modify your SWPPP accordingly within 14 calendar days of completing corrective action work.

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

3.4 Corrective Action Report

- a. Within 24 hours of discovery or by the end of the next business day (see 3.3 above) of any condition listed in Parts 3.1 and 3.2, you must document the following information:
 - i. Identification of the condition triggering the need for corrective action review;
 - ii. Description of the problem identified; and
 - iii. Date the problem was identified.
- b. Within 14 days of discovery of any condition listed in Parts 3.1 and 3.2, you must document the following information:
 - i. Summary of corrective action taken or to be taken (or, for triggering events identified in Part 3.2 where you determine that corrective action is not necessary, the basis for this determination);
 - ii. Notice of whether SWPPP modifications are required as a result of this discovery or corrective action;
 - iii. Date corrective action is initiated; and
 - iv. Date corrective action is completed or expected to be completed.

3.5 Effect of Corrective Action

If the event triggering the review is a permit violation (e.g., non-compliance with an effluent limit), correcting it does not eliminate the original violation. Additionally, failing to take corrective action in accordance with this section is an additional permit violation. The Department will consider the appropriateness and promptness of corrective action in determining enforcement responses to permit violations.

3.6 Substantially Identical Outfalls

If the event triggering corrective action is linked to an outfall that represents other substantially identical outfalls, your review must assess the need for corrective action for each outfall represented by the outfall that triggered the review. Any necessary changes to control measures that affect these other outfalls must also be made before the next storm event if possible, or as soon as practicable following that storm event.

4. Inspections

You must conduct the inspections in Parts 4.1 and 4.2 at your facility.

4.1 Routine Facility Inspections.

4.1.1 Routine Facility Inspection Procedures.

Conduct routine facility inspections of all areas of the facility where industrial materials or activities are exposed to storm water, and of all storm water control measures used to comply with the effluent limits contained in this permit. Routine facility inspections must be conducted at least quarterly (i.e., once each calendar quarter) although in many instances, more frequent inspection (e.g., monthly) may be appropriate for some types of equipment, processes, and control measures or areas of the facility with significant activities and materials exposed to storm water. Perform these inspections during periods when the facility is in operation. You must specify the relevant inspection schedules in your SWPPP document as required in Part 5.1.5. These routine inspections must be performed by qualified personnel (for definition, see Appendix A) with at least one member of your storm water pollution prevention team participating. At least once each calendar year, the routine facility inspection must be conducted during a period when a storm water discharge is occurring. The yearly requirement may be extended or modified under limited circumstances and only with written approval by the Department.

4.1.2 Routine Facility Inspection Documentation.

- a. You must document the findings of each routine facility inspection performed and maintain this documentation onsite with your SWPPP as required in Part 5.4. You are not required to submit your routine facility inspection findings to the Department, unless specifically requested to do so. At a minimum, your documentation of each routine facility inspection must include:
 - i. The inspection date and time;
 - ii. The name(s) and signature(s) of the inspector(s);
 - iii. Weather information and a description of any discharges occurring at the time of the inspection;
 - iv. Any previously unidentified discharges of pollutants from the site;
 - v. Any control measures needing maintenance or repairs;
 - vi. Any failed control measures that need replacement;
 - vii. Any incidents of noncompliance observed; and
 - viii. Any additional control measures needed to comply with the permit requirements.
- b. Any corrective action required as a result of a routine facility inspection must be performed consistent with Part 3 of this permit.

4.1.3 Exceptions to Routine Facility Inspections. *Inactive and Unstaffed Sites:*

- a. The requirement to conduct routine facility inspections on a quarterly basis does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. Such a facility is only required to conduct an annual site inspection in accordance with the requirements of Part 4.1.1 and 4.1.2. To invoke this exception, you must maintain a statement

in your SWPPP pursuant to Part 5.1.5.2 indicating that the site is inactive and unstaffed, and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in S.C. R.61-9.122.26(g)(4)(iii). The statement must be signed and certified in accordance with Appendix B, S.C. R.61-9.122.22. If circumstances change and industrial materials or activities become exposed to storm water or your facility becomes active and/or staffed, this exception no longer applies, and you must immediately resume periodic (at least quarterly) facility inspections. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to storm water, then you must include the same signed and certified statement as above and retain it with your records pursuant to Part 5.4.

- b. Inactive and unstaffed facilities covered under Sector G (Metal Mining) are not required to meet the “no industrial materials or activities exposed to storm water” standard to be eligible for this exception from routine inspections, consistent with the requirements established in Parts 8.G.8.

4.2 Quarterly Visual Assessment of Storm Water Discharges.

4.2.1 Quarterly Visual Assessment Procedures.

- a. Once each quarter for the entire permit term, you must collect a storm water sample from each outfall (except as noted in Part 4.2.3) and conduct a visual assessment of each of these samples. These samples are not required to be collected consistent with 40 CFR Part 136 procedures but should be collected in such a manner that the samples are representative of the storm water discharge. The sampling required is anticipated to occur during a site’s normal business hours.
- b. The visual assessment must be made:
 - i. Of a sample in a clean, clear glass or plastic container and examined in a well-lit area;
 - ii. On samples collected within the first 30 minutes of an actual discharge from a storm event. If it is not possible to collect the sample within the first 30 minutes of discharge, the sample must be collected as soon as practicable after the first 30 minutes, and you must document why it was not possible to take samples within the first 30 minutes. In the case of snowmelt, samples must be taken during a period with a measurable discharge from your site; and
 - iii. For storm events, on discharges that occur at least 72 hours (three 24-hour days) from the previous discharge.
- c. You must visually inspect the sample for the following water quality

characteristics:

- i. Color;
- ii. Odor;
- iii. Clarity;
- iv. Floating solids;
- v. Settled solids;
- vi. Suspended solids;
- vii. Foam;
- viii. Oil sheen; and
- ix. Other obvious indicators of stormwater pollution

4.2.2 Quarterly Visual Assessment Documentation.

- a. You must document the results of your visual assessments and maintain this documentation onsite with your SWPPP as required in Part 5.4. You are not required to submit your visual assessment findings to DHEC, unless specifically requested to do so. At a minimum, your documentation of the visual assessment must include:
 - i. Sample location(s)
 - ii. Sample collection date and time, and visual assessment date and time for each sample;
 - iii. Personnel collecting the sample and performing visual assessment, and their signatures;
 - iv. Nature of the discharge (e.g., runoff or snowmelt);
 - v. Results of observations of the storm water discharge;
 - vi. Probable sources of any observed storm water contamination; and
 - vii. If applicable, why it was not possible to take samples within the first 30 minutes.
- b. Any corrective action required as a result of a quarterly visual assessment must be performed consistent with Part 3 of this permit.

4.2.3 Exceptions to Quarterly Visual Assessments.

- a. *Adverse Weather Conditions:* When adverse weather conditions prevent the collection of samples during the quarter, you must take a substitute sample during the next qualifying storm event. Documentation of the rationale for not making a visual assessment for the quarter must be included with your SWPPP records as described in Part 5.4. Adverse conditions are those that are dangerous or create inaccessibility for personnel, such as local flooding, high winds, or electrical storms, or situations that otherwise make sampling impractical, such as drought or extended frozen conditions.

b. *Inactive and unstaffed sites:*

- i. The requirement for a quarterly visual assessment does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. To invoke this exception, you must maintain a statement in your SWPPP as required in Part 5.1.5.2 indicating that the site is inactive and unstaffed and that there are no industrial materials or activities exposed to precipitation, in accordance with the substantive requirements in S.C. R.61-9.122.26(g)(4)(iii). The statement must be signed and certified in accordance with Appendix B, S.C. R.61-9.122.22.
- ii. If circumstances change and industrial materials or activities become exposed to storm water or your facility becomes active and/or staffed, this exception no longer applies and you must immediately resume quarterly visual assessments.
- iii. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to storm water, then you must include the same signed and certified statement as above and retain it with your records pursuant to Part 5.4.
- iv. Inactive and unstaffed facilities covered under Sector G (Metal Mining) are not required to meet the “no industrial materials or activities exposed to storm water” standard to be eligible for this exception from quarterly visual assessment, consistent with the requirements established in Parts 8.G.8.

c. *Substantially identical outfalls:*

- i. If your facility has two or more outfalls that you believe discharge substantially identical effluents, as documented in Part 5.1.5.2, you may conduct quarterly visual assessments of the discharge at just one of the outfalls and report that the results also apply to the substantially identical outfall(s) provided that you perform visual assessments on a rotating basis of each substantially identical outfall throughout the period of your coverage under this permit.
- ii. If storm water contamination is identified through visual assessment performed at a substantially identical outfall, you must assess and modify your control measures as appropriate for each outfall represented by the monitored outfall.

4.3 Comprehensive Site Inspections.

4.3.1 Comprehensive Site Inspection Procedures.

- a. You must conduct annual comprehensive site inspections while you are covered under this permit. Annual, as defined in this Part, means once during each of the following inspection periods beginning with the period you are authorized to discharge under this permit:

Year 1: *October 1, 2016 – September 30, 2017*
Year 2: *October 1, 2017 – September 30, 2018*
Year 3: *October 1, 2018 – September 30, 2019*
Year 4: *October 1, 2019 – September 30, 2020*
Year 5: *October 1, 2020 – September 30, 2021*

- b. The requirement for you to perform a comprehensive site inspection for an inspection period is waived, as defined above, if you obtain authorization to discharge less than three months before the end of that inspection period.
- c. Should your coverage be administratively continued after the expiration date of this permit, you must continue to perform these inspections annually until you are no longer covered.
- d. Comprehensive site inspections must be conducted by qualified personnel, with at least one member of your storm water pollution prevention team participating in the comprehensive site inspections.
- e. Your comprehensive site inspections must cover all areas of the facility affected by the requirements in this permit, including the areas identified in the SWPPP as potential pollutant sources (see Part 5.1.3) where industrial materials or activities are exposed to storm water, any areas where control measures are used to comply with the effluent limits in Part 2, and areas where spills and leaks have occurred in the past 3 years. The inspections must also include a review of monitoring data collected in accordance with Part 6.2. Inspectors must consider the results of the past year's visual and analytical monitoring when planning and conducting inspections. Inspectors must examine the following:
 - i. Industrial materials, residue, or trash that may have or could come into contact with storm water;
 - ii. Leaks or spills from industrial equipment, drums, tanks, and other containers;
 - iii. Offsite tracking of industrial or waste materials or sediment where vehicles enter or exit the site;
 - iv. Tracking or blowing of raw, final, or waste materials from areas of no exposure to exposed areas; and
 - v. Control measures needing replacement, maintenance, or repair.
 - vi. The Department's list of approved TMDL and 303(d) list (found at www.scdhec.gov/tmdl) must be reviewed during each annual comprehensive site compliance evaluation related to water-quality-based monitoring as required in 2.2.2 and potential corrective action. Documentation of the inspector's findings must be kept with the SWPPP records.
 - vii. Elimination of non-stormwater discharges
- f. Storm water control measures required by this permit must be observed to ensure that they are functioning correctly. If discharge locations are inaccessible, nearby

downstream locations must be inspected.

- g. Your annual comprehensive site inspection may also be used as one of the routine inspections, as long as all components of both types of inspections are included.

4.3.2 Comprehensive Site Inspection Documentation.

- a. You must document the findings of each comprehensive site inspection and maintain this documentation onsite with your SWPPP as required in Part 5.4. At a minimum, your documentation of the comprehensive site inspection must include:
 - i. The date of the inspection;
 - ii. The name(s) and title(s) of the personnel making the inspection;
 - iii. Findings from the examination of areas of your facility identified in Part 4.3.1;
 - iv. All observations relating to the implementation of your control measures including:
 - 1. previously unidentified discharges from the site,
 - 2. previously unidentified pollutants in existing discharges,
 - 3. evidence of, or the potential for, pollutants entering the drainage system;
 - 4. evidence of pollutants discharging to receiving waters at all facility outfall(s), and the condition of and around the outfall, including flow dissipation measures to prevent scouring, and
 - 5. additional control measures needed to address any conditions requiring corrective action identified during the inspection.
 - v. Any required revisions to the SWPPP resulting from the inspection;
 - vi. Any incidents of noncompliance observed or a certification stating the facility is in compliance with this permit (if there is no noncompliance); and
 - vii. A statement, signed and certified in accordance with Appendix B, S.C. R.61-9.122.22 of the permit.

Any corrective action required as a result of the comprehensive site inspection must be performed consistent with Part 3 of this permit.

5. Storm Water Pollution Prevention Plan (SWPPP).

You must prepare a SWPPP for your facility before submitting your Notice of Intent (NOI) for permit coverage. If you prepared a SWPPP for coverage under a previous version of this permit, you must review and update the SWPPP to implement all provisions of this permit prior to submitting your NOI. If the Department does not request an NOI to continue authorization under this permit, you are to make updates within 90 days after the effective date of this permit. The SWPPP does not contain effluent limitations; the limitations are contained in Part 2 of the permit, and for some sectors, Part 8 of the permit. The SWPPP is intended to document the selection, design, and installation of control measures. As distinct from the SWPPP, the

additional documentation requirements (see Part 5.4) are intended to detail the implementation (including inspection, maintenance, monitoring, and corrective action) of the permit requirements. Consider using the template developed by the Department found here:

<http://www.scdhec.gov/Environment/docs/npdes-ind-swppp.doc>

The SWPPP shall be prepared in accordance with good engineering practices and to industry standards. The SWPPP may be developed by either a person on your staff or a third party you hire, but it must be developed by a “qualified person” (per definition in App. A) and must be certified per the signature requirements in Part 5.1.7. If the Department concludes that the SWPPP is not in compliance with this Part, the Department may require the SWPPP to be reviewed, amended as necessary, and certified by a Professional Engineer, or for Sector G, by a Professional Geologist, with the education and experience necessary to prepare an adequate SWPPP.

5.1 Contents of Your SWPPP.

- a. For coverage under this permit, your SWPPP must contain all of the following elements:
 - i. Storm water pollution prevention team (see Part 5.1.1);
 - ii. Site description (see Part 5.1.2);
 - iii. Summary of potential pollutant sources (see Part 5.1.3);
 - iv. Description of control measures (see Part 5.1.4);
 - v. Schedules and procedures (see Part 5.1.5); and
 - vi. [RESERVED]
 - vii. Signature requirements (see Part 5.1.7).
- b. Where your SWPPP refers to procedures in other facility documents, such as a Spill Prevention, Control, and Countermeasure (SPCC) Plan, a copy of the relevant portions of those documents must be kept with or within close proximity to your SWPPP.

5.1.1 Storm Water Pollution Prevention Team.

You must identify the staff members (by name or title) that comprise the facility’s storm water pollution prevention team as well as their individual responsibilities. Your storm water pollution prevention team is responsible for assisting the facility manager in developing and revising the facility’s SWPPP as well as maintaining control measures and taking corrective actions where required. Each member of the storm water pollution prevention team must have ready access to either an electronic or paper copy of applicable portions of this permit and your SWPPP.

5.1.2 Site Description.

Your SWPPP must include the following:

- a. *Activities at the Facility.* Provide a description of the nature of the industrial activities at your facility, including any co-located activities.
- b. *General location map.* Provide a general location map (e.g., U.S. Geological Survey (USGS) quadrangle map) with enough detail to identify the location of your facility and all receiving waters for your storm water discharges.
- c. *Site map.* Provide a map showing:
 - i. the size of the property in acres;
 - ii. the location and extent of significant structures and impervious surfaces;
 - iii. directions of storm water flow (use arrows);
 - iv. locations of all existing structural control measures;
 - v. locations of all receiving waters in the immediate vicinity of your facility, indicating if any of the waters are impaired and, if so, whether the waters have TMDL established for them;
 - vi. locations of all storm water conveyances including ditches, pipes, and swales;
 - vii. locations of potential pollutant sources identified under Part 5.1.3.2;
 - viii. locations where significant spills or leaks identified under Part 5.1.3.3 have occurred;
 - ix. locations of all storm water monitoring points;
 - x. locations of storm water inlets and outfalls, with a unique identification code for each outfall (e.g., Outfall No. 1, No. 2, etc), indicating if you are treating one or more outfalls as “substantially identical” under Parts 4.2.3, 5.1.5.2, and 6.1.1, and an approximate outline of the areas draining to each outfall with an indication of the applicable Sector(s) for each outlined area;
 - xi. municipal separate storm sewer systems, where your storm water discharges to them;
 - xii. locations and descriptions of all non-storm water discharges identified under Part 2.1.2.10;
 - xiii. locations of the following activities where such activities are exposed to precipitation:
 1. fueling stations;
 2. vehicle and equipment maintenance and/or cleaning areas;
 3. loading/unloading areas;
 4. locations used for the treatment, storage, or disposal of wastes;
 5. liquid storage tanks;
 6. processing and storage areas;
 7. immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility;
 8. transfer areas for substances in bulk; and
 9. machinery; and
 - xiv. locations and sources of run-on to your site that contains significant quantities of pollutants from adjacent property.

If the map becomes too dense in information, additional maps and/or similar documentation can be provided as well.

5.1.3 Summary of Potential Pollutant Sources.

You must document areas at your facility where industrial materials or activities are exposed to storm water and from which allowable non-storm water discharges are released. *Industrial materials or activities* include, but are not limited to: material handling equipment or activities; industrial machinery; raw materials; industrial production and processes; and intermediate products, by-products, final products, and waste products. *Material handling activities* include, but are not limited to: the storage, loading and unloading, transportation, disposal, or conveyance of any raw material, intermediate product, final product or waste product. For each area identified, the description must include:

5.1.3.1 Activities in the area. A list of the industrial activities exposed to storm water (e.g., material storage; equipment fueling, maintenance, and cleaning; cutting steel beams).

5.1.3.2 Pollutants. A list of the pollutant(s) or pollutant constituents (e.g., crankcase oil, zinc, sulfuric acid, and cleaning solvents) associated with each identified activity. The pollutant list must include all significant materials that have been handled, treated, stored, or disposed, and that have been exposed to storm water in the 3 years prior to the date you prepare or amend your SWPPP.

5.1.3.3 Spills and Leaks. You must document where potential spills and leaks could occur that could contribute pollutants to storm water discharges, and the corresponding outfall(s) that would be affected by such spills and leaks. You must document all significant spills and leaks of oil or toxic or hazardous pollutants that actually occurred at exposed areas, or that drained to a storm water conveyance, in the 3 years prior to the date you prepare or amend your SWPPP.

Note: Significant spills and leaks include, but are not limited to, releases of oil or hazardous substances in excess of quantities that are reportable under CWA Section 311 (see 40 CFR 110.6 and 40 CFR 117.21) or Section 102 of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), 42 USC §9602. This permit does not relieve you of the reporting requirements of 40 CFR 110, 40 CFR 117, and 40 CFR 302 relating to spills or other releases of oils or hazardous substances. Also, you must appropriately notify the Department's Emergency Response Section at 803/253-6488 or 888/481-0125.

5.1.3.4 Unauthorized Non-Storm Water Discharges. You must document that you have evaluated for the presence of non-storm water discharges and that all unauthorized discharges have been eliminated. This evaluation must be done annually (see Part 4.3.1.e.vii.). Documentation of your evaluation must include:

- a. The date of any evaluation;
- b. A description of the evaluation criteria used;
- c. A list of the outfalls or onsite drainage points that were directly observed during the evaluation;

- d. The different types of non-storm water discharge(s) and source locations; and
- e. The action(s) taken, such as a list of control measures used to eliminate unauthorized discharge(s), if any were identified. For example, a floor drain was sealed, a sink drain was re-routed to sanitary, or an NPDES permit application was submitted for an unauthorized cooling water discharge.

5.1.3.5 *Salt Storage and Pavement Deicing.*

- a. You must document the location of any storage piles containing salt used for deicing or other commercial or industrial purposes and areas where de-icing is expected to occur.
- b. *Pavement deicing activities.* For any pavement deicing activities at facilities, other than airports, covered under this permit, the SWPPP must include measures to assure that no SARA 313 chemical[s] is used for deicing and that no deicing occurs where spills or leaks of toxic or hazardous materials have occurred (unless all spilled material has been removed). Deicing is to be carried out only for safety purposes during inclement weather and must meet water quality standards and MS4 permit conditions (pertinent to the discharge).

5.1.3.6 *Sampling Data.* You must summarize all storm water discharge sampling data collected at your facility during the previous permit term.

5.1.4 Description of Control Measures.

Control Measures to Meet Technology-Based and Water Quality-Based Effluent Limits.

You must document the location and type of control measures you have installed and implemented at your site to achieve the non-numeric effluent limits in Part 2.1.2, and where applicable in Part 8, the effluent limitations guidelines-based limits in Part 2.1.3, the water quality-based effluent limits in Part 2.2, and describe how you addressed the control measure selection and design considerations in Part 2.1.1. This documentation must describe how the control measures at your site address both the pollutant sources identified in Part 5.1.3, and any storm water run-on that commingles with any discharges covered under this permit. You must keep, operate, and maintain any permanent storm water detention or retention pond or other permanent storm water management device installed under the requirements of State or local regulatory authority, unless you receive a written waiver from the Department.

5.1.5 Schedules and Procedures

5.1.5.1 Pertaining to Control Measures Used to Comply with the Effluent Limits in Part 2.

- a. The following must be documented in your SWPPP:
 - i. Good Housekeeping (See Part 2.1.2.2) – A schedule for regular pickup and disposal of waste materials, along with routine inspections for leaks and conditions of drums, tanks and containers;
 - ii. Maintenance (See Part 2.1.2.3) – Preventative maintenance procedures, including

- regular inspections, testing, maintenance, and repair of all industrial equipment and systems, and control measures, to avoid situations that may result in leaks, spills, and other releases, and any back-up practices in place should a runoff event occur while a control measure is off-line;
- iii. Spill Prevention and Response Procedures (See Part 2.1.2.4) – Procedures for preventing and responding to spills and leaks. You may reference the existence of other plans for Spill Prevention Control and Countermeasure (SPCC) developed for the facility under Section 311 of the CWA or BMP programs otherwise required by an NPDES permit for the facility, provided that you keep a copy of that other plan onsite and make it available for review consistent with Part 5.3; and
 - iv. Employee Training (Part 2.1.2.9) – A schedule for all types of necessary training.

5.1.5.2 Pertaining to Monitoring and Inspection.

- a. You must document in your SWPPP your procedures for conducting the four types of analytical monitoring specified by this permit, where applicable to your facility, including:
 - i. Benchmark monitoring (see Part 6.2.1);
 - ii. Effluent limitations guidelines monitoring (see Part 6.2.2);
 - iii. Impaired waters monitoring (see Part 6.2.4); and
 - iv. Other monitoring as required by the Department (see Part 6.2.5).
- b. For each type of monitoring, your SWPPP must document:
 - i. Locations where samples are collected, including any determination that two or more outfalls are substantially identical;
 - ii. Parameters for sampling and the frequency of sampling for each parameter;
 - iii. Schedules for monitoring at your facility;
 - iv. Any numeric control values (benchmarks, effluent limitations guidelines, TMDL-related requirements, or other requirements) applicable to discharges from each outfall; and
 - v. Procedures (e.g., responsible staff, logistics, laboratory to be used, etc.) for gathering storm event data, as specified in Part 6.1.
- c. If you are invoking the exception for inactive and unstaffed sites for benchmark monitoring, you must include in your SWPPP the information to support this claim as required by Part 6.2.1.2.
- d. You must document the following in your SWPPP, if you plan to use the exception for substantially identical outfalls for your quarterly visual assessment requirements in Part 4.2 or your benchmark monitoring requirements in Part 6.2.1:
 - i. Location of each of the substantially identical outfalls;

- ii. Description of the general industrial activities conducted in the drainage area of each outfall;
 - iii. Description of the control measures implemented in the drainage area of each outfall;
 - iv. Description of the exposed materials located in the drainage area of each outfall that are likely to be significant contributors of pollutants to storm water discharges;
 - v. An estimate of the amount of impervious surfaces located within each of the drainage areas (low = under 40%; medium = 40 to 65%; high = above 65%); and
 - vi. Why the outfalls are expected to discharge substantially identical effluents.
- e. You must document in your SWPPP your procedures for performing, as appropriate, the three types of inspections specified by this permit, including:
- i. Routine facility inspections (see Part 4.1);
 - ii. Quarterly visual assessment of storm water discharges (see Part 4.2); and
 - iii. Comprehensive site inspections (see Part 4.3).
- f. For each type of inspection performed, your SWPPP must identify:
- i. Person(s) or positions of person(s) responsible for inspection;
 - ii. Schedules for conducting inspections, and
 - iii. Specific items to be covered by the inspection, including schedules for specific outfalls.
- g. If you are invoking the exception for inactive and unstaffed sites relating to routine facility inspections and quarterly visual assessments, you must include in your SWPPP the information to support this claim as required by Parts 4.1.3 and 4.2.3.

5.1.6 [Reserved]

5.1.7 Signature Requirements.

You must sign and date your SWPPP in accordance with Appendix B, S.C. R.122.41(k), including the date of signature.

5.2 Required SWPPP Modifications.

You must modify your SWPPP whenever necessary to address any of the triggering conditions for corrective action in Part 3.1 and to ensure that they do not reoccur, or to reflect changes implemented when a review following the triggering conditions in Part 3.2 indicates that changes to your control measures are necessary to meet the effluent limits in this permit. Changes to your SWPPP document must be made in accordance with the corrective action

deadlines in Parts 3.3 and 3.4, and must be signed and dated in accordance with Appendix B, S.C. Reg. 61-9.122.41(k).

5.3 SWPPP Availability.

- a. You must retain a copy of the current SWPPP required by this permit at the facility, and it must be immediately available to the Department; Tribal or local agencies approving storm water management plans; and the operator of an MS4 receiving discharges from the site at the time of an onsite inspection or upon request. The Department may provide access to portions of your SWPPP to a member of the public upon request. Confidential Business Information (CBI) may be withheld from the public, but may not be withheld from those staff cleared for CBI review within the Department or EPA.
- b. The Department encourages you to post your SWPPP online and provide the website address on your NOI.

5.4 Additional Documentation Requirements.

You are required to maintain the following inspection, monitoring, and certification records and make them readily available to the Department. Paper or electronic versions of these records are acceptable. Along with your SWPPP, these complete and up-to-date records demonstrate full compliance with the conditions of this permit:

- a. A copy of the latest NOI submitted to the Department along with any correspondence exchanged between you and the Department specific to coverage under this permit;
- b. A copy of the acknowledgment letter you receive from the Department assigning your coverage certification number;
- c. A copy of this permit (an electronic copy easily available to SWPPP personnel is also acceptable);
- d. Descriptions and dates of any incidences of significant spills, leaks, or other releases that resulted in discharges of pollutants to waters of the State or U.S., through storm water or otherwise; the circumstances leading to the release and actions taken in response to the release; and measures taken to prevent the recurrence of such releases (see Parts 2.1.2.4 and 5.1.3.3);
- e. Records of employee training, including the date training is received (see Part 2.1.2.9) documentation of maintenance and repairs of control measures, including the date(s) of regular maintenance, date(s) of discovery of areas in need of repair/replacement, and for repairs, date(s) that the control measure(s) returned to full function, and the justification for any extended maintenance/repair schedules (see Part 2.1.2.3);

- f. All inspection reports, including the Routine Facility Inspection Reports (see Part 4.1), the Quarterly Visual Assessment Reports (see Part 4.2), and the Comprehensive Site Inspection Reports (see Part 4.3);
- g. Descriptions of any deviations from the schedule for visual assessments and/or monitoring, and the reasons for the deviations (e.g., adverse weather or it was impracticable to collect samples within the first 30 minutes of actual discharge; (see Part 6.1.4);
- h. Description of any corrective action taken at your site, including triggering event and dates when problems were discovered and modifications occurred;
- i. Documentation of any benchmark exceedances and how they were responded to, including either (1) corrective action taken, (2) a finding that the exceedance was due to natural background pollutant levels, or (3) a finding that no further pollutant reductions were technologically available and economically practicable and achievable in light of best industry practice consistent with Part 6.2.1.2;
- j. Documentation to support any determination that pollutants of concern are not expected to be present above natural background levels if you discharge directly to impaired waters, and that such pollutants were not detected in your discharge or were solely attributable to natural background sources (see Part 6.2.4.2); and
- k. Documentation to support your claim that your facility has changed its status from active to inactive and unstaffed with respect to the requirements to conduct routine facility inspections (see Part 4.1.3), quarterly visual assessments (see Part 4.2.3), benchmark monitoring (see Part 6.2.1.3), and/or impaired waters monitoring (see Part 6.2.4.3).

6. Monitoring.

You must collect and analyze storm water samples and document monitoring activities consistent with the procedures described in Part 6 and Appendix B, S.C. R.122.41(j) - (l), and any additional sector-specific or State/Tribal-specific requirements in Parts 8, respectively. Refer to Part 7 for reporting and recordkeeping requirements. The sampling required is anticipated to occur during a site's normal business hours.

6.1 Monitoring Procedures

6.1.1 Monitored Outfalls and Substantially Identical Outfalls.

Applicable monitoring requirements apply to each outfall authorized by this permit, except as otherwise exempt from monitoring as a "substantially identical outfall." If your facility has two or more outfalls that you believe discharge substantially identical effluents, based on the similarities of the general industrial activities and control measures, exposed

materials that may significantly contribute pollutants to storm water, and runoff coefficients of their drainage areas, you may monitor the effluent of just one of the outfalls and report that the results also apply to the substantially identical outfall(s). As required in Part 5.1.5.2, your SWPPP must identify each outfall authorized by this permit and describe the rationale for any substantially identical outfall determinations. The allowance for monitoring only one of the substantially identical outfalls is not applicable to any outfalls with numeric effluent limitations. You are required to monitor each outfall covered by a numeric effluent limit as identified in Part 6.2.2. If your discharge is co-located with another facility(s), then an alternative sampling plan may be submitted to the Department for review and approval.

6.1.2 Commingled Discharges.

If discharges authorized by this permit commingle with discharges not authorized under this permit, any required sampling of the authorized discharges must be performed at a point before they mix with other waste streams, to the extent practicable.

6.1.3 Measurable Storm Events.

- a. All required monitoring must be performed on a storm event that results in an actual discharge from your site (“measurable storm event”) that follows the preceding measurable storm event by at least 72 hours (three 24-hour days). In the case of snowmelt, the monitoring must be performed at a time when a measurable discharge occurs at your site.
- b. For each monitoring event, except snowmelt monitoring, you must identify the date and duration (in hours) of the rainfall event, rainfall total (in inches) for that rainfall event, and time (in days) since the previous measurable storm event or, alternatively, the absence of measurable precipitation in the 72 hours (three 24-hour days) preceding the monitoring event. For snowmelt monitoring, you must identify the dates of the snowfall and of the sampling event.

6.1.4 Sample Type.

You must take a minimum of one grab sample from a discharge resulting from a measurable storm event as described in Part 6.1.3. Samples must be collected within the first 30 minutes of initial discharge from a measurable storm event. If it is not possible to collect the sample within the first 30 minutes of initial discharge from a measurable storm event, the sample must be collected as soon as practicable after the first 30 minutes, and documentation must be kept with the SWPPP explaining why it was not possible to take samples within the first 30 minutes initial discharge. In the case of snowmelt, samples must be taken during a period with a measurable discharge.

6.1.5 Adverse Weather Conditions.

When adverse weather conditions as described in Part 4.2.3 prevent the collection of samples according to the relevant monitoring schedule, you must take a substitute sample

during the next qualifying storm event. You must document in your SWPPP any failure to monitor, indicating the basis for not sampling during the usual monitoring period.

6.1.6 [Reserved.]

6.1.7 Monitoring Periods.

- a. Monitoring requirements in this permit begin in the first full quarter following the effective date of this permit or your date of discharge authorization, whichever date comes later unless otherwise stated differently. A variance may be granted by the Department. If your monitoring is required on a quarterly basis (e.g., benchmark monitoring), you must monitor at least once in each of the following 3-month intervals:

January 1 – March 31;
April 1 – June 30;
July 1 – September 30; and
October 1 – December 31.

- b. For example, if you obtain permit coverage on June 2, 2017, then your first monitoring quarter is July 1 - September 30, 2017. This monitoring schedule may be modified in accordance with Part 6.1.5 if the revised schedule is documented with your SWPPP.

6.1.8 Monitoring for Allowable Non-Storm Water Discharges

You are only required to monitor allowable non-storm water discharges (as delineated in Part 1.1.3) when they are commingled with storm water discharges associated with industrial activity.

6.1.9 Parameter Codes for Reports of Monitoring Data.

Permittees covered by this permit must include the appropriate following parameter codes in their monitoring reports required under this permit, unless written approval for deviation is obtained from the Department.

<u>Parameter</u>	<u>Parameter Code</u>
Ammonia (as nitrogen)	00610
Aniline	77089
Arsenic (As)	01002
Benzoic acid	77247
BOD ₅	00310
Chromium (Cr)	01030

<u>Parameter</u>	<u>Parameter Code</u>
p-Cresol	77146
Debris	
Fluoride (total)	00951
Naphthalene	34696
Oil & Grease	00556
pH	00400
Phenol	34694
Phosphorus (total)	00665
Pyridine	77045
Suspended solids (total) TSS	00530
α -Terpineol	51031
Zinc (Zn)	01090

6.2 Required Monitoring.

- a. This permit includes the following types of required analytical monitoring, one or more of which may apply to your discharge:
 - i. Quarterly benchmark monitoring (see Part 6.2.1);
 - ii. Annual effluent limitations guidelines monitoring (see Part 6.2.2);
 - iii. Impaired waters monitoring (see Part 6.2.4); and
 - iv. Other monitoring as required by Department (see Part 6.2.5).
- b. When more than one type of monitoring for the same parameter at the same outfall applies (e.g., total suspended solids once per year for an effluent limit and once per quarter for benchmark monitoring at a given outfall), you may use a single sample to satisfy both monitoring requirements (i.e., one sample satisfying both the annual effluent limit sample and one of the 4 quarterly benchmark monitoring samples).
- c. All required monitoring must be conducted in accordance with the procedures described in Appendix B, S.C. Reg.61-9.122.41(j)(4).
- d. All monitoring data shall be prepared by a laboratory registered or accredited by the Department. Per 40 CFR 136.3, the field parameter of pH must be acted upon in a timely manner to assure accurate results. Due to the small timeframe required for accurate pH samples, the proliferation of pH sampling required by this permit, and the remoteness of many of the sites covered by this permit, the Department is waiving the certification requirement. However it is expected that each site follow the monitoring procedures specified in the latest version of the Department's *Field Parameter Certification Guidance Document* as applicable.

6.2.1 Benchmark Monitoring.

This permit states pollutant benchmark concentrations that may be applicable to your discharge. More than one sector may apply to a discharge and all must be addressed in the sampling. The benchmark concentrations are not effluent limitations; a benchmark exceedance, therefore, is not a permit violation. Benchmark monitoring data are primarily for your use to determine the overall effectiveness of your control measures and to assist you in knowing when additional corrective action(s) may be necessary to comply with the effluent limitations in Part 2.

At your discretion, more than four samples may be taken during separate runoff events and used to determine the average benchmark parameter concentration for facility discharges.

6.2.1.1 *Applicability of Benchmark Monitoring.*

- a. You must monitor for any benchmark parameters specified for the industrial sector(s), both primary industrial activity and any co-located industrial activities, applicable to your discharge. Your industry-specific benchmark concentrations are listed in the sector-specific sections of Part 8. If your facility is in one of the industrial sectors subject to benchmark concentrations that are hardness-dependent, you are required to include in your SWPPP with your first benchmark result a hardness value, established consistent with the procedures in Appendix J, which is representative of your receiving water.
- b. Samples must be analyzed consistent with 40 CFR Part 136 analytical methods and using test procedures with quantitation limits at or below benchmark values for all benchmark parameters for which you are required to sample.

6.2.1.2 *Benchmark Monitoring Schedule.* Benchmark monitoring must be conducted quarterly, as stated in Part 6.1.7, for your first 4 full quarters of permit coverage.

- a. ***Data not exceeding benchmarks:*** After collection of 4 quarterly samples, if the average of the 4 monitoring values for any parameter does not exceed the benchmark, you have fulfilled your monitoring requirements for that parameter for the permit term. For averaging purposes, use a value of zero for any individual sample parameter analyzed using procedures consistent with Part 6.2.1.1 which is determined to be less than the method detection limit. For sample values that fall between the method detection level and the quantitation limit (i.e., a confirmed detection but below the level that can be reliably quantified), use a value halfway between zero and the quantitation limit.
- b. ***Data exceeding benchmarks:*** After collection of 4 quarterly samples, if the average of the 4 monitoring values for any parameter exceeds the benchmark, you must, in accordance with Part 3.2, review the selection, design, installation, and implementation of your control measures to determine if modifications are necessary to meet the benchmarks in this permit, and either:

- i. Make the necessary modifications and continue quarterly monitoring until you have completed 4 additional quarters of monitoring for which the average does not exceed the benchmark; or
 - ii. Make a determination that no further pollutant reductions are technologically available and economically practicable and achievable in light of best industry practice to meet the technology-based effluent limits or are necessary to meet the water-quality-based effluent limitations in Parts 2 of this permit, in which case you must continue monitoring once per year. You must document your rationale for concluding that no further pollutant reductions are achievable, and retain all records related to this documentation with your SWPPP.
 - iii. In accordance with Part 3.2, you must review your control measures and perform any required corrective action immediately (or document why no corrective action is required), without waiting for the full 4 quarters of monitoring data, if an exceedance of the 4 quarter average is mathematically certain. If after modifying your control measures and conducting 4 consecutive additional quarters of monitoring, your average still exceeds the benchmark (or if an exceedance of the benchmark by the 4 quarter average is mathematically certain prior to conducting the full 4 additional quarters of monitoring), you must again review your control measures and take one of the two actions above.
- c. ***Natural background pollutant levels:***
- i. Following the first 4 quarters of benchmark monitoring (or sooner if the exceedance is triggered by less than 4 quarters of data, see above), if the average concentration of a pollutant exceeds a benchmark value, and you determine that exceedance of the benchmark is attributable solely to the presence of that pollutant in the natural background, you are not required to perform corrective action or additional benchmark monitoring provided that:
 1. The average concentration of your benchmark monitoring results is less than or equal to the concentration of that pollutant in the natural background;
 2. You document and maintain with your SWPPP, as required in Part 5.4, your supporting rationale for concluding that benchmark exceedances are in fact attributable solely to natural background pollutant levels. You must include in your supporting rationale any data previously collected by you or others (including literature studies) that describe the levels of natural background pollutants in your storm water discharge; and
 3. You must document in your SWPPP that the benchmark exceedances are attributable solely to natural background pollutant

levels.

- ii. Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on your site, or pollutants in run-on from neighboring sources which are not naturally occurring.

d. *Averages:*

- i. Since pH is measured on a log scale, the average of the 4 monitoring values for pH should be determined by first converting each pH measurement to its corresponding hydrogen ion concentration, calculating the average of the four hydrogen ion concentrations, and then converting the average hydrogen ion concentration back to its corresponding pH value. This would be the average pH value.
- ii. For biological parameters (e.g. E. coli, Enterococcus), the 4 quarterly samples should be a geometric mean, not arithmetic.

6.2.1.3 *Exception for Inactive and Unstaffed Sites.*

- a. The requirement for benchmark monitoring does not apply at a facility that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. To invoke this exception, you must do the following:
 - i. Maintain a statement onsite with your SWPPP pursuant to Part 5.4 stating that the site is inactive and unstaffed and that there are no industrial materials or activities exposed to storm water in accordance with the substantive requirements in S.C. R.61-9.122.26(g) and sign and certify the statement in accordance with Appendix B, S.C. R.61-9.122.22; and
 - ii. If circumstances change and industrial materials or activities become exposed to storm water or your facility becomes active and/or staffed, this exception no longer applies and you must immediately begin complying with the applicable benchmark monitoring requirements under Part 6.2.1 as if you were in your first year of permit coverage.
- b. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to storm water, then you must notify the Department of this change before you cease monitoring under the permit. You may discontinue benchmark monitoring once you have prepared and signed the certification statement described above in 6.2.1.3.a.i. concerning your facility's qualification for this special exception. Note this exception has different requirements for Sector G (see Part 8).

6.2.2 Effluent Limitations Monitoring.

6.2.2.1 *Monitoring Based on Effluent Limitations Guidelines.*

Table 6-1 identifies the storm water discharges subject to effluent limitation guidelines that are authorized for coverage under this permit. For such discharges, beginning in the first full quarter after the effective date of the permit, for existing permittees, or your date of discharge authorization for new dischargers, you must monitor once per year at each outfall containing the discharges identified in Table 6-1 for the parameters specified in the sector-specific section(s) of Part 8.

Table 6-1. Required Monitoring for Effluent Limits Based on Effluent Limitations Guidelines			
Regulated Activity	Effluent Limit	Monitoring Frequency	Sample Type
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	See Part 8.A.7	1/year	Grab
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	See Part 8.C.4	1/year	Grab
Runoff from asphalt emulsion facilities	See Part 8.D.4	1/year	Grab
Runoff from material storage piles at cement manufacturing facilities	See Part 8.E.5	1/year	Grab
Runoff from hazardous waste landfills	See Part 8.K.6	1/year	Grab
Runoff from non-hazardous waste landfills	See Part 8.L.10	1/year	Grab
Runoff from coal storage piles at steam electric generating facilities	See Part 8.O.8	1/year	Grab
Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	See Part 8.S.7	1/year	Grab

6.2.2.2 *Substantially Identical Outfalls.* You must monitor each outfall discharging runoff from any regulated activity identified in Table 6-1. The substantially identical outfall monitoring provisions are **not available** for numeric effluent limits monitoring.

6.2.3 [Reserved.]

6.2.4 **Monitoring Discharges to Impaired Waters.**

No monitoring under this permit is required related to the impairment where the impairment without an EPA approved or established TMDL is instream dissolved oxygen (DO) below the stream standard.

The Freshwater recreational use pathogen indicator changed from fecal coliform bacteria to E. coli in February 2013. In Freshwaters impaired for recreational use and covered under an approved or established fecal coliform bacteria TMDL (see 6.2.4.2.b. below), E. coli is the relevant pollutant of concern. In cases where the water quality standard is not being met (attained) for E. coli, it is appropriate to monitor for E. coli in lieu of fecal coliform bacteria, targeting the current E. coli 349 MPN/100 ml single sample maximum water quality criterion. Furthermore, required TMDL WLA percentage reductions relevant to stormwater discharges will remain the same, based on the conditions observed at the time of initial fecal coliform bacteria TMDL development.

Reference S.C. R.61-68, Water Classifications & Standards, for general information on impaired waters.

6.2.4.1 Permitees Required to Monitor Discharges to Impaired Waters.

- a. If you discharge to an impaired water, you must monitor for all pollutants for which the water body is impaired and for which a standard analytical method exists (see 40 CFR Part 136). You must keep abreast of impaired waters' status by clicking on:
<http://www.scdhec.gov/HomeAndEnvironment/Water/ImpairedWaters/Overview/>
- b. If the pollutant for which the water body is impaired is suspended solids, turbidity, or sediment/sedimentation, you must monitor for Total Suspended Solids (TSS).
- c. If the pollutant for which the water body is impaired is expressed in the form of an indicator or surrogate pollutant, you must monitor for that indicator or surrogate pollutant.
- d. For streams for which the cause of impairment is stated as "bio" (biological, based on macroinvertebrate stream study), monitoring is required only after development and U.S. EPA approval of a TMDL which states the pollutants of concern. This permit may be reopened to include a procedure to determine monitoring requirements for a stream impaired for "bio" where a TMDL has not been developed.
- e. No monitoring is required when a water body's impairment is related to hydrologic modifications, impaired hydrology, or temperature.
- f. If the pollutant for which the water body is impaired is mercury or polychlorinated biphenyl (PCB), you are not required to monitor. These impairments are based on the presence of the pollutant in fish tissue, not the water column. This permit may be reopened to include a procedure to determine monitoring requirements for a stream impaired for mercury or PCB where a TMDL has not been developed.

6.2.4.2 *Impaired-Waters-Monitoring Schedule.*

a. ***Discharges to impaired waters without an EPA approved or established TMDL:***

No later than the beginning in the first full quarter after the effective date of the permit, for existing permittees, or your date of discharge authorization for new dischargers, you must monitor once per year at each outfall (except substantially identical outfalls) discharging storm water to impaired waters without an EPA approved or established TMDL. For existing coverage holders, this monitoring must start no later than the second quarter after the effective date of this permit. This monitoring requirement does not apply after one year if the pollutant for which the water body is impaired is not detected above natural background levels in your storm water discharge, and you document, as required in Part 5.4.j. of this permit, that this pollutant is not expected to be present above natural background levels in your discharge.

i. If the pollutant for which the water is impaired is not present and not expected to be present in your discharge, or it is detected but you have determined that its presence is caused solely by natural background sources, you should include a note to this effect in your SWPPP, after which you may discontinue the monitoring requirement of this section. To support a determination that the pollutant's presence is caused solely by natural background sources, you must keep the following documentation with your SWPPP records:

1. An explanation of why you believe that the presence of the pollutant causing the impairment in your discharge is not related to the activities at your facility and
2. Data and/or studies that tie the presence of the pollutant causing the impairment in your discharge to natural background sources in the watershed.

ii. Natural background pollutants include those substances that are naturally occurring in soils or groundwater. Natural background pollutants do not include legacy pollutants from earlier activity on your site, or pollutants in run-on from neighboring sources which are not naturally occurring.

b. ***Discharges to impaired waters with an EPA approved or established TMDL:***

For storm water discharges associated with industrial activities authorized under this permit to receiving waters for which there is an EPA approved or established TMDL, monitoring must be conducted to demonstrate both consistency with the assumptions and requirements of any applicable TMDL and progress and ultimate achievement toward the pollutant reduction stated in said TMDL pertinent to the authorized discharges as required below.

i. Storm water sampling and analytical monitoring must be carried out for the pollutants of concern in the TMDL not less than four times per 12-month period. This monitoring requirement does not apply after one 12-month period

if the pollutant pertinent to the TMDL is not detected above natural background levels in your storm water discharge, or you document, as required in Part 5.4.j. of this permit, that this pollutant is not expected to be present above natural background levels in your discharge. The requirements in Parts 6.2.4.2.a.i. and ii. concerning non-detection and natural background apply to impaired waters with an EPA approved or established TMDL.

- ii. For EPA approved or established TMDL by the effective date of this permit, storm water sampling and monitoring is required to start no later than the first full quarter after the date your required NOI is submitted. For existing coverage holders, this monitoring must start no later than the first full quarter after the effective date of this permit.
 - iii. **[Reserved.]**
 - iv. **[Reserved.]**
 - v. Unless the TMDL specifies more frequent monitoring, should the presence of the pollutant of concern be detected in any of your storm water discharges analyzed in the first 12-month period and the appropriate water quality standard is not met (see 6.2.4.2.b.vi. below), monitoring must continue as required in part 6.2.4.2.b.i. above.
 - vi. Progress toward the pollutant reduction goal of the TMDL must be demonstrated. Upon demonstrating compliance with the water quality standard for the pollutant of concern during four consecutive storm water sampling and analyzing events, you may discontinue monitoring of the authorized discharge provided that the drainage conditions leading to that outfall remain the same as it was during the compliance period. In this scenario, monitoring results must demonstrate consistency with the assumptions and requirements of the TMDL prior to monitoring of the authorized discharge being discontinued. See 2.2.2.1.
- c. ***Discharges into an EPA approved or established TMDL watershed meeting water quality standards:*** For storm water discharges associated with industrial activities authorized under this permit to receiving waters for which there is an EPA approved or established TMDL and the water quality standard is being met (attained) for the pollutant of concern at the immediate downstream water quality monitoring station (and immediate upstream station if discharging into tidally-influenced waters), monitoring is not required to be conducted to demonstrate both consistency with the assumptions and requirements of any applicable TMDL and progress, and ultimate achievement, toward the pollutant reduction stated in said TMDL.

6.2.4.3. *Exception for Inactive and Unstaffed Sites.*

- a. The requirement for impaired waters monitoring does not apply at a facility

that is inactive and unstaffed, as long as there are no industrial materials or activities exposed to storm water. To invoke this exception, you must do the following:

- i. Maintain a statement onsite with your SWPPP pursuant to Part 5.4 stating that the site is inactive and unstaffed and that there are no industrial materials or activities exposed to storm water in accordance with the substantive requirements in S.C. R.61-9.122.26(g) and sign and certify the statement in accordance with Appendix B, S.C. R.61-9.122.22; and
 - ii. If circumstances change and industrial materials or activities become exposed to storm water or your facility becomes active and/or staffed, this exception no longer applies and you must immediately begin complying with the applicable impaired waters monitoring requirements under Part 6.2.4 as if you were in your first year of permit coverage.
- b. If you are not qualified for this exception at the time you are authorized under this permit, but during the permit term you become qualified because your facility is inactive and unstaffed, and there are no industrial materials or activities that are exposed to storm water, then you must notify the Department of this change before you cease monitoring under the permit. You may discontinue impaired waters monitoring once you have prepared and signed the certification statement described above in 6.2.4.3.a.i. concerning your facility's qualification for this special exception. Note this exception has different requirements for Sector G (see Part 8).

6.2.5 Additional Monitoring Required by the Department.

The Department may notify you of additional discharge monitoring requirements. Any such notice will briefly state the reasons for the monitoring, locations, and parameters to be monitored, frequency and period of monitoring, sample types, and reporting requirements. Such additional monitoring is a final agency decision subject to the contested case provisions under S.C. R.61-72.

6.3 Follow-up Actions if Discharge Exceeds Numeric Effluent Limit.

You must conduct follow-up monitoring within 30 calendar days (or during the next qualifying runoff event, should none occur within 30 days) of implementing corrective action(s) taken pursuant to Part 3 in response to an exceedance of a numeric effluent limit contained in this permit. Monitoring must be performed for any pollutant(s) that exceeds the effluent limit. If this follow-up monitoring exceeds the applicable effluent limitation, you must comply with both Parts 6.3.1 and 6.3.2.

6.3.1 Submit an Exceedance Report.

You must submit an Exceedance Report consistent with Part 7.3.

6.3.2 Continue to Monitor.

You must continue to monitor, at least quarterly, until your discharge is in compliance with the effluent limit or until the Department waives the requirement in writing for additional monitoring.

7. Reporting and Recordkeeping

7.1 Reporting Monitoring Data to the Department.

- i. All monitoring data collected pursuant to Parts 6.2.2, 6.2.5, and 6.3 must be submitted in a format approved by the Department. The Department is transitioning from paper submittals in order to comply with the Cross Media Electronic Reporting Rule (CROMERR). Please refer to the Stormwater website (www.scdhec.gov/stormwater) for instructions and guidance as we develop them.
- ii. Discharge monitoring reports must be submitted annually per the following schedule:
 1. January 31, 2018, and for succeeding years for the following sectors: A (Timber products), E (Glass, clay, cement, concrete, and gypsum products), and S (Air Transportation).
 2. April 30, 2018, and for succeeding years for coal-pile runoff and for the following sector: O (Steam-electric generating facilities).
 3. July 31, 2018, and for succeeding years for the following sectors: C (Chemicals and allied products) and K (Hazardous waste treatment, storage, and disposal facilities).
 4. October 31, 2018, and for succeeding years for the following sectors: D (Asphalt roofing and paving materials and lubricants) and L (Landfills, land application sites, and open dumps).

For benchmark monitoring, note that you are required to submit sampling results to the Department only when specifically required in writing by the Department.

7.2 [Reserved.]

7.3 Exceedance Report for Numeric Effluent Limits

If follow-up monitoring pursuant to Part 6.3 exceeds a numeric effluent limit, you must submit an Exceedance Report to the Department no later than 30 days after you have received your lab results. Your report must include the following:

- a. NPDES permit tracking number;
- b. Facility name, physical address and location;
- c. Name of receiving water;
- d. Monitoring data from this and the preceding monitoring event(s);

- e. An explanation of the situation; what you have done and intend to do (should your corrective actions not yet be complete) to correct the violation; and
- f. An appropriate contact name and phone number.

7.4 Additional Reporting.

- a. In addition to the reporting requirements stipulated in Part 7, you are also subject to the standard permit reporting provisions of Appendix B, S.C. R.61-9.122.41(l).
- b. Where applicable, you must submit the following reports to the appropriate Department Regional Office listed in Part 7.6.2, as applicable. If you discharge through an MS4, you must also submit these reports to the MS4 operator (identified pursuant to Part 5.1.2).
 - i. 24-hour reporting (see Appendix B, S.C. Reg.61-9.122.41(l)(6)) - You must report any noncompliance which may endanger health or the environment. Any information must be provided orally within 24 hours from the time you become aware of the circumstances;
 - ii. 5-day follow-up reporting to the 24 hour reporting (see Appendix B, S.C. R.61-9.122.41(l)(6)) - A written submission must also be provided within five days of the time you become aware of the circumstances;
 - iii. Reportable quantity spills (see Part 2.1.2.4) - You must provide notification, as required under Part 2.1.2.4, as soon as you have knowledge of a leak, spill, or other release containing a hazardous substance or oil in an amount equal to or in excess of a reportable quantity.
- c. Where applicable, you must submit the following reports to the Department at the appropriate address in Part 7.6:
 - i. Planned changes (see Appendix B, S.C. R.61-9.122.41(l)(1)) – You must give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility that qualify the facility as a new source or that could significantly change the nature or significantly increase the quantity of pollutants discharged;
 - ii. Anticipated noncompliance (see Appendix B, S.C. Reg.61-9.122.41(l)(2)) – You must give advance notice to the Department of any planned changes in the permitted facility or activity which you anticipate will result in noncompliance with permit requirements;
 - iii. Transfer of ownership and/or operation – You must submit a complete and accurate NOI as provided by the Department and by the deadlines specified in Table 1-2;
 - iv. Compliance schedules (see Appendix B, S.C. Reg.61-9.122.41(l)(6)) - Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit must be included in your SWPPP;
 - v. Other noncompliance (see Appendix B, S.C. Reg.61-9.122.41(l)(7)) - You must report all instances of noncompliance not reported in your monitoring

- report (pursuant to Part 7.1), compliance schedule report, or 24-hour report at the time monitoring reports are submitted; and
- vi. Other information (see Appendix B, S.C. Reg.61-9.122.41(1)(8)) – You must promptly submit facts or information if you become aware that you failed to submit relevant facts in your NOI or that you submitted incorrect information in your NOI or in any report.
 - vii. You must submit, within 30 days after the request, results of required monitoring when specifically requested by the Department.

7.5 Recordkeeping.

You must retain copies of your SWPPP (including any modifications made during the term of this permit), additional documentation requirements pursuant to Part 5.4 (including documentation related to corrective actions taken pursuant to Part 3), all reports and certifications required by this permit, monitoring data, and records of all data used to complete the NOI to be covered by this permit, for a period of at least 3 years after the date that your coverage under this permit expires or is terminated.

7.6 Addresses for Reports

a. Addresses for Reports

- i. For Exceedance Reports, send paper copies of these reports to:

S.C. DHEC
 Bureau of Water/Water Pollution Compliance & Enforcement
 2600 Bull St.
 Columbia, S.C. 29201

- ii. Notices of Intent and Notices of Termination and all other written correspondence concerning industrial storm water discharges should be sent to:

S.C. DHEC
 Bureau of Water/Storm Water Permitting
 2600 Bull St.
 Columbia, S.C. 29201

b. Department Regional Offices:

- i. During normal working hours call:

County	EQC Office	Phone Number
Anderson, Oconee	Upstate EQC Anderson	864-260-5585
Abbeville, Greenwood, Laurens, McCormick	Upstate EQC Greenwood	864-227-5915
Greenville, Pickens	Upstate EQC Greenville	864-372-3273

County	EQC Office	Phone Number
Cherokee, Spartanburg, Union	Upstate EQC Spartanburg	864-596-3800
Fairfield, Lexington, Newberry, Richland	Midlands EQC Columbia	803-896-0620
Chester, Lancaster, York	Midlands EQC Lancaster	803-285-7461
Chesterfield, Darlington, Dillon, Florence, Marion, Marlboro	Pee Dee EQC Florence	843-661-4825
Clarendon, Kershaw, Lee, Sumter	Pee Dee EQC Sumter	803-778-6548
Aiken, Barnwell, Edgefield, Saluda	Midlands EQC Aiken	803-642-1637
Georgetown, Horry, Williamsburg	Pee Dee EQC Myrtle Beach	843-238-4378
Allendale, Bamberg, Calhoun, Orangeburg	Lowcountry EQC Orangeburg	803-533-5490
Berkeley, Charleston, Dorchester	Lowcountry EQC Charleston	843-953-0150
Beaufort, Colleton, Hampton, Jasper	Lowcountry EQC Beaufort	843-846-1030

ii. After-hours, report to the 24-Hour Emergency Response telephone number, 803/253-6488 or 1-888/481-0125 outside of the Columbia area.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart A – Sector A – Timber Products.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.A.1 Covered Storm Water Discharges.

The requirements in Subpart A apply to storm water discharges associated with industrial activity from Timber Products facilities as identified by the SIC Codes specified under Sector A in Table D-1 of Appendix D of the permit.

8.A.2 Limitation on Coverage

8.A.2.1 Prohibition of Discharges. (See also Part 1.1.4) Not covered by this permit: storm water discharges from areas where there may be contact with the chemical formulations sprayed to provide surface protection. These discharges must be covered by a separate NPDES permit.

8.A.2.2 Authorized Non-Storm Water Discharges. (See also Part 1.1.3) Also authorized by this permit, provided the non-storm water component of the discharge is in compliance with the requirements in Part 2.1.2 (Non-Numeric Effluent Limits): discharges from the spray down of lumber and wood product storage yards where no chemical additives are used in the spray-down waters and no chemicals are applied to the wood during storage.

8.A.3 Additional Technology-Based Effluent Limits.

Good Housekeeping. (See also Part 2.1.2.2) In areas where storage, loading and unloading, and material handling occur, perform good housekeeping to minimize the discharge of wood debris, leachate generated from decaying wood materials, and the generation of dust.

8.A.4 Additional SWPPP Requirements.

8.A.4.1 Drainage Area Site Map. (See also Part 5.1.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: processing areas, treatment chemical storage areas, treated wood and residue storage areas, wet decking areas, dry decking areas, untreated wood and residue storage areas, and treatment equipment storage areas.

8.A.4.2 Inventory of Exposed Materials. (See also Part 5.1.3.2) Where such information exists, if your facility has used chlorophenolic, creosote, or chromium-copper-arsenic formulations for wood surface protection or preserving, document in your SWPPP the following: areas where contaminated soils, treatment equipment, and stored materials still remain and the management practices employed to minimize the contact of these materials with storm water runoff.

8.A.4.3 Description of Storm Water Management Controls. (See also Part 5.1.4) Document measures implemented to address the following activities and sources: log, lumber, and wood product storage areas; residue storage areas; loading and unloading areas; material handling areas; chemical storage areas; and equipment and vehicle maintenance, storage, and repair areas. If your facility performs wood surface protection and preservation activities, address the specific control measures, including any BMPs, for these activities.

8.A.5 Additional Inspection Requirements.

See also Part 4.1. If your facility performs wood surface protection and preservation activities, inspect processing areas, transport areas, and treated wood storage areas monthly to assess the usefulness of practices to minimize the deposit of treatment chemicals on unprotected soils and in areas that will come in contact with storm water discharges.

8.A.6 Sector-Specific Benchmarks

Table 8.A-1 identifies benchmarks that apply to the specific subsectors of Sector A. These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector A1. General Sawmills and Planing Mills (SIC 2421)	Chemical Oxygen Demand (COD)	120 mg/L
	Total Suspended Solids (TSS)	100 mg/L
	Total Zinc (freshwater) ² Total Zinc (saltwater) ¹	Hardness Dependent 0.09 mg/L
Subsector A2. Wood Preserving (SIC 2491)	Total Arsenic (freshwater) ²	0.15 mg/L
	Total Arsenic (saltwater) ¹	0.069 mg/L
	Total Copper (freshwater) ² Total Copper (saltwater) ¹	Hardness Dependent 0.0048 mg/L
Subsector A3. Log Storage and Handling (SIC 2411)	Total Suspended Solids (TSS)	100 mg/L
Subsector A4. Hardwood Dimension and Flooring Mills; Special Products Sawmills, not elsewhere classified; Millwork, Veneer, Plywood, and Structural Wood; Wood Pallets and Skids; Wood Containers, not elsewhere classified; Wood Buildings and Mobile Homes; Reconstituted Wood Products; and Wood Products Facilities not elsewhere classified (SIC 2426, 2429, 2431-2439 (except 2434), 2441, 2448, 2449, 2451, 2452, 2493, and 2499)	Chemical Oxygen Demand (COD)	120 mg/L
	Total Suspended Solids (TSS)	100 mg/L

¹Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility.

Hardness Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Copper (mg/L)	Zinc (mg/L)
0-24.99 mg/L	0.0038	0.04
25-49.99 mg/L	0.0056	0.05
50-74.99 mg/L	0.0090	0.08
75-99.99 mg/L	0.0123	0.11
100-124.99 mg/L	0.0156	0.13
125-149.99 mg/L	0.0189	0.16
150-174.99 mg/L	0.0221	0.18
175-199.99 mg/L	0.0253	0.20
200-224.99 mg/L	0.0285	0.23
225-249.99 mg/L	0.0316	0.25
250+ mg/L	0.0332	0.26

8.A.7 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1 of this permit.)

Table 8.A-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Industrial Activity	Parameter	Effluent Limitation
Discharges resulting from spray down or intentional wetting of logs at wet deck storage areas	pH	6.0 - 9.0 s.u
	Debris (woody material such as bark, twigs, branches, heartwood, or sapwood)	No discharge of debris that will not pass through a 2.54-cm (1-in.) diameter round opening

¹ Monitor annually.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart B – Sector B – Paper and Allied Products.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.B.1 Covered Storm Water Discharges.

The requirements in Subpart B apply to storm water discharges associated with industrial activity from Paper and Allied Products Manufacturing facilities, as identified by the SIC Codes specified under Sector B in Table D-1 of Appendix D of the permit.

8.B.2 Sector-Specific Benchmarks. (See also Part 6 of the permit.)

Table 8.B-1 identifies benchmarks that apply to the specific subsectors of Sector B. These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector B1. Paperboard Mills (SIC Code 2631)	Chemical Oxygen Demand (COD)	120 mg/L

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart C – Sector C – Chemical and Allied Products Manufacturing, and Refining.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.C.1 Covered Storm Water Discharges.

The requirements in Subpart C apply to storm water discharges associated with industrial activity from Chemical and Allied Products Manufacturing, and Refining facilities, as identified by the SIC Codes specified under Sector C in Table D-1 of Appendix D of the permit.

8.C.2 Limitations on Coverage.

8.C.2.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.1.4) The following are not covered by this permit: non-storm water discharges containing inks, paints, or substances (hazardous, nonhazardous, etc.) resulting from an onsite spill, including materials collected in drip pans; washwater from material handling and processing areas; and washwater from drum, tank, or container rinsing and cleaning.

8.C.3 Sector-Specific Benchmarks

Table 8.C-1 identifies benchmarks that apply to the specific subsectors of Sector C. These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector C1. Agricultural Chemicals (SIC 2873-2879)	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Total Lead (freshwater) ²	Hardness Dependent
	Total Lead (saltwater) ¹	0.21 mg/L
	Total Zinc (freshwater) ²	Hardness Dependent
	Total Zinc (saltwater) ¹	0.09 mg/L
	Phosphorus	2.0 mg/L
Subsector C2. Industrial Inorganic Chemicals (SIC 2812-2819)	Nitrate plus Nitrite Nitrogen	0.68 mg/L
Subsector C3. Soaps, Detergents, Cosmetics, and Perfumes (SIC 2841-2844)	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Total Zinc (freshwater) ²	Hardness Dependent
	Total Zinc (saltwater) ¹	0.09 mg/L
Subsector C4. Plastics, Synthetics, and Resins (SIC 2821-2824)	Total Zinc (freshwater) ²	Hardness Dependent
	Total Zinc (saltwater) ¹	0.09 mg/L
Subsector C5. (SIC 2833-2836, 2851, 2861-2869, 2891-2899, 3952, 2911)	none	none

¹Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, “Calculating Hardness in Receiving Waters for Hardness Dependent Metals,” for methodology), in accordance with Part 6.2.1.1, to identify the applicable ‘hardness range’ for determining their benchmark value applicable to their facility. Hardness Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Lead (mg/L)	Zinc (mg/L)
0-24.99 mg/L	0.014	0.04
25-49.99 mg/L	0.023	0.05
50-74.99 mg/L	0.045	0.08
75-99.99 mg/L	0.069	0.11
100-124.99 mg/L	0.095	0.13
125-149.99 mg/L	0.122	0.16
150-174.99 mg/L	0.151	0.18
175-199.99 mg/L	0.182	0.20
200-224.99 mg/L	0.213	0.23
225-249.99 mg/L	0.246	0.25
250+ mg/L	0.262	0.26

8.C.4 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1 of this permit.)

Table 8.C-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Industrial Activity	Parameter	Effluent Limitation
Runoff from phosphate fertilizer manufacturing facilities that comes into contact with any raw materials, finished product, by-products or waste products (SIC 2874)	Total Phosphorus (as P)	105.0 mg/L, daily maximum
		35 mg/L, 30-day avg.
	Fluoride	75.0 mg/L, daily maximum
		25.0 mg/L, 30-day avg.

¹ Monitor annually.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart D – Sector D – Asphalt Paving and Roofing Materials and Lubricant Manufacturing.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.D.1 Covered Storm Water Discharges.

The requirements in Subpart D apply to storm water discharges associated with industrial activity from Asphalt Paving and Roofing Materials and Lubricant Manufacturing facilities, as identified by the SIC Codes specified under Sector D in Table D-1 of Appendix D of the permit.

8.D.2 Limitations on Coverage.

The following storm water discharges associated with industrial activity are not authorized by this permit (See also Part 1.1.4):

8.D.2.1 Discharges from petroleum refining facilities, including those that manufacture asphalt or asphalt products, that are subject to nationally established effluent limitation guidelines found in 40 CFR Part 419 (Petroleum Refining).

The following stormwater discharges associated with industrial activity are not authorized under this Sector:

8.D.2.2 Discharges from oil recycling facilities (see Subpart N); or

8.D.2.3 Discharges associated with fats and oils rendering (see Subpart U).

8.D.3 Sector-Specific Benchmarks

Table 8.D-1 identifies benchmarks that apply to the specific subsectors of Sector D. These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Table 8.D-1.		
Subsector	Parameter	Benchmark Monitoring Concentration
Subsector D1. Asphalt Paving and Roofing Materials (SIC 2951, 2952)	Total Suspended Solids (TSS)	100 mg/L

8.D.4 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1 of this permit.)

Table 8.D-2 identifies effluent limitations that apply to the industrial activities described below. Compliance with these effluent limitations is to be determined based on discharges from

these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 8.D-2¹		
Industrial Activity	Parameter	Effluent Limitation
Discharges from asphalt emulsion facilities.	Total Suspended Solids (TSS)	23.0 mg/L, daily maximum
		15.0 mg/L, 30-day avg.
	pH	6.0 - 9.0 s.u.
	Oil and Grease	15.0 mg/L, daily maximum
		10 mg/L, 30-day avg.

¹Monitor annually.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart E – Sector E – Glass, Clay, Cement, Concrete, and Gypsum Products.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.E.1 Covered Storm Water Discharges.

The requirements in Subpart E apply to storm water discharges associated with industrial activity from Glass, Clay, Cement, Concrete, and Gypsum Products facilities, as identified by the SIC Codes specified under Sector E in Table D-1 of Appendix D of the permit.

8.E.2 Additional Technology-Based Effluent Limits.

Good Housekeeping Measures. (See also Part 2.1.2.2) As part of a good housekeeping program, prevent or minimize the discharge of spilled cement, aggregate (including sand or gravel), kiln dust, fly ash, settled dust, or other significant material in storm water from paved portions of the site that are exposed to storm water. Consider sweeping regularly or using other equivalent measures to minimize the presence of these materials. Indicate in your SWPPP the frequency of sweeping or equivalent measures. Determine the frequency based on the amount of industrial activity occurring in the area and the frequency of precipitation, but it must be performed at least once a week if cement, aggregate, kiln dust, fly ash, or settled dust are being handled or processed. You must also prevent the exposure of fine granular solids (e.g. cement, fly ash, kiln dust, etc.) to storm water, where practicable, by storing these materials in enclosed silos, hoppers, buildings, or under other covering.

8.E.3 Additional SWPPP Requirements.

8.E.3.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the SWPPP the locations of the following, as applicable: bag house or other dust control device; recycle/sedimentation pond, clarifier, or other device used for the treatment of process wastewater; and the areas that drain to the treatment device.

8.E.3.2 *Certification.* (See also Part 5.1.3.4) For facilities producing ready-mix concrete, concrete block, brick, or similar products, include in the non-storm water discharge certification a description of measures that ensure that process waste waters resulting from washing trucks, mixers, transport buckets, forms, or other equipment are discharged in accordance with NPDES waste water permit requirements or are recycled.

8.E.4 Sector-Specific Benchmarks.

Table 8.E-1 identifies benchmarks that apply to the specific subsectors of Sector E. These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Table 8.E-1.		
Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration
Subsector E1. Clay Product Manufacturers (SIC 3251-3259, 3261-3269)	Total Suspended Solids (TSS)	100 mg/L
Subsector E2. Concrete and Gypsum Product Manufacturers (SIC 3271-3275)	Total Suspended Solids (TSS)	100 mg/L
	pH	6.0 - 9.0 s.u.
Subsector E3. Flat Glass; Glass and Glassware, Pressed or Blown; Glass Products Made of Purchased Glass; Hydraulic Cement; Cut Stone and Stone Products; and Abrasive, Asbestos, and Miscellaneous Nonmetallic Mineral Products (SIC 3211, 3221, 3229, 3231, 3241, 3281, 3291-3299)	Total Suspended Solids (TSS)	100 mg/L

8.E.5 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1 of this permit.)

Table 8.E-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 8.E-2¹		
Industrial Activity	Parameter	Effluent Limitation
Discharges from material storage piles at cement manufacturing facilities	Total Suspended Solids (TSS)	50 mg/L, daily maximum ²
	pH	6.0 - 9.0 s.u. ²

¹Monitor annually.

²Any untreated overflow from facilities designed, constructed and operated to treat the volume of runoff from materials storage piles which is associated with a 10-year, 24-hour rainfall event shall not be subject to the pH and TSS limitations (40 CFR 411.32(b)).

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart F – Sector F – Primary Metals.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.F.1 Covered Storm Water Discharges.

The requirements in Subpart F apply to storm water discharges associated with industrial activity from Primary Metals facilities, as identified by the SIC Codes specified under Sector F in Table D-1 of Appendix D of the permit.

8.F.2 Additional Technology-Based Effluent Limits

Good Housekeeping Measures. (See also Part 2.1.2.2) As part of your good housekeeping program, include a cleaning and maintenance program for all impervious areas of the facility where particulate matter, dust, or debris may accumulate, especially areas where material loading and unloading, storage, handling, and processing occur; and, where practicable, the paving of areas where vehicle traffic or material storage occur but where vegetative or other stabilization methods are not practicable (institute a sweeping program in these areas too). For unstabilized areas where sweeping is not practicable, consider using storm water management devices such as sediment traps, vegetative buffer strips, filter fabric fence, sediment filtering boom, gravel outlet protection, or other equivalent measures that effectively trap or remove sediment.

8.F.3 Additional SWPPP Requirements.

8.F.3.1 *Drainage Area Site Map.* (See also Part 5.1.2) Identify in the SWPPP where any of the following activities may be exposed to precipitation or surface runoff: storage or disposal of wastes such as spent solvents and baths, sand, slag and dross; liquid storage tanks and drums; processing areas including pollution control equipment (e.g., baghouses); and storage areas of raw material such as coal, coke, scrap, sand, fluxes, refractories, or metal in any form. In addition, indicate where an accumulation of significant amounts of particulate matter could occur from such sources as furnace or oven emissions, losses from coal and coke handling operations, etc., and could result in a discharge of pollutants to waters of the United States.

8.F.3.2 *Inventory of Exposed Material.* (See also Part 5.1.3.2) Include in the inventory of materials handled at the site that potentially may be exposed to precipitation or runoff, areas where deposition of particulate matter from process air emissions or losses during material-handling activities are possible.

8.F.4 **Additional Inspection Requirements.** As part of conducting your quarterly routine facility inspections (Part 4.1) and/or in conjunction with any quarterly inspections required by air quality permits, address all potential sources of stormwater pollutants, including (if applicable) air pollution control equipment (e.g. baghouses, electrostatic precipitators, scrubbers, and cyclones), for any signs of degradation (e.g. leaks, corrosion, or improper operation) that could contribute to stormwater pollution. Also inspect all process and material handling equipment

(e.g. conveyors, cranes, and vehicles) for leaks, drips, or the potential loss of material; and material storage areas (e.g. piles, bins, or hoppers for storing coke, coal, scrap, or slag, as well as chemicals stored in tanks and drums) for signs of material losses due to wind or stormwater runoff.

8.F.5 Sector-Specific Benchmarks. (See also Part 6 of the permit.) These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration
Subsector F1. Steel Works, Blast Furnaces, and Rolling and Finishing Mills (SIC 3312-3317)	Total Zinc (freshwater) ²	Hardness Dependent 0.09 mg/L
	Total Zinc (saltwater) ¹	
Subsector F2. Iron and Steel Foundries (SIC 3321-3325)	Total Copper (freshwater) ²	Hardness Dependent 0.0048 mg/L
	Total Copper (saltwater) ¹	
	Total Suspended Solids (TSS)	100 mg/L
	Total Zinc (freshwater) ²	Hardness Dependent 0.09 mg/L
	Total Zinc (saltwater) ¹	
Subsector F3. Rolling, Drawing, and Extruding of Nonferrous Metals (SIC 3351-3357)	Total Copper (freshwater) ²	Hardness Dependent 0.0048 mg/L
	Total Copper (saltwater) ¹	
	Total Zinc (freshwater) ²	Hardness Dependent 0.09 mg/L
	Total Zinc (saltwater) ¹	
Subsector F4. Nonferrous Foundries (SIC 3363-3369)	Total Copper (freshwater) ²	Hardness Dependent 0.0048 mg/L
	Total Copper (saltwater) ¹	
	Total Zinc (freshwater) ²	Hardness Dependent 0.09 mg/L
	Total Zinc (saltwater) ¹	

¹Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. Hardness Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Water Hardness Range	Copper (mg/L)	Zinc (mg/L)
0-24.99 mg/L	0-25 mg/L	0.0038	0.04
25-49.99 mg/L	25-50 mg/L	0.0056	0.05
50-74.99 mg/L	50-75 mg/L	0.0090	0.08
75-99.99 mg/L	75-100 mg/L	0.0123	0.11
100-124.99 mg/L	100-125 mg/L	0.0156	0.13
125-149.99 mg/L	125-150 mg/L	0.0189	0.16
150-174.99 mg/L	150-175 mg/L	0.0221	0.18
175-199.99 mg/L	175-200 mg/L	0.0253	0.20
200-224.99 mg/L	200-225 mg/L	0.0285	0.23
225-249.99 mg/L	225-250 mg/L	0.0316	0.25
250+ mg/L	250+ mg/L	0.0332	0.26

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart G – Sector G – Metal Mining.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

Note: Where compliance with a requirement in a separate exploration permit, mining permit, reclamation plan, Surface Mining Control and Reclamation Act (SMCRA) requirements, etc. will result in you fully meeting any requirement in this Subpart, you are considered to have complied with the relevant requirement in this Subpart. You must include documentation in your SWPPP describing your rationale for concluding that any particular action on your part is sufficient to comply with the corresponding requirement in this Subpart.

8.G.1 Covered Storm Water Discharges.

The requirements in Subpart G apply to storm water discharges associated with industrial activity from Metal Mining facilities, including mines abandoned on Federal lands, as identified by the SIC Codes specified under Sector G in Table D-1 of Appendix D. Coverage is required for metal mining facilities that discharge storm water contaminated by contact with, or that has come into contact with, any overburden, raw material, intermediate product, finished product, byproduct, or waste product located on the site of the operation.

8.G.1.1 Covered Discharges from Inactive Facilities. All storm water discharges.

8.G.1.2 Covered Discharges from Active and Temporarily Inactive Facilities. Only the storm water discharges from the following areas are covered; waste rock and overburden piles if composed entirely of storm water and not combined with mine drainage; topsoil piles; offsite haul and access roads; onsite haul and access roads constructed of waste rock, overburden, or spent ore if composed entirely of storm water and not combining with mine drainage; onsite haul and access roads not constructed of waste rock, overburden, or spent ore except if mine drainage is used for dust control; runoff from tailings dams or dikes when not constructed of waste rock or tailings and no process fluids are present; runoff from tailings dams or dikes when constructed of waste rock or tailings and no process fluids are present, if composed entirely of storm water and not combining with mine drainage; concentration building if no contact with material piles; mill site if no contact with material piles; office or administrative building and housing if mixed with storm water from industrial area; chemical storage area; docking facility if no excessive contact with waste product that would otherwise constitute mine drainage; explosive storage; fuel storage; vehicle and equipment maintenance area and building; parking areas (if necessary); power plant; truck wash areas if no excessive contact with waste product that would otherwise constitute mine drainage; unreclaimed, disturbed areas outside of active mining area; reclaimed areas released from reclamation requirements prior to December 17, 1990; and partially or inadequately reclaimed areas or areas not released from reclamation requirements.

8.G.1.3 Covered Discharges from Exploration and Construction of Metal Mining and/or Ore Dressing Facilities. All storm water discharges.

8.G.1.4 Covered Discharges from Facilities Undergoing Reclamation. All storm water discharges.

8.G.2 Limitations on Coverage.

8.G.2.1 *Prohibition of Storm Water Discharges.* Storm water discharges not authorized by this permit: discharges from active metal mining facilities that are subject to effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440).

NOTE: Storm water runoff from these sources are subject to 40 CFR Part 440 if they are mixed with other discharges subject to Part 440. In this case, they are not eligible for coverage under this permit. Discharges from overburden/waste rock and overburden/waste rock-related areas are not subject to 40 CFR Part 440 unless they: (1) drain naturally (or are intentionally diverted) to a point source; and (2) combine with "mine drainage" that is otherwise regulated under the Part 440 regulations. For such sources, coverage under this permit would be available if the discharge composed entirely of storm water does not combine with other sources of mine drainage that are not subject to 40 CFR Part 440, and meets the other eligibility criteria contained in Part 1.3 of the permit. Permit applicants bear the initial responsibility for determining if they are eligible for coverage under this permit, or must seek coverage under another NPDES permit. The Department recommends that permit applicants contact us for assistance to determine the nature and scope of the "active mining area" on a mine-by-mine basis, as well as to determine the appropriate permitting mechanism for authorizing such discharges.

8.G.2.2 *Prohibition of Non-Storm Water Discharges.* Not authorized by this permit: adit drainage, and contaminated springs or seeps discharging from waste rock dumps that do not directly result from precipitation events (see also the standard Limitations on Coverage in Part 1.1.4).

8.G.3 Definitions.

The following definitions are not intended to supersede the definitions of active and inactive mining facilities established by 40 CFR 122.26(b)(14)(iii).

8.G.3.1 *Mining operation* - For this permit, mining operations are grouped into two distinct categories, with distinct effluent limits and requirements applicable to each: a) earth-disturbing activities conducted prior to active mining activities; and b) active mining activities, which includes reclamation. "Mining operations" can occur at both inactive mining facilities and temporarily inactive mining facilities.

8.G.3.2 *Earth-disturbing activities conducted prior to active mining activities* – Consists of two classes of earth-disturbing (i.e., clearing, grading and excavation) activities: a) activities performed for purposes of mine site preparation, including: cutting new rights of way (except when related to access road construction); providing access to a mine site for vehicles and equipment (except when related to access road construction); other earth disturbances associated with site preparation activities on any areas where active mining activities have not yet

commenced (e.g., for heap leach pads, waste rock facilities, tailings impoundments, wastewater treatment plants); and b) construction of staging areas to prepare for erecting structures such as to house project personnel and equipment, mill buildings, etc., and construction of access roads. Earth-disturbing activities associated with the construction of staging areas and the construction of access roads conducted prior to active mining are considered to be “construction” and have additional effluent limits in Part 8.G.4.2.

8.G.3.3 *Active mining activities* - Activities related to the extraction, removal or recovery, and beneficiation of metal ore from the earth; removal of overburden and waste rock to expose mineable minerals; and site reclamation and closure activities. All such activities occur within the “active mining area.” Reclamation involves activities undertaken, in compliance with applicable mined land reclamation requirements, to return the land to an appropriate post-mining contour and land use in order to meet applicable federal and state reclamation requirements. In addition, once earth-disturbing activities conducted prior to active mining activities have ceased and all related requirements in Part 8.G.4 have been met, and a well-delineated “active mining area” has been established, all activities (including any clearing, grading, and excavation) that occur within the active mining area are “active mining activities.”

8.G.3.4 *Active mining area* - A place where work or other activity related to the extraction, removal or recovery of metal ore is being conducted, except, with respect to surface mines, any area of land on or in which grading has been completed to return the earth to desired contour and reclamation work has begun.

Note: Earth-disturbing activities described in the definition in Part 8.G.3.2 that occur on areas outside the active mining area (e.g., for expansion of the mine into undeveloped territory) are considered “earth-disturbing conducted prior to active mining activities”, and must comply with the requirements in Part 8.G.4.

8.G.3.5 *Inactive metal mining facility* - A site or portion of a site where metal mining and/or milling occurred in the past but there are no active mining activities occurring as defined above, and where the inactive portion is not covered by an active mining permit issued by the applicable state or federal agency. An inactive metal mining facility has an identifiable owner / operator. Sites where mining claims are being maintained prior to disturbances associated with the extraction, beneficiation, or processing of mined materials and sites where minimal activities are undertaken for the sole purpose of maintaining a mining claim are not considered either active or inactive mining facilities and do not require an NPDES industrial stormwater permit.

8.G.3.6 *Temporarily inactive metal mining facility* - A site or portion of a site where metal mining and/or milling occurred in the past but currently are not being actively undertaken, and the facility is covered by an active mining permit issued by the Department.

8.G.4 Requirements Applicable to the Earth-Disturbing Activities Prior to Active Mining Activities.

Stormwater discharges from earth-disturbing activities prior to active mining are covered under this permit. For such earth-disturbing activities, you must comply with all applicable requirements in Parts 1-7 of this permit except for technology-based effluent limits in Parts 8.G.5 and 2.1.2, the inspection requirements in Parts 8.G.7 and 4, and the monitoring requirements of Parts 8.G.5 and 6.

Once the earth-disturbing activities have ceased and stabilization as specified in Parts 8.G.4.1.9 and 8.G.4.2.11 have been completed, discharges from these areas are no longer

subject to the Part 8.G.4 requirements, but are subject to all other applicable requirements in the IGP, including those excluded in the previous paragraph. Note stabilization is not required for areas where active mining activities will occur.

8.G.4.1 *Technology-Based Effluent Limits Applicable to All Earth-Disturbing Activities Prior Active Mining Activities.* The following technology-based effluent limits apply. These limits supersede the technology-based limits listed in Part 2.1.2 and Part 8.G.5 of the IGP during the exploration and construction phases of mining activities.

8.G.4.1.1 *Installation of Stormwater Controls.*

- By the time construction commences, stormwater controls to treat initial disturbance must be installed and made operational;
- Remaining controls must be installed as soon as conditions allow.

8.G.4.1.2 *Maintenance of Stormwater Controls.*

- At any time, if a stormwater control needs repair or replacement to continue operating effectively:
 - Initiate work to fix the problem immediately;
 - Complete work by end of the next work day.
- If a stormwater control must be replaced or significantly repaired, work must be completed within 7 days, unless infeasible.

8.G.4.1.3 *Perimeter Controls.* You must:

- Install sediment controls along those perimeter areas of your site that will receive stormwater;
- Remove sediment before it has accumulated to one-half of the above-ground height of any perimeter control.

8.G.4.1.4 *Sediment track-out.* For construction vehicles and equipment exiting the site onto paved roads, you must:

- Use appropriate stabilization techniques to minimize sediment track-out from vehicle and equipment prior to exit;
- Use additional controls to remove sediment from vehicle and equipment tires prior to exit;
- Remove tracked-out sediment by end of the work day.

8.G.4.1.5 *Soil or sediment stockpiles.* You must:

- Locate the piles outside of any natural buffers established per 8.G.4.2.3 below;
- Protect from contact with stormwater runoff using temporary barriers;
- Provide cover or appropriate temporary stabilization, where feasible.

8.G.4.1.6 *Sediment basins.* If you install a sediment basin, you must comply with the following:

- Provide storage for either the 2-year, 24-hour storm, or 3,600 cubic feet per acre drained;
- Prevent erosion of the sediment basin using stabilization controls (e.g., erosion control blankets), and the basin's inlet and outlet using erosion controls and velocity dissipation devices;

8.G.4.1.7 *Minimize dust.* You must minimize the generation of dust through the appropriate

application of water or other dust suppression techniques that minimize pollutants being discharged into surface waters.

8.G.4.1.8. *Restrictions on use of treatment chemicals.* If you intend to use sediment treatment chemicals at your site, you are subject to the following minimum requirements:

- Use conventional erosion and sediment controls prior to and after application of chemicals;
- Select chemicals suited to soil type, and expected turbidity, pH, flow rate;
- Minimize the discharge risk from stored chemicals;
- Comply with state/local requirements;
- Use chemicals in accordance with good engineering practices and specifications of chemical supplier;
- Ensure proper training;
- Provide proper SWPPP documentation.

If you plan to use cationic treatment chemicals, you are ineligible for coverage under this permit, unless you notify the Department in advance and the Department authorizes coverage under this permit after you have included appropriate controls and implement procedures designed to ensure that your use of cationic treatment chemicals will not lead to a violation of water quality standards.

8.G.4.1.9 *Site stabilization requirements for earth-disturbing activities performed for purposes of mine site preparation as defined in 8.G.3.2(a) (i.e., not applicable to construction of staging areas for structures and access roads as defined in 8.G.3.2(b)).* You must comply with the following stabilization requirements except where the intended function of the site accounts for such disturbed earth (e.g., the earth disturbances will become actively mined, or the controls implemented at the active mining area effectively control the disturbance), although you are encouraged to do so within the active mining area, where appropriate:

- *Temporary stabilization of disturbed areas.* Stabilization measures must be initiated immediately in portions of the site where earth-disturbing activities performed for purposes of mine site preparation (as defined in 8.G.3.2(a)) have temporarily ceased, but in no case more than 14 days after such activities have temporarily ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after earth-disturbing activities performed for purposes of mine site preparation has temporarily ceased, temporary vegetative stabilization measures must be initiated as soon as practicable. Until temporary vegetative stabilization is achieved, interim measures such as erosion control blankets with an appropriate seed base and tackifiers must be employed. In areas of the site where earth-disturbing activities performed for purposes of mine site preparation have permanently ceased prior to active mining, temporary stabilization measures must be implemented to minimize mobilization of sediment or other pollutants until active mining activities commence.

- *Final stabilization of disturbed areas.* Stabilization measures must be initiated immediately where earth-disturbing activities performed for purposes of mine site preparation (as defined in 8.G.3.2(a)) have permanently ceased, but in no case more than 14 days after the earth-disturbing activities have permanently ceased. In arid, semi-arid, and drought-stricken areas, or in areas subject to snow or freezing conditions, where initiating perennial vegetative stabilization measures is not possible within 14 days after earth-disturbing activities have permanently ceased, final vegetative stabilization measures must be initiated as soon as possible. Until final stabilization is achieved, temporary stabilization measures, such as erosion control blankets with an appropriate seed base and tackifiers, must be used.

8.G.4.2 *Additional Technology-Based Effluent Limits Applicable Only to the Construction of Staging Areas for Structures and Access Roads.* The following technology-based effluent limits apply to authorized discharges from earth-disturbing activities associated with the construction of staging areas and the construction of access roads, as defined in Part 8.G.3.2(b). These limits supersede the technology-based limits listed in Part 2.1.2 and Part 8.G.5 of the IGP. These limits do not apply to earth-disturbing activities performed for purposes of mine site preparation (as defined in 8.G.3.2(a)).

8.G.4.2.1 *Area of disturbance.* You must minimize the amount of soil exposed during construction activities.

8.G.4.2.2 *Erosion and sediment control design requirements.* You must:

- Design, install and maintain effective erosion and sediment controls to minimize the discharge of pollutants from construction activities. Account for the following factors in designing your erosion and sediment controls:
 - The expected amount, frequency, intensity and duration of precipitation;
 - The nature of stormwater runoff and run-on at the site, including factors such as impervious surfaces, slopes and site drainage features;
 - The range of soil particle sizes expected to be present on the site.
- Direct discharges from your stormwater controls to vegetated areas of your site to increase sediment removal and maximize stormwater infiltration, including any natural buffers, unless infeasible. Use velocity dissipation devices if necessary to prevent erosion when directing stormwater to vegetated areas.
- If any stormwater flow becomes or will be channelized at your site, you must design erosion and sediment controls to control both peak flowrates and total stormwater volume to minimize channel and streambank erosion and scour in the immediate vicinity of discharge points.
- If you install stormwater conveyance channels, they must be designed to avoid unstabilized areas on the site and to reduce erosion, unless infeasible. In addition, you must minimize erosion of channels and their embankments, outlets, adjacent streambanks, slopes, and downstream waters during discharge conditions through the use of erosion controls and velocity

dissipation devices within and along the length of any constructed stormwater conveyance channel, and at any outlet to provide a non-erosive flow velocity.

8.G.4.2.3 *Natural Buffers*. If earth disturbances will occur within 50 feet of a water of the U.S., additional protections apply. You must comply with 1 of 3 compliance alternatives:

- Provide a 50-foot undisturbed natural buffer between construction disturbances and the water of the U.S.; or
- Provide an undisturbed natural buffer that is less than 50 feet supplemented by additional erosion and sediment controls, which in combination, achieve a sediment load reduction that is equivalent to a 50-foot buffer; or
- If it is infeasible to provide an undisturbed natural buffer of any size, implement erosion and sediment controls that achieve a sediment load reduction that is equivalent to a 50-foot buffer.

There are exceptions when buffer requirements do not apply:

- There is no stormwater discharge from construction disturbances to the water of the U.S.; or
- The natural buffer has already been eliminated by preexisting development disturbances; or
- The disturbance is for the construction of a water-dependent structure (pier, boat ramp) or construction approved under a CWA section 404 permit; or
- For linear construction projects, you are not required to comply with the requirements if there are site constraints provided that, to the extent feasible, you limit disturbances within 50 feet of a water of the U.S. and/or you provide supplemental erosion and sediment controls to treat stormwater discharges from any disturbances within 50 feet of a water of the U.S.

8.G.4.2.4 *Soil or sediment stockpiles*. In addition to the requirements in Part 8.G.4.1.5, you must locate any piles outside of any natural buffers established under Part 8.G.4.2.3.

8.G.4.2.5 *Sediment basins*. In addition to the requirements in Part 8.G.4.1.6, you must locate sediment basins outside of any surface waters and any natural buffers established under Part 8.G.4.2.3, and you must utilize outlet structures that withdraw water from the surface, unless infeasible.

8.G.4.2.6 *Native topsoil preservation*. You must preserve native topsoil removed during clearing, grading, or excavation, unless infeasible. Store topsoil in a manner that will maximize its use in reclamation or final vegetative stabilization (e.g., by keeping the topsoil stabilized with seed or similar measures). This requirement does not apply if the intended function of the disturbed area dictates that topsoil be disturbed or removed.

8.G.4.2.7 *Steep slopes*. You must minimize the disturbance of steep slopes. The permit does not prevent or prohibit disturbance on steep slopes. Depending on site conditions and needs, disturbance on steep slopes may be necessary (e.g., a road cut in mountainous terrain; for grading steep slopes prior to erecting the mine office). Where steep slope disturbances are necessary, you can minimize the disturbances to steep slopes through the implementation of a

number of standard erosion and sediment control practices, such as by phasing disturbances in these areas and using stabilization practices specifically for steep grades.

8.G.4.2.8 *Soil compaction.* Where final vegetative stabilization will occur or where infiltration practices will be installed, you must either restrict vehicle/ equipment use in these areas to avoid soil compaction or use soil conditioning techniques to support vegetative growth. Minimizing soil compaction is not required where compacted soil is integral to the functionality of the site.

8.G.4.2.9 *Dewatering Practices.* You are prohibited from discharging ground water or accumulated stormwater that is removed from excavations, trenches, foundations, vaults or other similar points of accumulation, unless such waters are first effectively managed by appropriate controls (e.g., sediment basins or sediment traps, sediment socks, dewatering tanks, tube settlers, weir tanks, or filtration systems). Uncontaminated, non-turbid dewatering water can be discharged without being routed to a control.

You must also meet the following requirements for dewatering activities:

- Discharge requirements:
 - No discharging visible floating solids or foam;
 - Remove oil, grease and other pollutants from dewatering water via an oil-water separator or suitable filtration device (such as a cartridge filter);
 - Utilize vegetated upland areas of the site, to the extent feasible, to infiltrate dewatering water before discharge. In no case shall waters of the U.S. be considered part of the treatment area;
 - Implement velocity dissipation devices at all points where dewatering water is discharged;
 - Haul backwash water away for disposal or return it to the beginning of the treatment process; and
 - Clean or replace the filter media used in dewatering devices when the pressure differential equals or exceeds the manufacturer's specifications.
- Treatment chemical restrictions: If you use polymers, flocculants or other chemicals to treat dewatering water, you must comply with the requirements in Parts 8.G.4.1.8.

8.G.4.2.10 *Pollution prevention requirements.*

- *Prohibited discharges* (this non-exhaustive list of prohibited non-stormwater discharges is included here as a reminder that only the only allowable non-stormwater discharges are those enumerated in Part 1.1.3):
 - Wastewater from washout of concrete;
 - Wastewater from washout and cleanout of stucco, paint, form release oils, curing compounds, and other construction materials;
 - Fuels, oils, or other pollutants used for operation and maintenance of vehicles or equipment;
 - Soaps, solvents, or detergents used in vehicle or equipment washing;
 - Toxic or hazardous substances from a spill or other release.

- *Design and location requirements:* Minimize the discharge of pollutants from pollutant sources by:
 - Minimizing exposure;
 - Using secondary containment, spill kits, or other equivalent measures;
 - Locating pollution sources away from surface waters, storm sewer inlets, and drainageways;
 - Cleaning up spills immediately (do not clean by hosing area down).
- *Pollution prevention requirements for wash waters:* Minimize the discharge of pollutants from equipment and vehicle washing, wheel wash water, and other wash waters. Wash waters must be treated in a sediment basin or alternative control that provides equivalent or better treatment prior to discharge;
- *Pollution prevention requirements for the storage, handling, and disposal of construction products, materials, and wastes:* Minimize the exposure of building materials, building products, construction wastes, trash, landscape materials, fertilizers, pesticides, herbicides, detergents, sanitary waste, and other materials present on the site to stormwater. Minimization of exposure is not required in cases where the exposure to stormwater will not result in a discharge of pollutants, or where exposure of a specific material or product poses little risk of stormwater contamination (such as final products and materials intended for outdoor use).

8.G.4.2.11 *Site Stabilization requirements for the construction of staging areas for structures and access roads as defined in 8.G.3.2(b)* (i.e., not applicable to earth-disturbing activities performed for purposes of mine site preparation as defined in 8.G.3.2(a)). You must comply with the following stabilization requirements, except where the intended function of the site accounts for such disturbed earth (e.g., the area of construction will become actively mined, or the controls implemented at the active mining area effectively control the disturbance):

- By no later than the end of the next work day after construction work in an area has stopped permanently or temporarily (“temporarily” means the land will be idle for a period of 14 days or more but earth-disturbing activities will resume in the future), immediately initiate stabilization measures;
- If using vegetative measures, by no later than 14 days after initiating stabilization:
 - Seed or plant the area, and provide temporary cover to protect the planted area;
 - Once established, vegetation must be uniform, perennial (if final stabilization), and cover at least 70% of stabilized area based on density of native vegetation.
- If using non-vegetative stabilization, by no later than 14 days after initiating stabilization:
 - Install or apply all non-vegetative measures;
 - Cover all areas of exposed soil.

Note: For the purposes of this permit, the Department will consider any of the following types of activities to constitute the initiation of stabilization: 1. Prepping the soil for vegetative or non-vegetative stabilization; 2. Applying mulch or other non-vegetative product to the exposed area; 3. Seeding or planting the exposed area; 4. Starting any of the activities in # 1 – 3 on a portion of the area to be stabilized, but not on the entire area; and 5. Finalizing arrangements to have stabilization product fully installed in compliance with the applicable deadline for completing stabilization.

Exceptions:

- Arid, semi-arid (if construction occurs during seasonally dry period), or drought-stricken areas:
 - Within 14 days of stopping construction work in an area, install any necessary non-vegetative stabilization measures;
 - Initiate vegetative stabilization as soon as conditions on the site allow;
 - Document the schedule that will be followed for initiating and completing vegetative stabilization;
 - Plant the area so that within 3 years the 70% cover requirement is met.
- Sites affected by severe storm events or other unforeseen circumstances:
 - Initiate vegetative stabilization as soon as conditions on the site allow;
 - Document the schedule that will be followed for initiating and completing vegetative stabilization;
 - Plant the area so that so that within 3 years the 70% cover requirement is met.

8.G.4.3 Water Quality-Based Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities.

The following water quality-based limits apply to earth-disturbing activities conducted prior to active mining activities defined in Part 8.G.3.2(a) and 8.G.3.2(b), in addition to the water quality-based limits in Part 2.2 of the IGP.

Stricter requirements apply if your site will discharge to an impaired water or a water that is identified as an Outstanding Resource Water (ORW) for antidegradation purposes:

- More rapid stabilization of exposed areas: Complete initial stabilization activities within 7 days of stopping earth-disturbing work.
- More frequent site inspections: Once every 7 days and within 24 hours of a storm event of 0.25 inches or greater.

8.G.4.4 Inspection Requirements Applicable to Earth-Disturbing Activities Conducted Prior to Active Mining Activities.

The following requirements supersede the inspection requirements in Part 3 and 8.G.7 of the IGP for earth-disturbing activities conducted prior to active mining activities defined in Part 8.G.3.2(a) and 8.G.3.2(b).

8.G.4.4.1 Inspection frequency

- At least once every 7 calendar days, or
- Once every 14 calendar days and within 24 hours of a storm event of 0.25 inches or greater.

Note:

- Inspections only required during normal working hours;
- Inspections not required during unsafe conditions; and
- If you choose to inspect once every 14 days, you must have a method for measuring rainfall amount on site (either rain gauge or representative weather station)

Note: To determine if a storm event of 0.25 inches or greater has occurred on your site, you must either keep a properly maintained rain gauge on your site, or obtain the storm event information from a weather station that is representative of your location. For any day of rainfall during normal business hours that measures 0.25 inches or greater, you must record the total rainfall measured for that day.

Note: You are required to specify in your SWPPP which schedule you will be following.

Note: “Within 24 hours of the occurrence of a storm event” means that you are required to conduct an inspection within 24 hours once a storm event has produced 0.25 inches, even if the storm event is still continuing. Thus, if you have elected to inspect bi-weekly and there is a storm event at your site that continues for multiple days, and each day of the storm produces 0.25 inches or more of rain, you are required to conduct an inspection within 24 hours of the first day of the storm and within 24 hours after the end of the storm.

8.G.4.4.2 *Reductions in inspection frequency.*

- Stabilized areas: You may reduce the frequency of inspections to once per month in any area of your site where stabilization has occurred pursuant to Part 8.G.4.1.9 or 8.G.4.2.11.
- Arid, semi-arid, and drought stricken areas: If earth-disturbing activities are occurring during the seasonally dry period or during a period in which drought is predicted to occur, you may reduce inspections to once per month and within 24 hours of a 0.25 inch storm event.
- Frozen conditions: You may temporarily suspend or reduce inspections to once per month until thawing conditions occur if frozen conditions are continuous and disturbed areas have been stabilized. For extreme conditions in remote areas, e.g., where transit to the site is perilous/restricted or temperatures are routinely below freezing, you may suspend inspections until the conditions are conducive to safe access, and more frequent inspections can resume.

8.G.4.4.3 *Areas to be inspected.* You must at a minimum inspect all of the following areas:

- Disturbed areas;
- Stormwater controls and pollution prevention measures;
- Locations where stabilization measures have been implemented;
- Material, waste, borrow, or equipment storage and maintenance areas;
- Areas where stormwater flows;
- Points of discharge.

8.G.4.4.4 *What to check for during inspections.* At a minimum you must check:

- Whether all stormwater controls are installed, operational and working as intended;
- Whether any new or modified stormwater controls are needed;
- For conditions that could lead to a spill or leak;
- For visual signs of erosion/sedimentation at points of discharge.

If a discharge is occurring, check:

- The quality and characteristics of the discharge;
- Whether controls are operating effectively.

8.G.4.4.5 *Inspection report.* Within 24 hours of an inspection, complete a report that includes:

- Inspection date;
- Name and title of inspector(s);
- Summary of inspection findings;
- Rainfall amount that triggered the inspection (if applicable);
- If it was unsafe to inspect a portion of the site, include documentation of the reason and the location(s);
- Each inspection report must be signed;
- Keep a current copy of all reports at the site or at an easily accessible location.

8.G.5 Additional Technology-Based Effluent Limits.

Note: These requirements do not apply for any discharges from the construction and/or exploration phases of a mining facility, or to inactive metal mining facilities.

8.G.5.1 *Employee Training.* (See also Part 2.1.2.9) Conduct employee training at least annually at active and temporarily inactive sites.

8.G.5.2 *Storm Water Controls.* Apart from the control measures you implement to meet the applicable technology-based effluent limits in Part 2 of this permit, consider implementing the following control measures at your site. The potential pollutants identified in Part 8.G.6.3 shall determine the priority and appropriateness of the control measures selected. For mines subject to dust control requirements under the Department's air quality permits, provided the requirements are equivalent, compliance with such air permit dust requirements shall constitute compliance with the dust control effluent limit in Part 2.1.2.10.

8.G.5.2.1 *Storm Water Diversions:* Consider diverting storm water away from potential pollutant sources. The following are some options: interceptor or diversion controls (e.g., dikes, swales, curbs, or berms); pipe slope drains; subsurface drains; conveyance systems (e.g., channels or gutters, open-top box culverts, and waterbars; rolling dips and road sloping; roadway surface water deflector and culverts); or their equivalents.

8.G.5.2.2 *Capping:* When capping is necessary to minimize pollutant discharges in storm water, identify the source being capped and the material used to construct the cap.

8.G.5.2.3 *Treatment:* If treatment of storm water (e.g., chemical or physical systems, oil/water separators, artificial wetlands) is necessary to protect water quality, describe the type and location of treatment used. Passive and/or active treatment of storm water runoff is encouraged where feasible. Treated runoff may be discharged as a storm water source regulated under this

permit provided the discharge is not combined with discharges subject to effluent limitation guidelines for the Ore Mining and Dressing Point Source Category (40 CFR Part 440).

8.G.5.3 *Certification of Discharge Testing.* (See also Part 5.1.3.4) Test or evaluate all outfalls covered under this permit for the presence of specific mining-related but unauthorized non-storm water discharges such as seeps or adit discharges, or discharges subject to effluent limitations guidelines (e.g., 40 CFR Part 440), such as mine drainage or process water. Alternatively (if applicable), you may keep a certification with your SWPPP consistent with Part 8.G.6.6.

8.G.6 Additional SWPPP Requirements.

Note: The requirements in Part 8.G.6 are not applicable to inactive metal mining facilities.

8.G.6.1 *Nature of Industrial Activities.* (See also Part 5.1.2) Briefly document in your SWPPP the mining and associated activities that can potentially affect the storm water discharges covered by this permit, including a general description of the location of the site relative to major transportation routes and communities.

8.G.6.2 *Site Map.* (See also Part 5.1.2) Document in your SWPPP the locations of the following (as appropriate): mining or milling site boundaries; access and haul roads; outline of the drainage areas of each storm water outfall within the facility with indications of the types of discharges from the drainage areas; location(s) of all permitted discharges covered under an individual NPDES permit, outdoor equipment storage, fueling, and maintenance areas; materials handling areas; outdoor manufacturing, outdoor storage, and material disposal areas; outdoor chemicals and explosives storage areas; overburden, materials, soils, or waste storage areas; location of mine drainage (where water leaves mine) or other process water; tailings piles and ponds (including proposed ones); heap leach pads; off-site points of discharge for mine drainage and process water; surface waters; boundary of tributary areas that are subject to effluent limitations guidelines; and location(s) of reclaimed areas.

8.G.6.3 *Potential Pollutant Sources.* (See also Part 5.1.3) For each area of the mine or mill site where storm water discharges associated with industrial activities occur, identify the types of pollutants (e.g., heavy metals, sediment) likely to be present in significant amounts. Consider these factors: the mineralogy of the ore and waste rock (e.g., acid forming); toxicity and quantity of chemicals used, produced, or discharged; the likelihood of contact with storm water; vegetation of site (if any); and history of significant leaks or spills of toxic or hazardous pollutants. Also include a summary of any existing ore or waste rock or overburden characterization data and test results for potential generation of acid rock. If any new data is acquired due to changes in ore type being mined, update your SWPPP with this information.

8.G.6.4 *Documentation of Control Measures.* Document all control measures that you implement consistent with Part 8.G.5.2. If control measures are implemented or planned but are not listed in Part 8.G.5.2 (e.g., substituting a less toxic chemical for a more toxic one), include descriptions of them in your SWPPP. If you are in compliance with dust control requirements under Department air quality permits, you must include (or summarize, as necessary) what the air quality permit dust control requirements are and how compliance is achieved with them.

8.G.6.5 *Employee Training.* All employee training(s) must be documented in the SWPPP.

8.G.6.6 *Certification of Permit Coverage for Commingled Non-Storm Water Discharges:* If you are able, consistent with Part 8.G.5.3 above, to certify that a particular discharge composed of commingled storm water and non-storm water is covered under a separate NPDES permit, and that permit subjects the non-storm water portion to effluent limitations prior to any commingling, retain such certification with your SWPPP. This certification must identify the non-storm water discharges, the applicable NPDES permit(s), the effluent limitations placed on the non-storm water discharge by the permit(s), and the points at which the limitations are applied.

8.G.7 Additional Inspection Requirements.

(See also Part 4.1) Except for areas of the site subject to clearing, grading, and/or excavation activities conducted as part of the exploration and construction phase, which are subject to Part 8.G.4.2.1, inspect sites at least quarterly unless adverse weather conditions make the site inaccessible. Sites which discharge to waters designated as outstanding waters or waters which are impaired for sediment or nitrogen must be inspected monthly. See Part 8.G.8.4 for inspection requirements for inactive and unstaffed sites.

8.G.8 Monitoring and Reporting Requirements. (See also Part 6 of the permit.) These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Note: There are no Part 8.G.8 monitoring and reporting or impaired waters monitoring requirements for inactive and unstaffed sites.

8.G.8.1 *Benchmark Monitoring for Active Copper Ore Mining and Dressing Facilities.* Active copper ore mining and dressing facilities, must sample and analyze storm water discharges for the pollutants listed in Table 8.G-1.

Table 8.G-1		
Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector G1. Active Copper Ore Mining and Dressing Facilities (SIC 1021)	Total Suspended Solids (TSS)	100 mg/L
	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L

8.G.8.2 *Benchmark Monitoring Requirements for Discharges From Waste Rock and Overburden Piles at Active Metal Mining Facilities.* For discharges from waste rock and overburden piles, perform benchmark monitoring once in the first year for the parameters listed in Table 8.G-2, and twice annually in all subsequent years of coverage under this permit for any parameters for which the benchmark has been exceeded. You are also required to conduct analytic monitoring for the parameters listed in Table 8.G-3 in accordance with the requirements

in Part 8.G.6.3. The Director may also notify you that you must perform additional monitoring to accurately characterize the quality and quantity of pollutants discharged from your waste rock and overburden piles.

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Cutoff Concentration
Subsector G2. Iron Ores; Copper Ores; Lead and Zinc Ores; Gold and Silver Ores; Ferroalloy Ores, Except Vanadium; and Miscellaneous Metal Ores (SIC Codes 1011, 1021, 1031, 1041, 1044, 1061, 1081, 1094, 1099) (Note: when analyzing hardness for a suite of metals, it is more cost effective to add analysis of calcium and magnesium, and have hardness calculated than to require hardness analysis separately)	Total Suspended Solids (TSS)	100 mg/L
	Turbidity	50 NTU
	pH	6.0-9.0 s.u.
	Hardness (as CaCO ₃ ; calc. from Ca, Mg) ²	no benchmark value
	Total Antimony	0.64 mg/L
	Total Arsenic (freshwater) ²	0.15 mg/L
	Total Arsenic (saltwater) ¹	0.069 mg/L
	Total Beryllium	0.13 mg/L
	Total Cadmium (freshwater) ²	Hardness Dependent
	Total Cadmium (saltwater) ¹	0.04 mg/L
	Total Copper (freshwater) ²	Hardness Dependent
	Total Copper (saltwater) ¹	0.0048 mg/L
	Total Lead (freshwater) ²	Hardness Dependent
	Total Lead (saltwater) ¹	0.21 mg/L
	Total Mercury (freshwater) ²	0.0014 mg/L
	Total Mercury (saltwater) ¹	0.0018 mg/L
	Total Nickel (freshwater) ²	Hardness Dependent
	Total Nickel (saltwater) ¹	0.074 mg/L
Total Selenium (freshwater) ²	0.005 mg/L	
Total Selenium (saltwater) ¹	0.29 mg/L	
Total Silver (freshwater) ²	Hardness Dependent	
Total Silver (saltwater) ¹	0.0019 mg/L	
Total Zinc (freshwater) ²	Hardness Dependent	
Total Zinc (saltwater) ¹	0.09 mg/L	

¹ Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. Hardness Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Cadmium (mg/L)	Copper (mg/L)	Lead (mg/L)	Nickel (mg/L)	Silver (mg/L)	Zinc (mg/L)
0-24.99 mg/L	0.0005	0.0038	0.014	0.15	0.0007	0.04
25-49.99 mg/L	0.0008	0.0056	0.023	0.20	0.0007	0.05
50-74.99 mg/L	0.0013	0.0090	0.045	0.32	0.0017	0.08
75-99.99 mg/L	0.0018	0.0123	0.069	0.42	0.0030	0.11
100-124.99 mg/L	0.0023	0.0156	0.095	0.52	0.0046	0.13
125-149.99 mg/L	0.0029	0.0189	0.122	0.61	0.0065	0.16
150-174.99 mg/L	0.0034	0.0221	0.151	0.71	0.0087	0.18
175-199.99 mg/L	0.0039	0.0253	0.182	0.80	0.0112	0.20
200-224.99 mg/L	0.0045	0.0285	0.213	0.89	0.0138	0.23
225-249.99 mg/L	0.0050	0.0316	0.246	0.98	0.0168	0.25
250+ mg/L	0.0053	0.0332	0.262	1.02	0.0183	0.26

8.G.8.3 Additional Analytic Monitoring Requirements for Discharges From Waste Rock and Overburden Piles at Active Metal Mining Facilities. In addition to the monitoring required in Part 8.G.6.2 for discharges from waste rock and overburden piles, you must also conduct monitoring for additional parameters based on the type of ore you mine at your site. Where a parameter in Table 8.G-3 is the same as a pollutant you are required to monitor for in Table 8.G-2 (i.e., for all of the metals, you must use the corresponding benchmark in Table 8.G-2 and you may use any monitoring results conducted for Part 8.G.6.2 to satisfy the monitoring requirement for that parameter for Part 8.G.6.3. For radium and uranium, which do not have corresponding benchmarks in Table 8.G-2, there are no applicable benchmarks.) The frequency and schedule for monitoring for these additional parameters is the same as that specified in Part 6.2.1.2.

Table 8.G-3. Additional Monitoring Requirements for Discharges from Waste Rock and Overburden Piles			
Supplemental Requirements			
Type of Ore Mined	Pollutants of Concern		
	Total Suspended Solids (TSS)	pH	Metals, Total
Tungsten Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Nickel Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Aluminum Ore	X	X	--
Mercury Ore	X	X	Nickel (H)
Iron Ore	X	X	--
Platinum Ore	--	--	Cadmium (H), Copper (H), Mercury, Lead (H), Zinc (H)
Titanium Ore	X	X	Nickel (H), Zinc (H)
Vanadium Ore	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Zinc (H)
Molybdenum	X	X	Arsenic, Cadmium (H), Copper (H), Lead (H), Mercury, Zinc (H)

Table 8.G-3. Additional Monitoring Requirements for Discharges from Waste Rock and Overburden Piles			
Supplemental Requirements			
Type of Ore Mined	Pollutants of Concern		
	Total Suspended Solids (TSS)	pH	Metals, Total
Uranium, Radium, and Vanadium Ore	X	X	Chemical Oxygen Demand, Arsenic, Radium (Dissolved and Total), Uranium, Zinc (H)

Note: An "X" indicated for TSS and/or pH means that you are required to monitor for those parameters. (H) indicates that hardness must also be measured when this pollutant is measured.

8.G.8.4 Inactive and Unstaffed Sites – Conditional Exemption from No Exposure Requirements for Quarterly Visual Assessments and Routine Facility Inspections. As a Sector G facility, if you are seeking to exercise a waiver from the quarterly visual assessment and routine facility inspection requirements for inactive and unstaffed sites (including temporarily inactive sites), you are conditionally exempt from the requirement to certify that “there are no industrial materials or activities exposed to storm water” in Part 4.2.3. This exemption is conditioned on the following:

a. If circumstances change and your facility becomes active and/or staffed, this exception no longer applies and you must immediately begin complying with the quarterly visual assessment requirements; and

b. The Department retains the authority to revoke this exemption and/or the monitoring waiver where it is determined that the discharge causes, has a reasonable potential to cause, or contributes to an instream excursion above an applicable water quality standard, including designated uses.

c. Subject to the two conditions above, if your facility is inactive and unstaffed, you are waived from the requirement to conduct quarterly visual assessments and routine facility inspections. You are not waived from conducting the Part 4.3 comprehensive site inspection. You are encouraged to inspect your site more frequently where you have reason to believe that severe weather or natural disasters may have damaged control measures or increased discharges.

Table 8.G-4. Applicability of the Multi-Sector General Permit to Storm Water Runoff From Active Mining and Dressing Sites, Temporarily Inactive Sites, and Sites Undergoing Reclamation	
Discharge/Source of Discharge	Note/Comment
Piles	
Waste rock/overburden	If composed entirely of storm water and not combining with mine drainage. See note below.
Topsoil	--
Roads constructed of waste rock or spent ore	
Onsite haul roads	If composed entirely of storm water and not combining with mine drainage. See note below.
Offsite haul and access roads	--
Roads not constructed of waste rock or spent ore	
Onsite haul roads	Except if mine drainage is used for dust control
Offsite haul and access roads	--

Table 8.G-4. Applicability of the Multi-Sector General Permit to Storm Water Runoff From Active Mining and Dressing Sites, Temporarily Inactive Sites, and Sites Undergoing Reclamation	
Milling/concentrating	
Runoff from tailings dams and dikes when constructed of waste rock/tailings	Except if process fluids are present and only if composed entirely of storm water and not combining with mine drainage. See Note below.
Runoff from tailings dams/dikes when not constructed of waste rock and tailings	Except if process fluids are present
Concentration building	If storm water only and no contact with piles
Mill site	If storm water only and no contact with piles
Ancillary areas	
Office and administrative building and housing	If mixed with storm water from the industrial area
Chemical storage area	--
Docking facility	Except if excessive contact with waste product that would otherwise constitute mine drainage
Explosive storage	--
Fuel storage (oil tanks/coal piles)	--
Vehicle and equipment maintenance area/building	--
Parking areas	But coverage unnecessary if only employee and visitor-type parking
Power plant	
Truck wash area	Except when excessive contact with waste product that would otherwise constitute mine drainage
Reclamation-related areas	
Any disturbed area (unreclaimed)	Only if not in active mining area
Reclaimed areas released from reclamation requirements prior to Dec. 17, 1990	--
Partially/inadequately reclaimed areas or areas not released from reclamation requirements	--

Note: Storm water runoff from these sources are subject to the NPDES program for storm water unless mixed with discharges subject to 40 CFR Part 440 that are regulated by another permit prior to mixing. Non-storm water discharges from these sources are subject to NPDES permitting and may be subject to the effluent limitation guidelines under 40 CFR Part 440. Discharges from overburden/waste rock and overburden/waste rock-related areas are not subject to 40 CFR Part 440 unless: (1) it drains naturally (or is intentionally diverted) to a point source; and (2) combines with "mine drainage" that is otherwise regulated under the Part 440 regulations. For such sources, coverage under this permit would be available if the discharge composed entirely of storm water does not combine with other sources of mine drainage that are not subject to 40 CFR Part 440, as well as meeting other eligibility criteria contained in Part 1.1 of the permit. Permit applicants bear the initial responsibility for determining the applicable technology-based standard for such discharges. EPA recommends that permit applicants contact the relevant NPDES permit issuance authority for assistance to determine the nature and scope of the "active mining area" on a mine-by-mine basis, as well as to determine the appropriate permitting mechanism for authorizing such discharges.

8.G.9. Termination of Permit Coverage

8.G.9.1 Termination of Permit Coverage for Sites Reclaimed After December 17, 1990. A site or a portion of a site that has been released from applicable state or federal reclamation requirements after December 17, 1990, is no longer required to maintain coverage under this permit. If the site or portion of a site reclaimed after December 17, 1990, was not subject to reclamation requirements, the site or portion of the site is no longer required to maintain

coverage under this permit if the site or portion of the site has been reclaimed as defined in Part 8.G.3.3.

8.G.9.2 *Termination of Permit Coverage for Sites Reclaimed Before December 17, 1990.* A site or portion of a site that was released from applicable state or federal reclamation requirements before December 17, 1990, or that was otherwise reclaimed before December 17, 1990, is no longer required to maintain coverage under this permit if the site or portion of the site has been reclaimed. A site or portion of a site is considered to have been reclaimed if: (1) storm water runoff that comes into contact with raw materials, intermediate byproducts, finished products, and waste products does not have the potential to cause or contribute to violations of state water quality standards, (2) soil disturbing activities related to mining at the sites or portion of the site have been completed, (3) the site or portion of the site has been stabilized to minimize soil erosion, and (4) as appropriate depending on location, size, and the potential to contribute pollutants to storm water discharges, the site or portion of the site has been revegetated, will be amenable to natural revegetation, or will be left in a condition consistent with the post-mining land use.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart H – Sector H – [Reserved.]

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart I – Sector I – [Reserved.]

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart J – Sector J – [Reserved.] See NPDES General Permit for Discharges Associated With Nonmetal Mineral Mining Facilities, SCG730000.]

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart K – Sector K – Hazardous Waste Treatment, Storage, or Disposal Facilities.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.K.1 Covered Storm Water Discharges.

The requirements in Subpart K apply to storm water discharges associated with industrial activity from Hazardous Waste Treatment, Storage, or Disposal facilities (TSDFs) as identified by the Activity Code specified under Sector K in Table D-1 of Appendix D of the permit.

8.K.2 Industrial Activities Covered by Sector K.

This permit authorizes storm water discharges associated with industrial activity from facilities that treat, store, or dispose of hazardous wastes, including those that are operating under interim status or a permit under subtitle C of RCRA.

Disposal facilities that have been properly closed and capped, and have no significant materials exposed to storm water, are not considered industrial activity and do not require coverage under this permit.

8.K.3 Limitations on Coverage.

Prohibition of Non-Storm Water Discharges. (See also Part 1.1.4) The following are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory-derived wastewater, and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

8.K.4 Definitions.

8.K.4.1 *Contaminated storm water* - storm water that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Some specific areas of a landfill that may produce contaminated storm water include (but are not limited to) the open face of an active landfill with exposed waste (no cover added); the areas around wastewater treatment operations; trucks, equipment, or machinery that has been in direct contact with the waste; and waste dumping areas.

8.K.4.2 *Drained free liquids* - aqueous wastes drained from waste containers (e.g., drums) prior to landfilling.

8.K.4.3 *Landfill* - an area of land or an excavation in which wastes are placed for permanent disposal, but that is not a land application or land treatment unit, surface impoundment, underground injection well, waste pile, salt dome formation, salt bed formation, underground mine, or cave as these terms are defined in 40 CFR 257.2, 258.2, and 260.10.

8.K.4.4 *Landfill wastewater* - as defined in 40 CFR Part 445 (Landfills Point Source Category), all wastewater associated with, or produced by, landfilling activities except for sanitary wastewater, non-contaminated storm water, contaminated groundwater, and wastewater from recovery pumping wells. Landfill wastewater includes, but is not limited to, leachate, gas

collection condensate, drained free liquids, laboratory derived wastewater, contaminated storm water, and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

8.K.4.5 *Leachate* - liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

8.K.4.6 *Non-contaminated storm water* - storm water that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater as defined in Part 8.K.4.4. Non-contaminated storm water includes storm water that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

8.K.5 Sector-Specific Benchmarks

Table 8.K-1 identifies benchmarks that apply to the specific subsectors of Sector K. These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector K1. ALL - Industrial Activity Code "HZ" (Note: permit coverage limited in some States). Benchmarks only applicable to discharges not subject to effluent limitations in 40 CFR Part 445 Subpart A (see below).	Ammonia	2.14 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L
	Total Arsenic (freshwater)	0.15 mg/L
	Total Arsenic (saltwater) ¹	0.069 mg/L
	Total Cadmium (freshwater) ²	Hardness Dependent
	Total Cadmium (saltwater) ¹	0.04 mg/L
	Total Cyanide (freshwater)	0.022 mg/L
	Total Cyanide (saltwater) ¹	0.001 mg/L
	Total Lead (freshwater) ²	Hardness Dependent
	Total Lead (saltwater) ¹	0.21 mg/L
	Total Mercury (freshwater)	0.0014 mg/L
	Total Mercury (saltwater) ¹	0.0018 mg/L
Total Selenium (freshwater)	0.005 mg/L	
Total Selenium (saltwater) ¹	0.29 mg/L	
Total Silver (freshwater) ²	Hardness Dependent	
Total Silver (saltwater) ¹	0.0019 mg/L	
Total Suspended Solids (TSS)	100 mg/L	

¹ Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Cadmium (mg/L)	Lead (mg/L)	Silver (mg/L)
0-24.99 mg/L	0.0005	0.014	0.0007
25-49.99 mg/L	0.0008	0.023	0.0007
50-74.99 mg/L	0.0013	0.045	0.0017
75-99.99 mg/L	0.0018	0.069	0.0030
100-124.99 mg/L	0.0023	0.095	0.0046
125-149.99 mg/L	0.0029	0.122	0.0065
150-174.99 mg/L	0.0034	0.151	0.0087
175-199.99 mg/L	0.0039	0.182	0.0112
200-224.99 mg/L	0.0045	0.213	0.0138
225-249.99 mg/L	0.0050	0.246	0.0168
250+ mg/L	0.0053	0.262	0.0183

8.K.6 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1 of this permit.)

Table 8.K-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Industrial Activity	Parameter	Effluent Limitation
Discharges from hazardous waste landfills subject to effluent limitations in 40 CFR Part 445 Subpart A (see footnote).	Biochemical Oxygen Demand (BOD ₅)	220 mg/L, daily maximum
		56 mg/L, monthly avg. maximum
	Total Suspended Solids (TSS)	88 mg/L, daily maximum
		27 mg/L, monthly avg. maximum
	Ammonia	10 mg/L, daily maximum
		4.9 mg/L, monthly avg. maximum
	Alpha Terpineol	0.042 mg/L, daily maximum
		0.019 mg/L, monthly avg. maximum
	Aniline	0.024 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Benzoic Acid	0.119 mg/L, daily maximum
		0.073 mg/L, monthly avg. maximum
	Naphthalene	0.059 mg/L, daily maximum
		0.022 mg/L, monthly avg. maximum
	p-Cresol	0.024 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Phenol	0.048 mg/L, daily maximum
		0.029 mg/L, monthly avg. maximum
	Pyridine	0.072 mg/L, daily maximum
		0.025 mg/L, monthly avg. maximum
Total Arsenic	1.1 mg/L, daily maximum	
	0.54 mg/L, monthly avg. maximum	
Total Chromium	1.1 mg/L, daily maximum	
	0.46 mg/L, monthly avg. maximum	

	Total Zinc	0.535 mg/L, daily maximum
		0.296 mg/L, monthly avg. maximum
	pH	6.0-9.0 s.u.

Monitor annually. As set forth at 40 CFR Part 445 Subpart A, these numeric limitations apply to contaminated storm water discharges from hazardous waste landfills subject to the provisions of RCRA Subtitle C at 40 CFR Parts 264 (Subpart N) and 265 (Subpart N) except for any of the following facilities:

- (a) landfills operated in conjunction with other industrial or commercial operations when the landfill receives only wastes generated by the industrial or commercial operation directly associated with the landfill;
- (b) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes, provided that the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;
- (c) landfills operated in conjunction with Centralized Waste Treatment (CWT) facilities subject to 40 CFR Part 437, so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or
- (d) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities, so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart L – Sector L – Landfills, Land Application Sites, and Open Dumps.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.L.1 Covered Storm Water Discharges.

The requirements in Subpart L apply to storm water discharges associated with industrial activity from Landfills and Land Application Sites and Open Dumps as identified by the Activity Code specified under Sector L in Table D-1 of Appendix D of the permit.

8.L.2 Industrial Activities Covered by Sector L.

This permit may authorize storm water discharges for Sector L facilities associated with waste disposal at landfills, land application sites, and open dumps that receive or have received industrial waste, including sites subject to regulation under Subtitle D of RCRA.

Disposal facilities that have been properly closed and capped, and have no significant materials exposed to storm water, are not considered industrial activity and do not require coverage under this permit.

8.L.3 Limitations on Coverage.

Prohibition of Non-Storm Water Discharges. (See also Part 1.1.4) The following discharges are not authorized by this permit: leachate, gas collection condensate, drained free liquids, contaminated ground water, laboratory wastewater, and contact washwater from washing truck and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

Prohibition of Stormwater Discharges from Open Dumps. Discharges from open dumps as defined under RCRA are not authorized under this permit.

8.L.4 Definitions.

8.L.4.1 *Contaminated storm water* - storm water that comes into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Contaminated storm water that may produce contaminated storm water include (but are not limited to) active landfills with exposed waste (no cover added); the areas around active landfills; operations; trucks, equipment, or machinery that has been in or near active waste dumping areas.

8.L.4.2 *Drained free liquids* - aqueous wastes drained from landfills.

8.L.4.3 *Landfill wastewater* - as defined in 40 CFR Part 445, all wastewater associated with, or produced by, landfills, including but not limited to: landfill wastewater, non-contaminated storm water, contaminated ground water, recovery pumping wells. Landfill process wastewater includes: gas collection condensate; drained free liquids; laboratory-de

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Settlement
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Design Hydro
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Closure plan
Cap stability - here or eng. plan?

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storm water; and contact washwater from washing truck, equipment, and railcar exteriors and surface areas that have come in direct contact with solid waste at the landfill facility.

8.L.4.4 *Leachate* - liquid that has passed through or emerged from solid waste and contains soluble, suspended, or miscible materials removed from such waste.

8.L.4.5 *Non-contaminated storm water* - storm water that does not come into direct contact with landfill wastes, the waste handling and treatment areas, or landfill wastewater. Non-contaminated storm water includes storm water that flows off the cap, cover, intermediate cover, daily cover, and/or final cover of the landfill.

8.L.5 Additional Technology-Based Effluent Limits.

8.L.5.1 *Preventive Maintenance Program.* (See also Part 2.1.2.3) As part of your preventive maintenance program, maintain the following: all elements of leachate collection and treatment systems, to prevent commingling of leachate with storm water; the integrity and effectiveness of any intermediate or final cover (including repairing the cover as necessary), to minimize the effects of settlement, sinking, and erosion.

8.L.5.2 *Erosion and Sedimentation Control.* (See also Part 2.1.2.5) Provide temporary stabilization (e.g., temporary seeding, mulching, and placing geotextiles on the inactive portions of stockpiles) for the following: materials stockpiled for daily, intermediate, and final cover; inactive areas of the landfill or open dump; landfills or open dump areas that have gotten final covers but where vegetation has yet to establish itself; and land application sites where waste application has been completed but final vegetation has not yet been established.

8.L.5.3 *Unauthorized Discharge Test Certification.* (See also Part 5.1.3.4) The discharge test and certification must also be conducted for the presence of leachate and vehicle washwater.

8.L.6 Additional SWPPP Requirements.

8.L.6.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: active and closed landfill cells or trenches, active and closed land application areas, locations where open dumping is occurring or has occurred, locations of any known leachate springs or other areas where uncontrolled leachate may commingle with runoff, and leachate collection and handling systems.

8.L.6.2 *Summary of Potential Pollutant Sources.* (See also Part 5.1.3) Document in your SWPPP the following sources and activities that have potential pollutants associated with them: fertilizer, herbicide, and pesticide application; earth and soil moving; waste hauling and loading or unloading; outdoor storage of significant materials, including daily, interim, and final cover material stockpiles as well as temporary waste storage areas; exposure of active and inactive landfill and land application areas; uncontrolled leachate flows; and failure or leaks from leachate collection and treatment systems.

8.L.7 Additional Inspection Requirements. (See also Part 4)

8.L.7.1 *Inspections of Active Sites.* Except in arid and semi-arid climates, inspect operating landfills, open dumps, and land application sites at least once every 7 days. Focus on areas of landfills that have not yet been finally stabilized; active land application areas, areas used for storage of material and wastes that are exposed to precipitation, stabilization, and structural control measures; leachate collection and treatment systems; and locations where equipment and waste trucks enter and exit the site. Ensure that sediment and erosion control measures are

operating properly. For stabilized sites and areas where land application has been completed, or where the climate is arid or semi-arid, conduct inspections at least once every month.

8.L.7.2 *Inspections of Inactive Sites.* Inspect inactive landfills, open dumps, and land application sites at least quarterly. Qualified personnel must inspect landfill (or open dump) stabilization and structural erosion control measures, leachate collection and treatment systems, and all closed land application areas.

8.L.8 Additional Post-Authorization Documentation Requirements.

Recordkeeping and Internal Reporting. Keep records with your SWPPP of the types of wastes disposed of in each cell or trench of a landfill or open dump. For land application sites, track the types and quantities of wastes applied in specific areas.

8.L.9 Sector-Specific Benchmarks

Table 8.L-1 identifies benchmarks that apply to the specific subsectors of Sector L. These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Table 8.L-1.		
Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration ¹
Subsector L1. All Landfills, Land Application Sites, and Open Dumps (Industrial Activity Code "LF")	Total Suspended Solids (TSS)	100 mg/L

¹Benchmark monitoring required only for discharges not subject to effluent limitations in 40 CFR Part 445 Subpart B (see Table L-2 below).

8.L.10. Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1 of this permit.)

Table 8.L-2 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other wastestreams that may be covered under this permit.

Table 8.L-2 ¹		
Industrial Activity	Parameter	Effluent Limitation
Discharges from non-hazardous waste landfills subject to effluent limitations in 40 CFR Part 445 Subpart B.	Biochemical Oxygen Demand (BOD ₅)	140 mg/L, daily maximum
		37 mg/L, monthly avg. maximum
	Total Suspended Solids (TSS)	88 mg/L, daily maximum
		27 mg/L, monthly avg. maximum
	Ammonia	10 mg/L, daily maximum
		4.9 mg/L, monthly avg. maximum
	Alpha Terpineol	0.033 mg/L, daily maximum
		0.016 mg/L monthly avg. maximum
Benzoic Acid	0.12 mg/L, daily maximum	
	0.071 mg/L, monthly avg. maximum	

Table 8.L-2 ¹		
Industrial Activity	Parameter	Effluent Limitation
	p-Cresol	0.025 mg/L, daily maximum
		0.014 mg/L, monthly avg. maximum
	Phenol	0.026 mg/L, daily maximum
		0.015 mg/L, monthly avg. maximum
	Total Zinc	0.20 mg/L, daily maximum
		0.11 mg/L, monthly avg. maximum
pH	6.0-9.0 s.u.	

¹ Monitor annually. As set forth at 40 CFR Part 445 Subpart B, these numeric limitations apply to contaminated storm water discharges from MSWLFs that have not been closed in accordance with 40 CFR 258.60, and to contaminated storm water discharges from those landfills that are subject to the provisions of 40 CFR Part 257 except for discharges from any of the following facilities:

- (a) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives only wastes generated by the industrial or commercial operation directly associated with the landfill;
- (b) landfills operated in conjunction with other industrial or commercial operations, when the landfill receives wastes generated by the industrial or commercial operation directly associated with the landfill and also receives other wastes, provided that the other wastes received for disposal are generated by a facility that is subject to the same provisions in 40 CFR Subchapter N as the industrial or commercial operation, or that the other wastes received are of similar nature to the wastes generated by the industrial or commercial operation;
- (c) landfills operated in conjunction with CWT facilities subject to 40 CFR Part 437, so long as the CWT facility commingles the landfill wastewater with other non-landfill wastewater for discharge. A landfill directly associated with a CWT facility is subject to this part if the CWT facility discharges landfill wastewater separately from other CWT wastewater or commingles the wastewater from its landfill only with wastewater from other landfills; or
- (d) landfills operated in conjunction with other industrial or commercial operations when the landfill receives wastes from public service activities, so long as the company owning the landfill does not receive a fee or other remuneration for the disposal service.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart M – Sector M – Automobile Salvage Yards.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.M.1 Covered Storm Water Discharges.

The requirements in Subpart M apply to storm water discharges associated with industrial activity from Automobile Salvage Yards as identified by the SIC Code specified under Sector M in Table D-1 of Appendix D of this permit.

8.M.2 Additional Technology-Based Effluent Limits.

8.M.2.1 *Spill and Leak Prevention Procedures.* (See also Part 2.1.2.4) Drain vehicles intended to be dismantled of all fluids upon arrival at the site (or as soon thereafter as feasible), or employ some other equivalent means to prevent spills and leaks. An example of other equivalent means would be placing vehicles not drained upon arrival on an impermeable area that is bermed and/or drains to a sump to capture any potential fluid leaks. Potential stormwater pollution is precluded until the fluids can be removed.

8.M.2.2 *Employee Training.* (See also Part 2.1.2.9) If applicable to your facility, address the following areas (at a minimum) in your employee training program: proper handling (collection, storage, and disposal) of oil, used mineral spirits, anti-freeze, mercury switches, and solvents.

8.M.2.3 *Management of Runoff.* (See also Part 2.1.2.6) Consider the following management practices: berms or drainage ditches on the property line (to help prevent run-on from neighboring properties); berms for uncovered outdoor storage of oily parts, engine blocks, and above-ground liquid storage; installation of detention ponds; and installation of filtering devices and oil-water separators.

8.M.3 Additional SWPPP Requirements.

8.M.3.1 *Drainage Area Site Map.* (See also Part 5.1.2) Identify locations used for dismantling, storage, and maintenance of used motor vehicle parts. Also identify where any of the following may be exposed to precipitation or surface runoff: dismantling areas, parts (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers) storage areas, and liquid storage tanks and drums for fuel and other fluids.

8.M.3.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Assess the potential for the following to contribute pollutants to storm water discharges: vehicle storage areas, dismantling areas, parts storage areas (e.g., engine blocks, tires, hub caps, batteries, hoods, mufflers), and fueling stations.

8.M.4 **Additional Inspection Requirements.** (See also Part 4.1) Immediately (or as soon thereafter as feasible) inspect vehicles arriving at the site for leaks. Inspect quarterly for signs of leakage all equipment containing oily parts, hydraulic fluids, any other types of fluids, or mercury switches. Also, inspect quarterly for signs of leakage all vessels and areas where

hazardous materials and general automotive fluids are stored, including, but not limited to, mercury switches, brake fluid, transmission fluid, radiator water, and antifreeze.

8.M.5 Sector-Specific Benchmarks. (See also Part 6 of the permit.) These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector M1. Automobile Salvage Yards (SIC 5015)	Total Suspended Solids (TSS)	100 mg/L
	Total Lead (freshwater) ² Total Lead (saltwater) ¹	Hardness Dependent 0.21 mg/L

¹ Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Lead (mg/L)
0-24.99 mg/L	0.014
25-49.99 mg/L	0.023
50-74.99 mg/L	0.045
75-99.99 mg/L	0.069
100-124.99 mg/L	0.095
125-149.99 mg/L	0.122
150-174.99 mg/L	0.151
175-199.99 mg/L	0.182
200-224.99 mg/L	0.213
225-249.99 mg/L	0.246
250+ mg/L	0.262

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart N – Sector N – Scrap Recycling and Waste Recycling Facilities.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.N.1 Covered Storm Water Discharges.

The requirements in Subpart N apply to storm water discharges associated with industrial activity from Scrap Recycling and Waste Recycling facilities as identified by the SIC Code specified under Sector N in Table D-1 of Appendix D of the permit.

8.N.2 Limitation on Coverage.

Separate permit requirements have been established for recycling facilities that only receive source-separated recyclable materials primarily from non-industrial and residential sources (i.e., common consumer products including paper, newspaper, glass, cardboard, plastic containers, and aluminum and tin cans). This includes recycling facilities commonly referred to as material recovery facilities (MRF).

8.N.2.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.1.4) Non-storm water discharges from turnings containment areas are not covered by this permit (see also Part 8.N.3.1.3). Discharges from containment areas in the absence of a storm event are prohibited unless covered by a separate NPDES permit.

8.N.3 Additional Technology-Based Effluent Limits.

8.N.3.1 *Scrap and Waste Recycling Facilities (Non-Source Separated, Nonliquid Recyclable Materials).* Requirements for facilities that receive, process, and do wholesale distribution of nonliquid recyclable wastes (e.g., ferrous and nonferrous metals, plastics, glass, cardboard, and paper). These facilities may receive both nonrecyclable and recyclable materials. This section is not intended for those facilities that accept recyclables only from primarily non-industrial and residential sources.

8.N.3.1.1 *Inbound Recyclable and Waste Material Control Program.* Minimize the chance of accepting materials that could be significant sources of pollutants by conducting inspections of inbound recyclables and waste materials. Following are some control measure options: (a) provide information and education to suppliers of scrap and recyclable waste materials on draining and properly disposing of residual fluids (e.g., from vehicles and equipment engines, radiators and transmissions, oil filled transformers, and individual containers or drums) and removal of mercury switches from vehicles before delivery to your facility; (b) establish procedures to minimize the potential of any residual fluids from coming into contact with precipitation or runoff; (c) establish procedures for accepting scrap lead-acid batteries (additional requirements for the handling, storage, and disposal or recycling of batteries are contained in the scrap lead-acid battery program provisions in Part 8.N.3.2.6); (d) provide training targeted for those personnel engaged in the inspection and acceptance of inbound recyclable materials; and (e) establish procedures to ensure that liquid wastes, including used oil, are stored in materially

compatible and non-leaking containers and are disposed of or recycled in accordance with the Resource Conservation and Recovery Act (RCRA).

8.N.3.1.2 *Scrap and Waste Material Stockpiles and Storage (Outdoor)*. Minimize contact of storm water runoff with stockpiled materials, processed materials, and nonrecyclable wastes. Following are some control measure options: (a) permanent or semi-permanent covers; (b) sediment traps, vegetated swales and strips, catch basin filters, and sand filters to facilitate settling or filtering of pollutants; (c) dikes, berms, containment trenches, culverts, and surface grading to divert runoff from storage areas; (d) silt fencing; and (e) oil and water separators, sumps, and dry absorbents for areas where potential sources of residual fluids are stockpiled (e.g., automobile engine storage areas).

8.N.3.1.3 *Stockpiling of Turnings Exposed to Cutting Fluids (Outdoor Storage)*. Minimize contact of surface runoff with residual cutting fluids by: (a) storing all turnings exposed to cutting fluids under some form of permanent or semi-permanent cover, or (b) establishing dedicated containment areas for all turnings that have been exposed to cutting fluids. Any containment areas must be constructed of concrete, asphalt, or other equivalent types of impermeable material and include a barrier (e.g., berms, curbing, elevated pads) to prevent contact with storm water run-on. Storm water runoff from these areas can be discharged, provided that any runoff is first collected and treated by an oil and water separator or its equivalent. You must regularly maintain the oil and water separator (or its equivalent) and properly dispose of or recycle collected residual fluids.

8.N.3.1.4 *Scrap and Waste Material Stockpiles and Storage (Covered or Indoor Storage)*. Minimize contact of residual liquids and particulate matter from materials stored indoors or under cover with surface runoff. Following are some control measure options: (a) good housekeeping measures, including the use of dry absorbents or wet vacuuming to contain, dispose of, or recycle residual liquids originating from recyclable containers, or mercury spill kits for spills from storage of mercury switches; (b) not allowing washwater from tipping floors or other processing areas to discharge to the storm sewer system; and (c) disconnecting or sealing off all floor drains connected to the storm sewer system.

8.N.3.1.5 *Scrap and Recyclable Waste Processing Areas*. Minimize surface runoff from coming in contact with scrap processing equipment. Pay attention to operations that generate visible amounts of particulate residue (e.g., shredding) to minimize the contact of accumulated particulate matter and residual fluids with runoff (i.e., through good housekeeping, preventive maintenance, etc.). Following are some control measure options: (a) regularly inspect equipment for spills or leaks and malfunctioning, worn, or corroded parts or equipment; (b) establish a preventive maintenance program for processing equipment; (c) use dry-absorbents or other cleanup practices to collect and dispose of or recycle spilled or leaking fluids or use mercury spill kits for spills from storage of mercury switches; (d) on unattended hydraulic reservoirs over 150 gallons in capacity, install protection devices such as low-level alarms or equivalent devices, or secondary containment that can hold the entire volume of the reservoir; (e) containment or diversion structures such as dikes, berms, culverts, trenches, elevated concrete pads, and grading to minimize contact of storm water runoff with outdoor processing equipment or stored materials; (f) oil and water separators or sumps; (g) permanent or semi-permanent covers in processing areas where there are residual fluids and grease; (h) retention or detention ponds or basins; sediment traps, and vegetated swales or strips (for pollutant settling and filtration); (i) catch basin filters or sand filters.

8.N.3.1.6 *Scrap Lead-Acid Battery Program*. Properly handle, store, and dispose of scrap lead-acid batteries. Following are some control measure options (a) segregate scrap lead-acid batteries from other scrap materials; (b) properly handle, store, and dispose of cracked or broken batteries; (c) collect and dispose of leaking lead-acid battery fluid; (d) minimize or eliminate (if possible) exposure of scrap lead-acid batteries to precipitation or runoff; and (e) provide employee training for the management of scrap batteries.

8.N.3.1.7 *Spill Prevention and Response Procedures*. (See also Part 2.1.2.4) Install alarms and/or pump shutoff systems on outdoor equipment with hydraulic reservoirs exceeding 150 gallons in the event of a line break. Alternatively, a secondary containment system capable of holding the entire contents of the reservoir plus room for precipitation can be used. Use a mercury spill kit for any release of mercury from switches, anti-lock brake systems, and switch storage areas.

8.N.3.1.8 *Supplier Notification Program*. As appropriate, notify major suppliers which scrap materials will not be accepted at the facility or will be accepted only under certain conditions.

8.N.3.2 Waste Recycling Facilities (Liquid Recyclable Materials).

8.N.3.2.1 *Waste Material Storage (Indoor)*. Minimize or eliminate contact between residual liquids from waste materials stored indoors and from surface runoff. The plan may refer to applicable portions of other existing plans, such as Spill Prevention, Control, and Countermeasure (SPCC) plans required under 40 CFR Part 112. Following are some control measure options (a) procedures for material handling (including labeling and marking); (b) clean up spills and leaks with dry absorbent materials, a wet vacuum system; (c) appropriate containment structures (trenching, curbing, gutters, etc.); and (d) a drainage system, including appurtenances (e.g., pumps or ejectors, manually operated valves), to handle discharges from diked or bermed areas. Drainage should be discharged to an appropriate treatment facility or sanitary sewer system, or otherwise disposed of properly. These discharges may require coverage under a separate NPDES wastewater permit or industrial user permit under the pretreatment program.

8.N.3.2.2 *Waste Material Storage (Outdoor)*. Minimize contact between stored residual liquids and precipitation or runoff. The plan may refer to applicable portions of other existing plans, such as SPCC plans required under 40 CFR Part 112. Discharges of precipitation from containment areas containing used oil must also be in accordance with applicable sections of 40 CFR Part 112. Following are some control measure options (a) appropriate containment structures (e.g., dikes, berms, curbing, pits) to store the volume of the largest tank, with sufficient extra capacity for precipitation; (b) drainage control and other diversionary structures; (c) corrosion protection and/or leak detection systems for storage tanks; and (d) dry-absorbent materials or a wet vacuum system to collect spills.

8.N.3.2.3 *Trucks and Rail Car Waste Transfer Areas*. Minimize pollutants in discharges from truck and rail car loading and unloading areas. Include measures to clean up minor spills and leaks resulting from the transfer of liquid wastes. Following are two control measure options: (a) containment and diversionary structures to minimize contact with precipitation or runoff, and (b) dry clean-up methods, wet vacuuming, roof coverings, or runoff controls.

8.N.3.3 *Recycling Facilities (Source-Separated Materials)*. The following identifies considerations for facilities that receive only source-separated recyclables, primarily from non-industrial and residential sources.

8.N.3.3.1 *Inbound Recyclable Material Control.* Minimize the chance of accepting nonrecyclables (e.g., hazardous materials) that could be a significant source of pollutants by conducting inspections of inbound materials. Following are some control measure options: (a) providing information and education measures to inform suppliers of recyclables about acceptable and non-acceptable materials, (b) training drivers responsible for pickup of recycled material, (c) clearly marking public drop-off containers regarding which materials can be accepted, (d) rejecting nonrecyclable wastes or household hazardous wastes at the source, and (e) establishing procedures for handling and disposal of nonrecyclable material.

8.N.3.3.2 *Outdoor Storage.* Minimize exposure of recyclables to precipitation and runoff. Use good housekeeping measures to prevent accumulation of particulate matter and fluids, particularly in high traffic areas. Following are some control measure options (a) provide totally enclosed drop-off containers for the public; (b) install a sump and pump with each container pit and treat or discharge collected fluids to a sanitary sewer system; (c) provide dikes and curbs for secondary containment (e.g., around bales of recyclable waste paper); (d) divert surface water runoff away from outside material storage areas; (e) provide covers over containment bins, dumpsters, and roll-off boxes; and (f) store the equivalent of one day's volume of recyclable material indoors.

8.N.3.3.3 *Indoor Storage and Material Processing.* Minimize the release of pollutants from indoor storage and processing areas. Following are some control measure options (a) schedule routine good housekeeping measures for all storage and processing areas, (b) prohibit tipping floor washwater from draining to the storm sewer system, and (c) provide employee training on pollution prevention practices.

8.N.3.3.4 *Vehicle and Equipment Maintenance.* Following are some control measure options for areas where vehicle and equipment maintenance occur outdoors (a) prohibit vehicle and equipment washwater from discharging to the storm sewer system, (b) minimize or eliminate outdoor maintenance areas whenever possible, (c) establish spill prevention and clean-up procedures in fueling areas, (d) avoid topping off fuel tanks, (e) divert runoff from fueling areas, (f) store lubricants and hydraulic fluids indoors, and (g) provide employee training on proper handling and storage of hydraulic fluids and lubricants.

8.N.4 Additional SWPPP Requirements.

8.N.4.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in your SWPPP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: scrap and waste material storage, outdoor scrap and waste processing equipment; and containment areas for turnings exposed to cutting fluids.

8.N.4.2 *Maintenance Schedules/Procedures for Collection, Handling, and Disposal or Recycling of Residual Fluids at Scrap and Waste Recycling Facilities.* If you are subject to Part 8.N.3.1.3, your SWPPP must identify any applicable maintenance schedule and the procedures to collect, handle, and dispose of or recycle residual fluids.

8.N.5 Additional Inspection Requirements.

8.N.5.1 *Inspections for Waste Recycling Facilities.* The inspections must be performed quarterly, pursuant to Part 4.1, and include, at a minimum, all areas where waste is generated, received, stored, treated, or disposed of and that are exposed to either precipitation or storm water runoff.

8.N.6 Sector-Specific Benchmarks. (See also Part 6 of the permit.) These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector N1. Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling (SIC 5093)	Chemical Oxygen Demand (COD)	120 mg/L
	Total Suspended Solids (TSS)	100 mg/L
	Total Copper (freshwater) ² Total Copper (saltwater) ¹	Hardness Dependent 0.0048 mg/L
	Total Lead (freshwater) ² Total Lead (saltwater) ¹	Hardness Dependent 0.21 mg/L
	Total Zinc (freshwater) ² Total Zinc (saltwater) ¹	Hardness Dependent 0.09 mg/L

¹ Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Copper (mg/L)	Lead (mg/L)	Zinc (mg/L)
0-24.99 mg/L	0.0038	0.014	0.04
25-49.99 mg/L	0.0056	0.023	0.05
50-74.99 mg/L	0.0090	0.045	0.08
75-99.99 mg/L	0.0123	0.069	0.11
100-124.99 mg/L	0.0156	0.095	0.13
125-149.99 mg/L	0.0189	0.122	0.16
150-174.99 mg/L	0.0221	0.151	0.18
175-199.99 mg/L	0.0253	0.182	0.20
200-224.99 mg/L	0.0285	0.213	0.23
225-249.99 mg/L	0.0316	0.246	0.25
250+ mg/L	0.0332	0.262	0.26

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart O – Sector O – Steam Electric Generating Facilities.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.O.1 Covered Storm water Discharges.

The requirements in Subpart O apply to storm water discharges associated with industrial activity from Steam Electric Power Generating Facilities as identified by the Activity Code specified under Sector O in Table D-1 of Appendix D.

8.O.2 Industrial Activities Covered by Sector O.

This permit authorizes storm water discharges from the following industrial activities at Sector O facilities:

8.O.2.1 steam electric power generation using coal, natural gas, oil, nuclear energy, etc., to produce a steam source, including coal handling areas (geothermal power is excluded);

8.O.2.2 coal pile runoff, including effluent limitations established by 40 CFR Part 423; and

8.O.2.3 dual fuel facilities that could employ a steam boiler.

8.O.3 Limitations on Coverage.

8.O.3.1 *Prohibition of Non-Storm Water Discharges.* Non-storm water discharges subject to effluent limitations guidelines are not covered by this permit.

8.O.3.2 *Prohibition of Storm Water Discharges.* Storm water discharges from the following are not covered by this permit:

8.O.3.2.1 ancillary facilities (e.g., fleet centers and substations) that are not contiguous to a steam electric power generating facility;

8.O.3.2.2 gas turbine facilities (providing the facility is not a dual-fuel facility that includes a steam boiler), and combined-cycle facilities where no supplemental fuel oil is burned (and the facility is not a dual-fuel facility that includes a steam boiler); and

8.O.3.2.3 cogeneration (combined heat and power) facilities utilizing a gas turbine.

8.O.4 Additional Technology-Based Effluent Limits. The following good housekeeping measures are required in addition to Part 2.1.2.2:

8.O.4.1 *Fugitive Dust Emissions.* Minimize fugitive dust emissions from coal handling areas. To minimize the tracking of coal dust offsite, consider procedures such as installing specially designed tires or washing vehicles in a designated area before they leave the site and controlling the wash water.

8.O.4.2 *Delivery Vehicles.* Minimize contamination of storm water runoff from delivery vehicles arriving at the plant site. Consider procedures to inspect delivery vehicles arriving at the plant site and ensure overall integrity of the body or container and procedures to deal with leakage or spillage from vehicles or containers.

8.O.4.3 *Fuel Oil Unloading Areas.* Minimize contamination of precipitation or surface runoff from fuel oil unloading areas. Consider using containment curbs in unloading areas, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and using spill and overflow protection devices (e.g., drip pans, drip diapers, or other containment devices placed beneath fuel oil connectors to contain potential spillage during deliveries or from leaks at the connectors).

8.O.4.4 *Chemical Loading and Unloading.* Minimize contamination of precipitation or surface runoff from chemical loading and unloading areas. Consider using containment curbs at chemical loading and unloading areas to contain spills, having personnel familiar with spill prevention and response procedures present during deliveries to ensure that any leaks or spills are immediately contained and cleaned up, and loading and unloading in covered areas and storing chemicals indoors.

8.O.4.5 *Miscellaneous Loading and Unloading Areas.* Minimize contamination of precipitation or surface runoff from loading and unloading areas. Consider covering the loading area; grading, berming, or curbing around the loading area to divert run-on; locating the loading and unloading equipment and vehicles so that leaks are contained in existing containment and flow diversion systems; or equivalent procedures.

8.O.4.6 *Liquid Storage Tanks.* Minimize contamination of surface runoff from above-ground liquid storage tanks. Consider protective guards around tanks, containment curbs, spill and overflow protection, dry cleanup methods, or equivalent measures.

8.O.4.7 *Large Bulk Fuel Storage Tanks.* Minimize contamination of surface runoff from large bulk fuel storage tanks. Consider containment berms (or their equivalent). You must also comply with applicable State and Federal laws, including Spill Prevention, Control and Countermeasure (SPCC) Plan requirements.

8.O.4.8 *Spill Reduction Measures.* Minimize the potential for an oil or chemical spill, or reference the appropriate part of your SPCC plan. Visually inspect as part of your routine facility inspection the structural integrity of all above-ground tanks, pipelines, pumps, and related equipment that may be exposed to storm water, and make any necessary repairs immediately.

8.O.4.9 *Oil-Bearing Equipment in Switchyards.* Minimize contamination of surface runoff from oil-bearing equipment in switchyard areas. Consider using level grades and gravel surfaces to retard flows and limit the spread of spills, or collecting runoff in perimeter ditches.

8.O.4.10 *Residue-Hauling Vehicles.* Inspect all residue-hauling vehicles for proper covering over the load, adequate gate sealing, and overall integrity of the container body. Repair vehicles without load covering or adequate gate sealing, or with leaking containers or beds.

8.O.4.11 *Ash Loading Areas.* Reduce or control the tracking of ash and residue from ash loading areas. Clear the ash building floor and immediately adjacent roadways of spillage, debris, and excess water before departure of each loaded vehicle.

8.O.4.12 *Areas Adjacent to Disposal Ponds or Landfills.* Minimize contamination of surface runoff from areas adjacent to disposal ponds or landfills. Reduce ash residue that may be tracked on to access roads traveled by residue handling vehicles, and reduce ash residue on exit roads leading into and out of residue handling areas.

8.O.4.13 *Landfills, Scrap yards, Surface Impoundments, Open Dumps, General Refuse Sites.* Minimize the potential for contamination of runoff from these areas.

8.O.5 Additional SWPPP Requirements.

8.O.5.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in your SWPPP the locations of any of the following activities or sources that may be exposed to precipitation or surface runoff: storage tanks, scrap yards, and general refuse areas; short- and long-term storage of general materials (including but not limited to supplies, construction materials, paint equipment, oils, fuels, used and unused solvents, cleaning materials, paint, water treatment chemicals, fertilizer, and pesticides); landfills and construction sites; and stock pile areas (e.g., coal or limestone piles).

8.O.5.2 *Documentation of Good Housekeeping Measures.* You must document in your SWPPP the good housekeeping measures implemented to meet the effluent limits in Part 8.O.4.

8.O.6 Additional Inspection Requirements.

Site Compliance Inspection. (See also Part 4.1 and 4.3) As part of your inspection, inspect the following areas monthly: coal handling areas, loading or unloading areas, switchyards, fueling areas, bulk storage areas, ash handling areas, areas adjacent to disposal ponds and landfills, maintenance areas, liquid storage tanks, and long term and short term material storage areas.

8.O.7 Effluent Limitations Based on Effluent Limitations Guidelines (See also Part 6.2.2.1 of this permit.)

Table 8.O-1 identifies effluent limits that apply to the industrial activities described below. Compliance with these effluent limits is to be determined based on discharges from these industrial activities independent of commingling with any other waste streams that may be covered under this permit.

Industrial Activity	Parameter	Effluent Limitation
Discharges from coal storage piles at Steam Electric Generating Facilities	Total Suspended Solids (TSS)	50 mg/L ²
	pH	6.0-9.0 s.u.

¹ Monitor annually.

² If your facility is designed, constructed, and operated to treat the volume of coal pile runoff that is associated with a 10-year, 24-hour rainfall event, any untreated overflow of coal pile runoff from the treatment unit is not subject to the 50 mg/L limitation for total suspended solids.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart P – Sector P – Land Transportation and Warehousing.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.P.1 Covered Storm Water Discharges.

The requirements in Subpart P apply to storm water discharges associated with industrial activity from Land Transportation and Warehousing facilities as identified by the SIC Codes specified under Sector P in Table D-1 of Appendix D of the permit.

8.P.2 Limitation on Coverage.

Prohibited Discharges (see also Parts 1.1.4 and 8.P.3.1.4) This permit does not authorize the discharge of vehicle/equipment/surface washwater, including tank cleaning operations. Such discharges must be authorized under a separate NPDES permit, discharged to a sanitary sewer in accordance with applicable industrial pretreatment requirements, or recycled on-site.

8.P.3 Additional Technology-Based Effluent Limits.

8.P.3.1 *Good Housekeeping Measures*. (See also Part 2.1.2.2) In addition to the Good Housekeeping requirements in Part 2.1.2.2, you must do the following:

8.P.3.1.1 *Vehicle and Equipment Storage Areas*. Minimize the potential for storm water exposure to leaky or leak-prone vehicles/equipment awaiting maintenance. Consider the following (or other equivalent measures): use of drip pans under vehicles/equipment, indoor storage of vehicles and equipment, installation of berms or dikes, use of absorbents, roofing or covering storage areas, and cleaning pavement surfaces to remove oil and grease.

8.P.3.1.2 *Fueling Areas*. Minimize contamination of storm water runoff from fueling areas. Consider the following (or other equivalent measures): Covering the fueling area; using spill/overflow protection and cleanup equipment; minimizing storm water run-on/runoff to the fueling area; using dry cleanup methods; and treating and/or recycling collected storm water runoff.

8.P.3.1.3 *Material Storage Areas*. Maintain all material storage vessels (e.g., for used oil/oil filters, spent solvents, paint wastes, hydraulic fluids) to prevent contamination of storm water and plainly label them (e.g., “Used Oil,” “Spent Solvents,” etc.). Consider the following (or other equivalent measures): storing the materials indoors; installing berms/dikes around the areas; minimizing runoff of storm water to the areas; using dry cleanup methods; and treating and/or recycling collected storm water runoff.

8.P.3.1.4 *Vehicle and Equipment Cleaning Areas*. Minimize contamination of storm water runoff from all areas used for vehicle/equipment cleaning. Consider the following (or other equivalent measures): performing all cleaning operations indoors; covering the cleaning operation, ensuring that all washwater drains to a proper collection system (i.e., not the storm water drainage system); treating and/or recycling collected washwater, or other equivalent measures.

8.P.3.1.5 *Vehicle and Equipment Maintenance Areas.* Minimize contamination of storm water runoff from all areas used for vehicle/equipment maintenance. Consider the following (or other equivalent measures): performing maintenance activities indoors; using drip pans; keeping an organized inventory of materials used in the shop; draining all parts of fluid prior to disposal; prohibiting wet clean up practices if these practices would result in the discharge of pollutants to storm water drainage systems; using dry cleanup methods; treating and/or recycling collected storm water runoff, minimizing run on/runoff of storm water to maintenance areas.

8.P.3.1.6 *Locomotive Sanding (Loading Sand for Traction) Areas.* Consider the following (or other equivalent measures): covering sanding areas; minimizing storm water run on/runoff; or appropriate sediment removal practices to minimize the offsite transport of sanding material by storm water.

8.P.3.2 *Employee Training.* (See also Part 2.1.2.9) Train personnel at least once a year and address the following activities, as applicable: used oil and spent solvent management; fueling procedures; general good housekeeping practices; proper painting procedures; and used battery management.

8.P.4 Additional SWPPP Requirements.

8.P.4.1 *Drainage Area Site Map.* (See also Part 5.1.2) Identify in the SWPPP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff: Fueling stations; vehicle/equipment maintenance or cleaning areas; storage areas for vehicle/equipment with actual or potential fluid leaks; loading/unloading areas; areas where treatment, storage or disposal of wastes occur; liquid storage tanks; processing areas; and storage areas.

8.P.4.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Assess the potential for the following activities and facility areas to contribute pollutants to storm water discharges: Onsite waste storage or disposal; dirt/gravel parking areas for vehicles awaiting maintenance; illicit plumbing connections between shop floor drains and the storm water conveyance system(s); and fueling areas. Describe these activities in the SWPPP.

8.P.4.3 *Description of Good Housekeeping Measures.* You must document in your SWPPP the good housekeeping measures you implement consistent with Part 8.P.3.

8.P.4.4 *Vehicle and Equipment Washwater Requirements.* If applicable, attach to or reference in your SWPPP, a copy of the NPDES permit issued for vehicle/equipment washwater or, if an NPDES permit has not been issued, a copy of the pending application. If an industrial user permit is issued under a local pretreatment program, attach a copy to your SWPPP. In any case, implement all non-storm water discharge permit conditions or pretreatment conditions in your SWPPP. If washwater is handled in another manner (e.g., hauled offsite), describe the disposal method and attach all pertinent documentation/information (e.g., frequency, volume, destination, etc.) in the plan.

8.P.5 Additional Inspection Requirements. (See also Part 4.1) Inspect all the following areas/activities: storage areas for vehicles/equipment awaiting maintenance, fueling areas, indoor and outdoor vehicle/equipment maintenance areas, material storage areas, vehicle/equipment cleaning areas and loading/unloading areas.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart Q – Sector Q – Water Transportation.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.Q.1 Covered Storm Water Discharges.

The requirements in Subpart Q apply to storm water discharges associated with industrial activity from Water Transportation facilities as identified by the SIC Codes specified under Sector Q in Table D-1 of Appendix D of the permit.

8.Q.2 Limitations on Coverage.

Prohibition of Non-Storm Water Discharges. (See also Part 1.1.4) Not covered by this permit: bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels.

8.Q.3 Additional Technology-Based Effluent Limits.

8.Q.3.1 *Good Housekeeping Measures.* You must implement the following good housekeeping measures in addition to the requirements of part 2.1.2.2:

8.Q.3.1.1 *Pressure Washing Area.* If pressure washing is used to remove marine growth from vessels, the discharge water must be permitted by a separate NPDES permit. Collect or contain the discharges from the pressures washing area so that they are not co-mingled with storm water discharges authorized by this permit.

8.Q.3.1.2 *Blasting and Painting Area.* Minimize the potential for spent abrasives, paint chips, and overspray to discharge into receiving waters or the storm sewer systems. Consider containing all blasting and painting activities or use other measures to minimize the discharge of contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). When necessary, regularly clean storm water conveyances of deposits of abrasive blasting debris and paint chips.

8.Q.3.1.3 *Material Storage Areas.* Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Minimize the contamination of precipitation or surface runoff from the storage areas. Specify which materials are stored indoors, and consider containment or enclosure for those stored outdoors. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite.

8.Q.3.1.4 *Engine Maintenance and Repair Areas.* Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Consider the following (or their equivalents): performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluid prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and treating and/or recycling storm water runoff collected from the maintenance area.

8.Q.3.1.5 *Material Handling Area*. Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Consider the following (or their equivalents): covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing runoff of storm water to material handling areas.

8.Q.3.1.6 *Drydock Activities*. Routinely maintain and clean the drydock to minimize pollutants in storm water runoff. Address the cleaning of accessible areas of the drydock prior to flooding, and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, and fuel spills occurring on the drydock. Consider the following (or their equivalents): sweeping rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to flooding and making absorbent materials and oil containment booms readily available to clean up or contain any spills.

8.Q.3.2 *Employee Training*. (See also Part 2.1.2.9) As part of your employee training program, address, at a minimum, the following activities (as applicable): used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.

8.Q.3.3 *Preventive Maintenance*. (See also Part 2.1.2.3) As part of your preventive maintenance program, perform timely inspection and maintenance of storm water management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system), as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

8.Q.4 Additional SWPPP Requirements.

8.Q.4.1 *Drainage Area Site Map*. (See also Part 5.1.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance and repair; vessel maintenance and repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; locations used for the treatment, storage, or disposal of wastes; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

8.Q.4.2 *Summary of Potential Pollutant Sources*. (See also Part 5.1.3) Document in the SWPPP the following additional sources and activities that have potential pollutants associated with them: outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting.)

8.Q.5 Additional Inspection Requirements.

(See also Part 4.1) Include the following in all quarterly routine facility inspections: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area.

8.Q.6 Sector-Specific Benchmarks. (See also Part 6 of the permit.) These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector Q1. Water Transportation Facilities (SIC 4412-4499)	Total Lead (freshwater) ²	Hardness Dependent 0.21 mg/L
	Total Lead (saltwater) ¹	
	Total Zinc (freshwater) ²	Hardness Dependent 0.09 mg/L
	Total Zinc (saltwater) ¹	

¹ Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. Hardness Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Lead (mg/L)	Zinc (mg/L)
0-24.99 mg/L	0.014	0.04
25-49.99 mg/L	0.023	0.05
50-74.99 mg/L	0.045	0.08
75-99.99 mg/L	0.069	0.11
100-124.99 mg/L	0.095	0.13
125-149.99 mg/L	0.122	0.16
150-174.99 mg/L	0.151	0.18
175-199.99 mg/L	0.182	0.20
200-224.99 mg/L	0.213	0.23
225-249.99 mg/L	0.246	0.25
250+ mg/L	0.262	0.26

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart R – Sector R – Ship and Boat Building and Repair Yards.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.R.1 Covered Storm Water Discharges.

The requirements in Subpart R apply to storm water discharges associated with industrial activity from Ship and Boat Building and Repair Yards as identified by the SIC Codes specified under Sector R in Table D-1 of Appendix D of the permit.

8.R.2 Limitations on Coverage.

8.R.2.1 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.1.4) Discharges containing bilge and ballast water, sanitary wastes, pressure wash water, and cooling water originating from vessels are not covered by this permit.

8.R.3 Additional Technology-Based Effluent Limits.

8.R.3.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2)

8.R.3.1.1 *Pressure Washing Area.* If pressure washing is used to remove marine growth from vessels, the discharged water must be permitted as a process wastewater by a separate NPDES permit.

8.R.3.1.2 *Blasting and Painting Area.* Minimize the potential for spent abrasives, paint chips, and overspray to discharging into the receiving water or the storm sewer systems. Consider containing all blasting and painting activities, or use other measures to prevent the discharge of the contaminants (e.g., hanging plastic barriers or tarpaulins during blasting or painting operations to contain debris). When necessary, regularly clean storm water conveyances of deposits of abrasive blasting debris and paint chips.

8.R.3.1.3 *Material Storage Areas.* Store and plainly label all containerized materials (e.g., fuels, paints, solvents, waste oil, antifreeze, batteries) in a protected, secure location away from drains. Minimize the contamination of precipitation or surface runoff from the storage areas. If abrasive blasting is performed, discuss the storage and disposal of spent abrasive materials generated at the facility. Consider implementing an inventory control plan to limit the presence of potentially hazardous materials onsite.

8.R.3.1.4 *Engine Maintenance and Repair Areas.* Minimize the contamination of precipitation or surface runoff from all areas used for engine maintenance and repair. Consider the following (or their equivalents): performing all maintenance activities indoors, maintaining an organized inventory of materials used in the shop, draining all parts of fluid prior to disposal, prohibiting the practice of hosing down the shop floor, using dry cleanup methods, and treating and/or recycling storm water runoff collected from the maintenance area.

8.R.3.1.5 *Material Handling Area.* Minimize the contamination of precipitation or surface runoff from material handling operations and areas (e.g., fueling, paint and solvent mixing, disposal of process wastewater streams from vessels). Consider the following (or their

equivalents): covering fueling areas, using spill and overflow protection, mixing paints and solvents in a designated area (preferably indoors or under a shed), and minimizing storm water run-on to material handling areas.

8.R.3.1.6 *Drydock Activities*. Routinely maintain and clean the drydock to minimize pollutants in storm water runoff. Clean accessible areas of the drydock prior to flooding and final cleanup following removal of the vessel and raising the dock. Include procedures for cleaning up oil, grease, or fuel spills occurring on the drydock. Consider the following (or their equivalents): sweeping rather than hosing off debris and spent blasting material from accessible areas of the drydock prior to flooding, and having absorbent materials and oil containment booms readily available to clean up and contain any spills.

8.R.3.2 *Employee Training*. (See also Part 2.1.2.9) As part of your employee training program, address, at a minimum, the following activities (as applicable): used oil management, spent solvent management, disposal of spent abrasives, disposal of vessel wastewaters, spill prevention and control, fueling procedures, general good housekeeping practices, painting and blasting procedures, and used battery management.

8.R.3.3 *Preventive Maintenance*. (See also Part 2.1.2.3) As part of your preventive maintenance program, perform timely inspection and maintenance of storm water management devices (e.g., cleaning oil and water separators and sediment traps to ensure that spent abrasives, paint chips, and solids will be intercepted and retained prior to entering the storm drainage system), as well as inspecting and testing facility equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters.

8.R.4 Additional SWPPP Requirements.

8.R.4.1 *Drainage Area Site Map*. (See also Part 5.1.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: fueling; engine maintenance or repair; vessel maintenance or repair; pressure washing; painting; sanding; blasting; welding; metal fabrication; loading and unloading areas; treatment, storage, and waste disposal areas; liquid storage tanks; liquid storage areas (e.g., paint, solvents, resins); and material storage areas (e.g., blasting media, aluminum, steel, scrap iron).

8.R.4.2 *Potential Pollutant Sources*. (See also Part 5.1.3) Document in your SWPPP the following additional sources and activities that have potential pollutants associated with them (if applicable): outdoor manufacturing or processing activities (e.g., welding, metal fabricating) and significant dust or particulate generating processes (e.g., abrasive blasting, sanding, and painting).

8.R.4.3 *Documentation of Good Housekeeping Measures*. Document in your SWPPP any good housekeeping measures implemented to meet the effluent limits in Part 8.R.3.

8.R.4.3.1 *Blasting and Painting Areas*. Document in the SWPPP any standard operating practices relating to blasting and painting (e.g., prohibiting uncontained blasting and painting over open water or prohibiting blasting and painting during windy conditions, which can render containment ineffective).

8.R.4.3.2 *Storage Areas*. Specify in your SWPPP which materials are stored indoors, and consider containment or enclosure for those stored outdoors.

8.R.5 Additional Inspection Requirements.

(See also Part 4.1) Include the following in all quarterly routine facility inspections: pressure washing area; blasting, sanding, and painting areas; material storage areas; engine maintenance and repair areas; material handling areas; drydock area; and general yard area.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart S – Sector S – Air Transportation.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.S.1 Covered Storm Water Discharges.

The requirements in Subpart S apply to storm water discharges associated with industrial activity from Air Transportation facilities identified by the SIC Codes specified under Sector S in Table D-1 of Appendix D of the permit.

8.S.2 Limitation on Coverage

8.S.2.1 *Limitations on Coverage.* This permit authorizes storm water discharges from only those portions of the air transportation facility that are involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling and lubrication), equipment cleaning operations or deicing operations.

Note: “Deicing” will generally be used to imply both deicing (removing frost, snow or ice) and anti-icing (preventing accumulation of frost, snow or ice) activities, unless specific mention is made regarding anti-icing and/or deicing activities.

8.S.2.2 *Prohibition of Non-Storm Water Discharges.* (See also Part 1.1.4 and Part 8.S.3) This permit does not authorize the discharge of aircraft, ground vehicle, runway and equipment washwaters; nor the dry weather discharge of deicing chemicals. Such discharges must be covered by separate NPDES permit(s). Note that a discharge resulting from snowmelt is not a dry weather discharge.

8.S.3 Multiple Operators at Air Transportation Facilities.

Air transportation facilities often have more than one operator who could discharge stormwater associated with industrial activity. Operators include the airport authority and airport tenants, including air passenger or cargo companies, fixed based operators, and other parties who routinely perform industrial activities on airport property.

8.S.3.1 *Permit Coverage/Submittal of NOIs.* Where an airport transportation facility has multiple industrial operators that discharge stormwater, each individual operator must obtain coverage under an NPDES stormwater permit. To obtain coverage under the IGP, all such operators must meet the eligibility requirements in Part 1 and must submit an NOI, per Part 1.3.1. (or, if appropriate, a no exposure certification per Part 1.5).

8.S.3.2 *IGP Implementation Responsibilities for Airport Authority and Tenants.* The airport authority, in collaboration with its tenants, may choose to implement certain IGP requirements on behalf of its tenants in order to increase efficiency and eliminate redundancy or duplication of effort. Options available to the airport authority and its tenants for implementation of IGP requirements include:

- The airport authority performs certain activities on behalf of itself and its tenants and reports on its activities;
- Tenants provide the airport authority with relevant inputs about tenants' activities, including deicing chemical usage*, and the airport authority compiles and reports on tenants' and its own activities;
- Tenants independently perform, document and submit required information on their activities.

*Tenants who report their deicing chemical usage to the airport authority and rely on the airport authority to perform monitoring should not check the glycol and urea use box on their NOI forms.

8.S.3.3 *SWPPP Requirements.* A single comprehensive SWPPP must be developed for all stormwater discharges associated with industrial activity at the airport before submittal of any NOIs. The comprehensive SWPPP should be developed collaboratively by the airport authority and tenants. If any operator develops a SWPPP for discharges from its own areas of the airport, that SWPPP must be coordinated and integrated with the comprehensive SWPPP. All operators and their separate SWPPP contributions and compliance responsibilities must be clearly identified in the comprehensive SWPPP, which all operators must sign and certify per Part 5.2.7. As applicable, the SWPPP must clearly specify the IGP requirements to be complied with by:

- The airport authority for itself;
- The airport authority on behalf of its tenants;
- Tenants for themselves.

For each activity that an operator (e.g., the airport authority) conducts on behalf of another operator (e.g., a tenant), the SWPPP must describe a process for reporting results to the latter operator and for ensuring appropriate follow-up, if necessary, by all affected operators. This is to ensure all actions are taken to correct any potential deficiencies or permit violations. For example, where the airport authority is conducting monitoring for itself and its tenants, the SWPPP must identify how the airport authority will share the monitoring results with its tenants, and then follow-up with its tenants where there are any exceedances of benchmarks, effluent limits, or water quality standards. In turn, the SWPPP must describe how the tenants will also follow-up to ensure permit compliance.

8.S.3.4 *Duty to Comply.* All individual operators are responsible for implementing their assigned portion of the comprehensive SWPPP, and operators must ensure that their individual activities do not render another operator's stormwater controls ineffective. In addition, the standard permit conditions found in Appendix B apply to each individual operator, including "Duty to Comply" (which states, in part, "You [each individual operator] must comply with all conditions of this permit."). For multiple operators at an airport this means that each individual operator remains responsible for ensuring all requirements of its own IGP coverage are met regardless of whether the comprehensive SWPPP allocates the actual implementation of any of

those responsibilities to another entity. That is, the failure of the entity allocated responsibility in the SWPPP to implement an IGP requirement on behalf of other operators does not negate the other operators' ultimate liability.

8.S.4 Additional Technology-Based Effluent Limits.

8.S.4.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2)

8.S.4.1.1 Aircraft, Ground Vehicle and Equipment Maintenance Areas. Minimize the contamination of storm water runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangars). Consider the following practices (or their equivalents): performing maintenance activities indoors; maintaining an organized inventory of material used in the maintenance areas; draining all parts of fluids prior to disposal; prohibiting the practice of hosing down the apron or hanger floor; using dry cleanup methods; and collecting the storm water runoff from the maintenance area and providing treatment or recycling.

8.S.4.1.2 Aircraft, Ground Vehicle and Equipment Cleaning Areas. Clearly demarcate these areas on the ground using signage or other appropriate means. Minimize the contamination of storm water runoff from cleaning areas.

8.S.4.1.3 Aircraft, Ground Vehicle and Equipment Storage Areas. Store all aircraft, ground vehicles and equipment awaiting maintenance in designated areas only and minimize the contamination of storm water runoff from these storage areas. Consider the following control measures, including any BMPs (or their equivalents): storing aircraft and ground vehicles indoors; using drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding the storage areas.

8.S.4.1.4 Material Storage Areas. Maintain the vessels of stored materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) in good condition, to prevent or minimize contamination of storm water. Also plainly label the vessels (e.g., "used oil," "Contaminated Jet A," etc.). Minimize contamination of precipitation/runoff from these areas. Consider the following control measures (or their equivalents): storing materials indoors; storing waste materials in a centralized location; and installing berms/dikes around storage areas.

8.S.4.1.5 Airport Fuel System and Fueling Areas. Minimize the discharge of fuel to the storm sewer/surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. Consider the following control measures (or their equivalents): implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using only dry cleanup methods; and collecting storm water runoff.

8.S.4.1.6 Source Reduction. Minimize, and where feasible eliminate, the use of urea and glycol-based deicing chemicals, in order to reduce the aggregate amount of deicing chemicals used and/or lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; and anhydrous sodium acetate.

8.S.4.1.6.1 Runway Deicing Operation: Minimize contamination of storm water runoff from runways as a result of deicing operations. Evaluate whether over-application of deicing chemicals occurs by analyzing application rates, and adjust as necessary, consistent with considerations of flight safety. Also consider these control measure options (or their equivalents): metered application of chemicals; pre-wetting dry chemical constituents prior to

application; installing a runway ice detection system; implementing anti-icing operations as a preventive measure against ice buildup.

8.S.4.1.6.2 Aircraft Deicing Operations. Minimize contamination of storm water runoff from aircraft deicing operations. Determine whether excessive application of deicing chemicals occurs and adjust as necessary, consistent with considerations of flight safety. This evaluation should be carried out by the personnel most familiar with the particular aircraft and flight operations in question (versus an outside entity such as the airport authority). Consider using alternative deicing/anti-icing agents as well as containment measures for all applied chemicals. Also consider these control measure options (or their equivalents) for reducing deicing fluid use: forced-air deicing systems, computer-controlled fixed-gantry systems, infrared technology, hot water, varying glycol content to air temperature, enclosed-basket deicing trucks, mechanical methods, solar radiation, hangar storage, aircraft covers, and thermal blankets for MD-80s and DC-9s. Also consider using ice-detection systems and airport traffic flow strategies and departure slot allocation systems.

8.S.4.1.7 Management of Runoff. (See also 2.1.2.6) Where deicing operations occur, implement a program to control or manage contaminated runoff to minimize the amount of pollutants being discharged from the site. Consider these control measure options (or their equivalents): a dedicated deicing facility with a runoff collection/ recovery system; using vacuum/collection trucks; storing contaminated storm water/deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works; collecting contaminated runoff in a wet pond for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations); and directing runoff into vegetative swales or other infiltration measures. Also consider recovering deicing materials when these materials are applied during non-precipitation events (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of storm water contamination. Used deicing fluid should be recycled whenever possible.

8.S.4.2 *Deicing Season.* You must determine the seasonal timeframe (e.g., December-February, October - March, etc.) during which deicing activities typically occur at the facility. Implementation of control measures, including any BMP, facility inspections and monitoring must be conducted with particular emphasis throughout the defined deicing season. If you meet the deicing chemical usage thresholds of 100,000 gallons glycol and/or 100 tons of urea, the deicing season you identified is the timeframe during which you must obtain the four required benchmark monitoring-event results for deicing-related parameters, i.e., BOD, COD, ammonia, and pH. See also Part 8.S.6.

8.S.5 Additional SWPPP Requirements.

An airport authority and tenants of the airport are encouraged to work in partnership in the development of a SWPPP. If an airport tenant obtains authorization under this permit and develops a SWPPP for discharges from his own areas of the airport, prior to authorization, that SWPPP must be coordinated and integrated with the SWPPP for the entire airport. Tenants of the airport facility include air passenger or cargo companies, fixed based operators and other parties who have contracts with the airport authority to conduct business operations on airport property and whose operations result in storm water discharges associated with industrial activity.

8.S.5.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in the SWPPP the following areas of the facility and indicate whether activities occurring there may be exposed to precipitation/surface runoff: aircraft and runway deicing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; storage areas for aircraft, ground vehicles and equipment awaiting maintenance.

8.S.5.2 *Potential Pollutant Sources.* (See also Part 5.1.3) In your inventory of exposed materials, describe in your SWPPP the potential for the following activities and facility areas to contribute pollutants to storm water discharges: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing operations (including apron and centralized aircraft deicing stations, runways, taxiways and ramps). If you use deicing chemicals, you must maintain a record of the types (including the Safety Data Sheets [SDS]) used and the monthly quantities, either as measured or, in the absence of metering, as estimated to the best of your knowledge. This includes all deicing chemicals, not just glycols and urea (e.g., potassium acetate), because large quantities of these other chemicals can still have an adverse impact on receiving waters. Tenants or other fixed-based operations that conduct deicing operations must provide the above information to the airport authority for inclusion with any comprehensive airport SWPPPs.

8.S.5.3 *Vehicle and Equipment Washwater Requirements.* Attach to or reference in your SWPPP, a copy of the NPDES permit issued for vehicle/equipment washwater or, if an NPDES permit has not been issued, a copy of the pending application. If an industrial user permit is issued under a local pretreatment program, include a copy in your SWPPP. In any case, if you are subject to another permit, describe your control measures for implementing all non-storm water discharge permit conditions or pretreatment requirements in your SWPPP. If washwater is handled in another manner (e.g., hauled offsite, retained onsite), describe the disposal method and attach all pertinent documentation/information (e.g., frequency, volume, destination, etc.) in your SWPPP.

8.S.5.4 *Documentation of Control Measures Used for Management of Runoff:* Document in your SWPPP the control measures used for collecting or containing contaminated melt water from collection areas used for disposal of contaminated snow.

8.S.6 Additional Inspection Requirements.

8.S.6.1 *Inspections.* (See also Part 4.1) At a minimum conduct routine facility inspections at least monthly during the deicing season (e.g., October through April for most mid-latitude airports). If your facility needs to deice before or after this period, expand the monthly inspections to include all months during which deicing chemicals may be used. The Department may specifically require you to increase inspection frequencies.

8.S.6.2 *Comprehensive Site Inspections.* (See also Part 4.3) Using only qualified personnel, conduct your annual site inspection during periods of actual deicing operations, if possible. If not practicable during active deicing because of weather, conduct the inspection during the season when deicing operations occur and the materials and equipment for deicing are in place.

8.S.7 Sector-Specific Benchmarks. (See also Part 6 of the permit.)

Monitor per the requirements in Table 8.S-1. These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Table 8.S-1.		
Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
For airports where a single permittee, or a combination of permitted facilities use more than 100,000 gallons of glycol in glycol-based deicing fluids and/or 100 tons or more of urea on an average annual basis, monitor the first four parameters in ONLY those outfalls that collect runoff from areas where deicing activities occur (SIC 4512-4581).	Biochemical Oxygen Demand (BOD ₅) ¹	30 mg/L
	Chemical Oxygen Demand (COD) ¹	120 mg/L
	Ammonia ¹	2.14 mg/L
	pH ¹	6.0 - 9.0 s.u.

¹ These are deicing-related parameters. Collect the four benchmark samples, and any required follow-up benchmark samples, during the timeframe defined in Part 8.S.3.2 when deicing activities are occurring.

8.S.8 Effluent Limitations Based on Effluent Limitations Guidelines and New Source Performance Standards. (See also Part 6.2.2.1 of this permit.)

8.S.8.1 *Airfield Pavement Deicing.* For both existing and new “primary airports” (as defined at 40 CFR 449.2) with 1,000 or more annual non-propeller aircraft departures that discharge stormwater from airfield pavement deicing activities, there shall be no discharge of airfield pavement deicers containing urea. To comply with this limitation, such airports must do one of the following: (1) certify annually on the annual report that you do not use pavement deicers containing urea, or (2) meet the effluent limitation in Table 8.S-2.

8.S.8.2 *Aircraft Deicing.* Airports that are both “primary airports” (as defined at 40 CFR 449.2) and new sources (“new airports”) with 1,000 or more annual non-propeller aircraft departures must meet the applicable requirements for aircraft deicing at 40 CFR 449.11(a). Discharges of the collected aircraft deicing fluid directly to Waters of the U.S. or Waters of the State are not eligible for coverage under this permit.

8.S.8.3 *Monitoring, Reporting and Recordkeeping.* For new and existing airports subject to the effluent limitations in Part 8.S.8.1 or 8.S.8.2 of this permit, you must comply with the applicable monitoring, reporting and recordkeeping requirements outlined in 40 CFR 449.20.

Table 8.S-2		
Industrial Activity	Parameter	Effluent Limitation
Runoff containing urea from airfield pavement deicing at existing and new primary airports with 1,000 or more annual non-propeller aircraft departures	Ammonia as Nitrogen	14.7 mg/L, daily maximum

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart T – Sector T – Treatment Works.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.T.1 Covered Storm Water Discharges.

The requirements in Subpart T apply to storm water discharges associated with industrial activity from Treatment Works as identified by the Activity Code specified under Sector T in Table D-1 of Appendix D of the permit.

8.T.2 Industrial Activities Covered by Sector T.

The requirements listed under this part apply to all existing point source storm water discharges associated with the following activities:

8.T.2.1 Treatment works treating domestic sewage, or any other sewage sludge or wastewater treatment device or system used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge; that are located within the confines of a facility with a design flow of 1.0 million gallons per day (MGD) or more; or are required to have an approved pretreatment program under 40 CFR Part 403.

8.T.2.2 The following are not required to have permit coverage: farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located within the facility, or areas that are in compliance with Section 405 of the CWA.

8.T.3 Limitations on Coverage.

Prohibition of Non-Storm Water Discharges. (See also Part 1.1.4) Sanitary and industrial wastewater and equipment and vehicle washwater are not authorized by this permit.

8.T.4 Additional Technology-Based Effluent Limits.

8.T.4.1 *Control Measures.* (See also the non-numeric effluent limits in Part 2.1.2) In addition to the other control measures, consider the following: routing storm water to the treatment works; or covering exposed materials (i.e., from the following areas: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station).

8.T.4.2 *Employee Training.* (See also Part 2.1.2.9) At a minimum, training must address the following areas when applicable to a facility: petroleum product management; process chemical management; spill prevention and controls; fueling procedures; general good housekeeping practices; and proper procedures for using fertilizer, herbicides, and pesticides.

8.T.5 Additional SWPPP Requirements.

8.T.5.1 *Site Map.* (See also Part 5.1.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and storage areas for process chemicals, petroleum products, solvents, fertilizers, herbicides, and pesticides.

8.T.5.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in your SWPPP the following additional sources and activities that have potential pollutants associated with them, as applicable: grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; septage or hauled waste receiving station; and access roads and rail lines.

8.T.5.3 *Wastewater and Washwater Requirements.* Keep a copy of all your current NPDES permits issued for wastewater and industrial, vehicle and equipment washwater discharges or, if an NPDES permit has not yet been issued, a copy of the pending application(s) with your SWPPP. If the washwater is handled in another manner, the disposal method must be described and all pertinent documentation must be retained onsite.

8.T.6 Additional Inspection Requirements.

(See also Part 4.1) Include the following areas in all inspections: access roads and rail lines; grit, screenings, and other solids handling, storage, or disposal areas; sludge drying beds; dried sludge piles; compost piles; and septage or hauled waste receiving station.

8.T.7 Sector-Specific Benchmarks. (See also Part 6 of the permit.) These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Table 8.T-1.		
Subsector (You may be subject to requirements for more than one Sector / Subsector)	Parameter/Receiving Water Classification¹	Benchmark Monitoring Concentration
Subsector T1. Treatment works (Activity Code TW)	E. coli (Freshwater)	349 MPN/100 mL
	Fecal coliform (Shellfish Harvesting)	43 MPN/100 mL
	Enterococci (Shellfish Harvesting, SA)	104 MPN/100 mL
	Enterococci (SB)	501 MPN/100 mL

¹ Trout Waters (TN, TPGT, TPT) are considered Freshwater. Outstanding Resource Waters (ORW) and Outstanding Natural Resource Waters (ONRW) are considered the classification prior to reclassification. For ONRW reference 2.2.3.b. of this permit.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart U – Sector U – Food and Kindred Products.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.U.1 Covered Storm Water Discharges.

The requirements in Subpart U apply to storm water discharges associated with industrial activity from Food and Kindred Products facilities as identified by the SIC Codes specified in Table D-1 of Appendix D of the permit.

8.U.2 Limitations on Coverage.

Prohibition of Non-Storm Water Discharges. (See also Part 1.1.4) The following discharges are not authorized by this permit: discharges containing boiler blowdown, cooling tower overflow and blowdown, ammonia refrigeration purging, and vehicle washing and clean-out operations.

8.U.3 Additional Technology-Based Limitations.

Employee Training. (See also Part 2.1.2.9) Address pest control in your employee training program.

8.U.4 Additional SWPPP Requirements.

8.U.4.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in your SWPPP the locations of the following activities if they are exposed to precipitation or runoff: vents and stacks from cooking, drying, and similar operations; dry product vacuum transfer lines; animal holding pens; spoiled product; and broken product container storage areas.

8.U.4.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in your SWPPP, in addition to food and kindred products processing-related industrial activities, application and storage of pest control chemicals (e.g., rodenticides, insecticides, fungicides) used on plant grounds.

8.U.5 Additional Inspection Requirements.

(See also Part 4.1) Inspect on a quarterly basis, at a minimum, the following areas where the potential for exposure to storm water exists: loading and unloading areas for all significant materials; storage areas, including associated containment areas; waste management units; vents and stacks emanating from industrial activities; spoiled product and broken product container holding areas; animal holding pens; staging areas; and air pollution control equipment.

8.U.6 Sector-Specific Benchmarks. (See also Part 6 of the permit.) These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Table 8.U-1.		
Subsector (You may be subject to requirements for more than one Sector / Subsector)	Parameter or Parameter/Receiving Water Classification¹	Benchmark Monitoring Concentration
Subsector U1. Grain Mill Products (SIC 2041-2048)	Total Suspended Solids (TSS)	100 mg/L
Subsector U2. Fats and Oils Products (SIC 2074-2079)	Biochemical Oxygen Demand (BOD ₅)	30 mg/L
	Chemical Oxygen Demand (COD)	120 mg/L
	Nitrate plus Nitrite Nitrogen	0.68 mg/L
	Total Suspended Solids (TSS)	100 mg/L
Subsector U3. Meat products - only facilities which kill animals (SIC codes 2011 - 2015)	E. coli (Freshwater)	349 MPN/100 mL
	Fecal coliform (Shellfish Harvesting)	43 MPN/100 mL
	Enterococci (Shellfish Harvesting, SA)	104 MPN/100 mL
	Enterococci (SB)	501 MPN/100 mL

¹ Trout Waters (TN, TPGT, TPT) are considered Freshwater. Outstanding Resource Waters (ORW) and Outstanding Natural Resource Waters (ONRW) are considered the classification prior to reclassification. For ONRW reference 2.2.3.b. of this permit.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart V – Sector V – Textile Mills, Apparel, and Other Fabric Products.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.V.1 Covered Storm Water Discharges.

The requirements in Subpart V apply to storm water discharges associated with industrial activity from Textile Mills, Apparel, and Other Fabric Product manufacturing as identified by the SIC Codes specified under Sector V in Table D-1 of Appendix D of the permit.

8.V.2 Limitations on Coverage.

Prohibition of Non-Storm Water Discharges. (See also Part 1.1.4) The following are not authorized by this permit: discharges of wastewater (e.g., wastewater resulting from wet processing or from any processes relating to the production process), reused or recycled water, and waters used in cooling towers. If you have these types of discharges from your facility, you must cover them under a separate NPDES permit.

8.V.3 Additional Technology-Based Limitations.

8.V.3.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2)

8.V.3.1.1 *Material Storage Areas.* Plainly label and store all containerized materials (e.g., fuels, petroleum products, solvents, and dyes) in a protected area, away from drains. Minimize contamination of the storm water runoff from such storage areas. Also consider an inventory control plan to prevent excessive purchasing of potentially hazardous substances. For storing empty chemical drums or containers, ensure that the drums and containers are clean (consider triple-rinsing) and that there is no contact of residuals with precipitation or runoff. Collect and dispose of washwater from these cleanings properly.

8.V.3.1.2 *Material Handling Areas.* Minimize contamination of storm water runoff from material handling operations and areas. Consider the following (or their equivalents): use of spill and overflow protection; covering fueling areas; and covering or enclosing areas where the transfer of material may occur. When applicable, address the replacement or repair of leaking connections, valves, transfer lines, and pipes that may carry chemicals, dyes, or wastewater.

8.V.3.1.3 *Fueling Areas.* Minimize contamination of storm water runoff from fueling areas. Consider the following (or their equivalents): covering the fueling area, using spill and overflow protection, minimizing run-on of storm water to the fueling areas, using dry cleanup methods, and treating and/or recycling storm water runoff collected from the fueling area.

8.V.3.1.4 *Above-Ground Storage Tank Area.* Minimize contamination of the storm water runoff from above-ground storage tank areas, including the associated piping and valves. Consider the following (or their equivalents): regular cleanup of these areas; including measures for tanks, piping and valves explicitly in your SPCC program; minimizing runoff of storm water from adjacent areas; restricting access to the area; inserting filters in adjacent catch basins;

providing absorbent booms in unbermed fueling areas; using dry cleanup methods; and permanently sealing drains within critical areas that may discharge to a storm drain.

8.V.3.2 *Employee Training.* (See also Part 2.1.2.9) As part of your employee training program, address, at a minimum, the following activities (as applicable): use of reused and recycled waters, solvents management, proper disposal of dyes, proper disposal of petroleum products and spent lubricants, spill prevention and control, fueling procedures, and general good housekeeping practices.

8.V.4 Additional SWPPP Requirements.

8.V.4.1 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in your SWPPP the following additional sources and activities that have potential pollutants associated with them: industry-specific significant materials and industrial activities (e.g., backwinding, beaming, bleaching, backing bonding, carbonizing, carding, cut and sew operations, desizing, drawing, dyeing locking, fulling, knitting, mercerizing, opening, packing, plying, scouring, slashing, spinning, synthetic-felt processing, textile waste processing, tufting, turning, weaving, web forming, winging, yarn spinning, and yarn texturing).

8.V.4.2 *Description of Good Housekeeping Measures for Material Storage Areas.* Document in the SWPPP your containment area or enclosure for materials stored outdoors in connection with Part 8.V.3.1.1 above.

8.V.5 Additional Inspection Requirements.

(See also Part 4.1) Inspect, at least monthly, the following activities and areas (at a minimum): transfer and transmission lines, spill prevention, good housekeeping practices, management of process waste products, and all structural and nonstructural management practices.

8.V.6 Sector-Specific Benchmarks. (See also Part 6 of the permit.) These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Subsector (You may be subject to requirements for more than one Sector / Subsector)	Parameter/ Receiving Water Classification ¹	Benchmark Monitoring Concentration
Subsector V1. Wool Scouring plants (SIC Code 2299); Leather products - facilities handling raw hides only (SIC codes 3131 – 3199)	E. coli (Freshwater)	349 MPN/100 mL
	Fecal coliform (Shellfish Harvesting)	43 MPN/100 mL
	Enterococci (Shellfish Harvesting, SA)	104 MPN/100 mL
	Enterococci (SB)	501 MPN/100 mL

¹ Trout Waters (TN, TPGT, TPT) are considered Freshwater. Outstanding Resource Waters (ORW) and Outstanding Natural Resource Waters (ONRW) are considered the classification prior to reclassification. For ONRW reference 2.2.3.b. of this permit

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart W – Sector W – Furniture and Fixtures.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.W.1 Covered Storm Water Discharges.

The requirements in Subpart W apply to storm water discharges associated with industrial activity from Furniture and Fixtures facilities as identified by the SIC Codes specified under Sector W in Table D-1 of Appendix D of the permit.

8.W.2 Additional SWPPP Requirements.

Drainage Area Site Map. (See also Part 5.1.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: material storage (including tanks or other vessels used for liquid or waste storage) areas; outdoor material processing areas; areas where wastes are treated, stored, or disposed of; access roads; and rail spurs.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart X – Sector X – Printing and Publishing.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.X.1 Covered Storm Water Discharges.

The requirements in Subpart X apply to storm water discharges associated with industrial activity from Printing and Publishing facilities as identified by the SIC Codes specified under Sector X in Table D-1 of Appendix D of the permit.

8.X.2 Additional Technology-Based Effluent Limits.

8.X.2.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2)

8.X.2.1.1 *Material Storage Areas.* Plainly label and store all containerized materials (e.g., skids, pallets, solvents, bulk inks, hazardous waste, empty drums, portable and mobile containers of plant debris, wood crates, steel racks, and fuel oil) in a protected area, away from drains. Minimize contamination of the storm water runoff from such storage areas. Also consider an inventory control plan to prevent excessive purchasing of potentially hazardous substances.

8.X.2.1.2 *Material Handling Area.* Minimize contamination of storm water runoff from material handling operations and areas (e.g., blanket wash, mixing solvents, loading and unloading materials). Consider the following (or their equivalents): using spill and overflow protection, covering fueling areas, and covering or enclosing areas where the transfer of materials may occur. When applicable, address the replacement or repair of leaking connections, valves, transfer lines, and pipes that may carry chemicals or wastewater.

8.X.2.1.3 *Fueling Areas.* Minimize contamination of storm water runoff from fueling areas. Consider the following (or their equivalents): covering the fueling area, using spill and overflow protection, minimizing runoff of storm water to the fueling areas, using dry cleanup methods, and treating and/or recycling storm water runoff collected from the fueling area.

8.X.2.1.4 *Above Ground Storage Tank Area.* Minimize contamination of the storm water runoff from above-ground storage tank areas, including the associated piping and valves. Consider the following (or their equivalents): regularly cleaning these areas, explicitly addressing tanks, piping and valves in the SPCC program, minimizing storm water runoff from adjacent areas, restricting access to the area, inserting filters in adjacent catch basins, providing absorbent booms in unbermed fueling areas, using dry cleanup methods, and permanently sealing drains within critical areas that may discharge to a storm drain.

8.X.2.2 *Employee Training.* (See also Part 2.1.2.9) As part of your employee training program, address, at a minimum, the following activities (as applicable): spent solvent management, spill prevention and control, used oil management, fueling procedures, and general good housekeeping practices.

8.X.3 Additional SWPPP Requirements.

Description of Good Housekeeping Measures for Material Storage Areas. In connection with Part 8.X.2.1.1, describe in the SWPPP the containment area or enclosure for materials stored outdoors.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart Y – Sector Y – Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.Y.1 Covered Storm Water Discharges.

The requirements in Subpart Y apply to storm water discharges associated with industrial activity from Rubber, Miscellaneous Plastic Products, and Miscellaneous Manufacturing Industries facilities as identified by the SIC Codes specified under Sector Y in Table D-1 of Appendix D of the permit.

8.Y.2 Additional Technology-Based Effluent Limits.

8.Y.2.1 *Controls for Rubber Manufacturers.* (See also Part 2.1.2) Minimize the discharge of zinc in your storm water discharges. Parts 8.Y.2.1.1 to 8.Y.2.1.5 give possible sources of zinc to be reviewed and list some specific control measures to be considered for implementation (or their equivalents). Following are some general control measure options to consider: using chemicals purchased in pre-weighed, sealed polyethylene bags; storing in-use materials in sealable containers, ensuring an airspace between the container and the cover to minimize “puffing” losses when the container is opened, and using automatic dispensing and weighing equipment.

8.Y.2.1.1 *Zinc Bags.* Ensure proper handling and storage of zinc bags at your facility. Following are some control measure options: employee training on the handling and storage of zinc bags, indoor storage of zinc bags, cleanup of zinc spills without washing the zinc into the storm drain, and the use of 2,500-pound sacks of zinc rather than 50- to 100-pound sacks.

8.Y.2.1.2 *Dumpsters.* Minimize discharges of zinc from dumpsters. Following are some control measure options: covering the dumpster, moving the dumpster indoors, or providing a lining for the dumpster.

8.Y.2.1.3 *Dust Collectors and Baghouses.* Minimize contributions of zinc to storm water from dust collectors and baghouses. Replace or repair, as appropriate, improperly operating dust collectors and baghouses.

8.Y.2.1.4 *Grinding Operations.* Minimize contamination of storm water as a result of dust generation from rubber grinding operations. One control measure option is to install a dust collection system.

8.Y.2.1.5 *Zinc Stearate Coating Operations.* Minimize the potential for storm water contamination from drips and spills of zinc stearate slurry that may be released to the storm drain. One control measure option is to use alternative compounds to zinc stearate.

8.Y.2.2 *Controls for Plastic Products Manufacturers.* Minimize the discharge of plastic resin pellets in your storm water discharges. Control measures to be considered for implementation

(or their equivalents) include minimizing spills, cleaning up of spills promptly and thoroughly, sweeping thoroughly, pellet capturing, employee education, and disposal precautions.

8.Y.3 Additional SWPPP Requirements.

Potential Pollutant Sources for Rubber Manufacturers. (See also Part 5.1.3) Document in your SWPPP the use of zinc at your facility and the possible pathways through which zinc may be discharged in storm water runoff.

8.Y.4 Sector-Specific Benchmarks. (See also Part 6 of the permit.) These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector Y. Rubber Products Manufacturing (SIC 3011, 3021, 3052, 3053, 3061, 3069)	Total Zinc (freshwater) ² Total Zinc (saltwater) ¹	Hardness Dependent 0.09 mg/L

¹ Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The freshwater benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. Hardness Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Zinc (mg/L)
0-24.99 mg/L	0.04
25-49.99 mg/L	0.05
50-74.99 mg/L	0.08
75-99.99 mg/L	0.11
100-124.99 mg/L	0.13
125-149.99 mg/L	0.16
150-174.99 mg/L	0.18
175-199.99 mg/L	0.20
200-224.99 mg/L	0.23
225-249.99 mg/L	0.25
250+ mg/L	0.26

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart Z – Sector Z – Leather Tanning and Finishing.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.Z.1 Covered Storm Water Discharges.

The requirements in Subpart Z apply to storm water discharges associated with industrial activity from Leather Tanning and Finishing facilities as identified by the SIC Code specified under Sector Z in Table D-1 of Appendix D of the permit.

8.Z.2 Additional Technology-Based Effluent Limits.

8.Z.2.3 *Good Housekeeping Measures.* (See also Part 2.1.2.2)

8.Z.2.3.1 *Storage Areas for Raw, Semiprocessed, or Finished Tannery By-products.* Minimize contamination of storm water runoff from pallets and bales of raw, semiprocessed, or finished tannery by-products (e.g., splits, trimmings, shavings). Consider indoor storage or protection with polyethylene wrapping, tarpaulins, roofed storage, etc. Consider placing materials on an impermeable surface and enclosing or putting berms (or equivalent measures) around the area to prevent storm water run-on and runoff.

8.Z.2.3.2 *Material Storage Areas.* Label storage containers of all materials (e.g., specific chemicals, hazardous materials, spent solvents, waste materials) minimize contact of such materials with storm water.

8.Z.2.3.3 *Buffing and Shaving Areas.* Minimize contamination of storm water runoff with leather dust from buffing and shaving areas. Consider dust collection enclosures, preventive inspection and maintenance programs, or other appropriate preventive measures.

8.Z.2.3.4 *Receiving, Unloading, and Storage Areas.* Minimize contamination of storm water runoff from receiving, unloading, and storage areas. If these areas are exposed, consider the following (or their equivalents): covering all hides and chemical supplies, diverting drainage to the process sewer, or grade berming or curbing the area to prevent storm water runoff.

8.Z.2.3.5 *Outdoor Storage of Contaminated Equipment.* Minimize contact of storm water with contaminated equipment. Consider the following (or their equivalents): covering equipment, diverting drainage to the process sewer, and cleaning thoroughly prior to storage.

8.Z.2.3.6 *Waste Management.* Minimize contamination of storm water runoff from waste storage areas. Consider the following (or their equivalents): covering dumpsters, moving waste management activities indoors, covering waste piles with temporary covering material such as tarpaulins or polyethylene, and minimizing storm water runoff by enclosing the area or building berms around the area.

8.Z.3 Additional SWPPP Requirements.

8.Z.3.1 *Drainage Area Site Map.* (See also Part 5.1.2) Identify in your SWPPP where any of the following may be exposed to precipitation or surface runoff: processing and storage areas of the beamhouse, tanyard, and re-tan wet finishing and dry finishing operations.

8.Z.3.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in your SWPPP the following sources and activities that have potential pollutants associated with them (as appropriate): temporary or permanent storage of fresh and brine-cured hides; extraneous hide substances and hair; leather dust, scraps, trimmings, and shavings.

8.Z.4 **Sector-Specific Benchmarks.** (See also Part 6 of the permit.) These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Subsector (Discharges may be subject to requirements for more than one sector/subsector)	Parameter/ Receiving Water Classification¹	Benchmark Monitoring Concentration_s
Subsector Z1. Leather Tanning and Finishing (SIC 3111)	E. coli (Freshwater)	349 MPN/100 mL
	Fecal coliform (Shellfish Harvesting)	43 MPN/100 mL
	Enterococci (Shellfish Harvesting, SA)	104 MPN/100 mL
	Enterococci (SB)	501 MPN/100 mL

¹ Trout Waters (TN, TPGT, TPT) are considered Freshwater. Outstanding Resource Waters (ORW) and Outstanding Natural Resource Waters (ONRW) are considered the classification prior to reclassification. For ONRW reference 2.2.3.b. of this permit.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart AA – Sector AA – Fabricated Metal Products

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.AA.1 Covered Storm Water Discharges.

The requirements in Subpart AA apply to storm water discharges associated with industrial activity from Fabricated Metal Products facilities as identified by the SIC Codes specified under Sector AA in Table D-1 of Appendix D of the permit.

8.AA.2 Additional Technology-Based Effluent Limits.

8.AA.2.1 *Good Housekeeping Measures.* (See also Part 2.1.2.2)

8.AA.2.1.1 *Raw Steel Handling Storage.* Minimize the generation of and/or recover and properly manage scrap metals, fines, and iron dust. Include measures for containing materials within storage handling areas.

8.AA.2.1.2 *Paints and Painting Equipment.* Minimize exposure of paint and painting equipment to storm water.

8.AA.2.2 *Spill Prevention and Response Procedures.* (See also Part 2.1.2.4) Ensure that the necessary equipment to implement a cleanup is available to personnel. The following areas should be addressed

8.AA.2.2.1 *Metal Fabricating Areas.* Maintain clean, dry, orderly conditions in these areas. Consider using dry clean-up techniques.

8.AA.2.2.2 *Storage Areas for Raw Metal.* Keep these areas free of conditions that could cause, or impede appropriate and timely response to, spills or leakage of materials. Consider the following (or their equivalents): maintaining storage areas so that there is easy access in the event of a spill, and labeling stored materials to aid in identifying spill contents.

8.AA.2.2.3 *Metal Working Fluid Storage Areas.* Minimize the potential for storm water contamination from storage areas for metal working fluids.

8.AA.2.2.4 *Cleaners and Rinse Water.* Control and clean up spills of solvents and other liquid cleaners, control sand buildup and disbursement from sand-blasting operations, and prevent exposure of recyclable wastes. Substitute environmentally benign cleaners when possible.

8.AA.2.2.5 *Lubricating Oil and Hydraulic Fluid Operations.* Minimize the potential for storm water contamination from lubricating oil and hydraulic fluid operations. Consider using monitoring equipment or other devices to detect and control leaks and overflows. Consider installing perimeter controls such as dikes, curbs, grass filter strips, or equivalent measures.

8.AA.2.2.6 *Chemical Storage Areas.* Minimize storm water contamination and accidental spillage in chemical storage areas. Include a program to inspect containers and identify proper disposal methods.

8.AA.2.3 *Spills and Leaks.* (See also Part 5.1.3.3) In your spill prevention and response procedures, required by Part 2.1.2.4, pay attention to the following materials (at a minimum): chromium, toluene, pickle liquor, sulfuric acid, zinc and other water priority chemicals, and hazardous chemicals and wastes.

8.AA.3 Additional SWPPP Requirements.

8.AA.3.1 *Drainage Area Site Map.* (See also Part 5.1.2) Document in your SWPPP where any of the following may be exposed to precipitation or surface runoff: raw metal storage areas; finished metal storage areas; scrap disposal collection sites; equipment storage areas; retention and detention basins; temporary and permanent diversion dikes or berms; right-of-way or perimeter diversion devices; sediment traps and barriers; processing areas, including outside painting areas; wood preparation; recycling; and raw material storage.

8.AA.3.2 *Potential Pollutant Sources.* (See also Part 5.1.3) Document in your SWPPP the following additional sources and activities that have potential pollutants associated with them: loading and unloading operations for paints, chemicals, and raw materials; outdoor storage activities for raw materials, paints, empty containers, corn cobs, chemicals, and scrap metals; outdoor manufacturing or processing activities such as grinding, cutting, degreasing, buffing, and brazing; onsite waste disposal practices for spent solvents, sludge, pickling baths, shavings, ingot pieces, and refuse and waste piles.

8.AA.4 Additional Inspection Requirements

8.AA.4.1 *Inspections.* (See also Part 4) At a minimum, include the following areas in all inspections: raw metal storage areas, finished product storage areas, material and chemical storage areas, recycling areas, loading and unloading areas, equipment storage areas, paint areas, and vehicle fueling and maintenance areas.

8.AA.4.2 *Comprehensive Site Inspections.* (See also Part 4.3) As part of your inspection, also inspect areas associated with the storage of raw metals, spent solvents and chemicals storage areas, outdoor paint areas, and drainage from roof. Potential pollutants include chromium, zinc, lubricating oil, solvents, aluminum, oil and grease, methyl ethyl ketone, steel, and related materials.

8.AA.5 Sector-Specific Benchmarks. (See also Part 6 of the permit.) These benchmarks apply to each of your outfalls whether described by your primary industrial activity, any applicable co-located industrial activities, or both.

Subsector (You may be subject to requirements for more than one sector/subsector)	Parameter	Benchmark Monitoring Concentration
Subsector AA1. Fabricated Metal Products, (SIC 3411-3499; 3911-3915)	Total Zinc (freshwater) ²	Hardness Dependent 0.09 mg/L
	Total Zinc (saltwater) ¹	
	Nitrate plus Nitrite Nitrogen	0.68 mg/L
Subsector AA2. Fabricated Metal Coating and Engraving (SIC 3479)	Total Zinc (freshwater) ²	Hardness Dependent 0.09 mg/L
	Total Zinc (saltwater) ¹	
	Nitrate plus Nitrite Nitrogen	0.68 mg/L

¹Saltwater benchmark values apply to stormwater discharges into saline waters where indicated.

² The benchmark values of some metals are dependent on water hardness. For these parameters, permittees must determine the hardness of the receiving water (see Appendix J, "Calculating Hardness in Receiving Waters for Hardness Dependent Metals," for methodology), in accordance with Part 6.2.1.1, to identify the applicable 'hardness range' for determining their benchmark value applicable to their facility. The ranges occur in 25 mg/L increments. Hardness Dependent Benchmarks follow in the table below:

Freshwater Hardness Range	Zinc (mg/L)
0-24.99 mg/L	0.04
25-49.99 mg/L	0.05
50-74.99 mg/L	0.08
75-99.99 mg/L	0.11
100-124.99 mg/L	0.13
125-149.99 mg/L	0.16
150-174.99 mg/L	0.18
175-199.99 mg/L	0.20
200-224.99 mg/L	0.23
225-249.99 mg/L	0.25
250+ mg/L	0.26

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart AB – Sector AB – Transportation Equipment, Industrial or Commercial Machinery Facilities.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.AB.1 Covered Storm Water Discharges.

The requirements in Subpart AB apply to storm water discharges associated with industrial activity from Transportation Equipment, Industrial or Commercial Machinery facilities as identified by the SIC Codes specified under Sector AB in Table D-1 of Appendix D of the permit.

8.AB.2 Additional SWPPP Requirements.

Drainage Area Site Map. (See also Part 5.1.2) Identify in your SWPPP where any of the following may be exposed to precipitation or surface runoff: vents and stacks from metal processing and similar operations.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart AC– Sector AC –Electronic and Electrical Equipment and Components, Photographic and Optical Goods.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.AC.1 Covered Storm Water Discharges.

The requirements in Subpart AC apply to storm water discharges associated with industrial activity from facilities that manufacture Electronic and Electrical Equipment and Components, Photographic and Optical goods as identified by the SIC Codes specified in Table D-1 of Appendix D of the permit.

8.AC.2 Additional Requirements.

No additional sector-specific requirements apply.

Part 8 – Sector-Specific Requirements for Industrial Activity

Subpart AD – Sector AD – Storm Water Discharges Designated by the Department as Requiring Permits.

You must comply with Part 8 sector-specific requirements associated with your primary industrial activity and any co-located industrial activities, as defined in Appendix A. The sector-specific requirements apply to those areas of your facility where those sector-specific activities occur. These sector-specific requirements are in addition to any requirements specified elsewhere in this permit.

8.AD.1 Covered Storm Water Discharges.

Sector AD is used to provide permit coverage for facilities designated by the Department as needing a storm water permit, and any discharges of storm water associated with industrial activity that do not meet the description of an industrial activity covered by Sectors A-AC.

8.AD.1.1 Eligibility for Permit Coverage. Because this sector is primarily intended for use by discharges designated by the Department as needing a storm water permit (which is an atypical circumstance), and your facility may or may not normally be discharging storm water associated with industrial activity, you must obtain the Department's written permission to use this permit prior to submitting an NOI. If you are authorized to use this permit, you will still be required to ensure that your discharges meet the basic eligibility provisions of this permit at Part 1.1.

8.AD.2 Sector-Specific Benchmarks and Effluent Limits. (See also Part 6 of the permit.)

The Department will establish any additional monitoring and reporting requirements for your facility prior to authorizing you to be covered by this permit. Additional monitoring requirements would be based on the nature of activities at your facility and your storm water discharges.

South Carolina Industrial Storm Water General NPDES Permit - SCR000000

Appendix A Definitions, Abbreviations and Acronyms

A.1 DEFINITIONS (for the purposes of this permit):

Action Area – all areas to be affected directly or indirectly by the storm water discharges, allowable non-storm water discharges, and storm water discharge-related activities, and not merely the immediate area involved in these discharges and activities.

Best Available Technology Economically Achievable (BAT) – Best Available Technology Economically Achievable (BAT) is defined at Section 304(b)(2) of the CWA. In general, Best Available Technology Economically Achievable (BAT) represents the best available economically achievable performance of plants in the industrial subcategory or category. The factors considered in assessing BAT include the cost of achieving BAT effluent reductions, the age of equipment and facilities involved, the process employed, potential process changes, non-water quality environmental impacts, including energy requirements and other such factors as the EPA Administrator deems appropriate. EPA retains considerable discretion in assigning the weight according to these factors. BAT limitations may be based on effluent reductions attainable through changes in a facility's processes and operations. Where existing performance is uniformly inadequate, BAT may reflect a higher level of performance than is currently being achieved within a particular subcategory based on technology transferred from a different subcategory or category. BAT may be based upon process changes or internal controls, even when these technologies are not common industry practice.

Best Conventional Pollution Control Technology (BCT) – Best Conventional Pollutant Control Technology (BCT) is defined at Section 304(b)(4) of the CWA. The 1977 amendments to the CWA required EPA to identify effluent reduction levels for conventional pollutants associated with BCT for discharges from existing industrial point sources. In addition to the other factors specified in section 304(b)(4)(B), the CWA requires that EPA establish BCT limitations after consideration of a two part "cost-reasonableness" test. EPA explained its methodology for the development of BCT limitations in a Federal Register notice on July 9, 1986 (51 FR 24974).

Best Management Practices (BMP) – schedules of activities, practices (and prohibitions of practices), structures, vegetation, maintenance procedures, and other management practices to prevent or reduce the discharge of pollutants to waters of the United States. BMP also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. See S.C. R.61-9.122.2.

Best Practicable Control Technology Currently Available (BPT) – Best Practicable Control Technology Currently Available (BPT) is defined at Section 304(b)(1) of the Clean Water Act (CWA). EPA sets Best Practicable Control Technology Currently Available (BPT) effluent limitations for conventional, toxic, and non-conventional pollutants. Section 304(a)(4) designates the following as conventional pollutants: biochemical oxygen demand (BOD5), total suspended solids, fecal coliform, pH, and any additional pollutants defined by the Administrator as

conventional. The Administrator designated oil and grease as an additional conventional pollutant on July 30, 1979 (see 44 FR 44501).

EPA has identified 65 pollutants and classes of pollutants as toxic pollutants, of which 126 specific substances have been designated priority toxic pollutants (see Appendix A to part 403, reprinted after 40 CFR 423.17). All other pollutants are considered to be non-conventional.

In specifying BPT, EPA looks at a number of factors. EPA first considers the total cost of applying the control technology in relation to the effluent reduction benefits. The Agency also considers the age of the equipment and facilities, the processes employed and any required process changes, engineering aspects of the control technologies, non-water quality environmental impacts (including energy requirements), and such other factors as the EPA Administrator deems appropriate. Traditionally, EPA establishes BPT effluent limitations based on the average of the best performance of facilities within the industry of various ages, sizes, processes or other common characteristics. Where existing performance is uniformly inadequate, BPT may reflect higher levels of control than currently in place in an industrial category if the Agency determines that the technology can be practically applied.

Co-located Industrial Activities – Any industrial activities, excluding your primary industrial activity, located on-site that are defined by the storm water regulations at S.C. Reg. 61-9.122.26(b)(14)(i)-(ix) and (xi). An activity at a facility is not considered co-located if the activity, when considered separately, does not meet the description of a category of industrial activity covered by the storm water regulations or identified by the SIC code list in Appendix D.

Control Measure – refers to any BMP or other method (including effluent limitations) used to prevent or reduce the discharge of pollutants to waters of the United States.

The Department - the South Carolina Department of Health and Environmental Control.

Director – a Regional Administrator of the Environmental Protection Agency or an authorized representative. See 40 CFR 122.2.

Discharge – when used without qualification, means the "discharge of a pollutant." See S.C. Reg. 61-9.122.2.

Discharge of a Pollutant – any addition of any "pollutant" or combination of pollutants to waters of the State or "waters of the United States" from any "point source," or any addition of any pollutant or combination of pollutants to the waters of the "contiguous zone" or the ocean from any point source other than a vessel or other floating craft which is being used as a means of transportation. This includes additions of pollutants into waters of the United States from: surface runoff which is collected or channeled by man; discharges through pipes, sewers, or other conveyances, leading into privately owned treatment works. See S.C. R.61-9. 122.2.

Discharge-related Activities – activities that cause, contribute to, or result in storm water and allowable non-storm water point source discharges, and measures such as the siting, construction, and operation of BMP to control, reduce, or prevent pollution in the discharges.

Drought-stricken Area – a period of below average water content in streams, reservoirs,

ground-water aquifers, lakes and soils.

EPA Approved or Established Total Maximum Daily Loads (TMDL) – “EPA Approved TMDL” are those that are developed by the Department and approved by EPA. “EPA Established TMDL” are those that are developed by EPA.

Existing Discharger – an operator applying for coverage under this permit for discharges authorized previously under an NPDES general or individual permit.

Facility or Activity – any NPDES “point source” (including land or appurtenances thereto) that is subject to regulation under the NPDES program. See S.C. R.61-9. 122.2.

Federal Facility – any buildings, installations, structures, land, public works, equipment, aircraft, vessels, and other vehicles and property, owned by, or constructed or manufactured for the purpose of leasing to, the federal government.

Impaired Water (or “Water Quality Impaired Water” or “Water Quality Limited Segment”) – A water is impaired for purposes of this permit if it has been identified by a State or EPA pursuant to Section 303(d) of the Clean Water Act as not meeting applicable State water quality standards (these waters are called “water quality limited segments” under 40 CFR 130.2(j)). Impaired waters include both waters with approved or established TMDL, and those for which a TMDL has not yet been approved or established.

Indian Country – (a) all land within the limits of any Indian reservation under the jurisdiction of the United States Government, notwithstanding the issuance of any patent, and including rights-of-way running through the reservation; (b) all dependent Indian communities within the borders of the United States, whether within the original or subsequently acquired territory thereof, and whether within or without the limits of a State, and (c) all Indian allotments, the Indian titles to which have not been extinguished, including rights-of-way running through the same. This definition includes all land held in trust for an Indian tribe. (18 U.S.C. 1151)

Industrial Activity – the 10 categories of industrial activities included in the definition of “storm water discharges associated with industrial activity” as defined in S.C. Reg. 61-9.122.26(b)(14)(i)-(ix) and (xi). NOTE: Storm water associated with construction activity, as defined at S.C. Reg. 61-9.122.26(b)(14)(x) and (15), are not covered by this permit.

Industrial Storm Water – storm water runoff from industrial activity.

Legacy Pollutants - concentrations or mass loadings of specific chemical parameters in storm water runoff that result from previous industrial activity at a site.

Minimize - reduce and/or eliminate to the extent achievable using control measures (including best management practices) that are technologically available and economically practicable and achievable in light of best industry practices.

Municipal Separate Storm Sewer System (MS4) – a conveyance or system of conveyances

(including roads with drainage systems, municipal streets, catch basins, curbs, gutters, ditches, man-made channels, or storm drains):

(i) Owned or operated by a State, city, town, borough, county, parish, district, association, or other public body (created by or pursuant to State law) having jurisdiction over disposal of sewage, industrial wastes, storm water, or other wastes, including special districts under State law such as a sewer district, flood control district or drainage district, or similar entity, or an Indian tribe or an authorized Indian tribal organization, or a designated and approved management agency under section 208 of the CWA that discharges to waters of the United States;

(ii) Designed or used for collecting or conveying storm water;

(iii) Which is not a combined sewer; and

(iv) Which is not part of a Publicly Owned Treatment Works (POTW) as defined at S.C. Reg. 61-9.122.2. See S.C. Reg. 61-9.122.26(b)(4) and (b)(7).

Note: Additional information on the State's MS4 program, including a listing of small MS4, may be found at:

<http://www.scdhec.gov/environment/WaterQuality/Stormwater/RegulatedMS4s/>

Natural Background Pollutant Levels – concentrations or mass loadings of specific chemical parameters in storm water runoff that result from naturally occurring levels in soils, groundwater, or native biota. Natural background pollutant levels do not include legacy pollutants from earlier activity on your site, or pollutants in run-on from neighboring sources which are not naturally occurring.

New Discharger – an operator applying for coverage under this permit for discharges not authorized previously under an NPDES general or individual permit.

New Source – any building, structure, facility, or installation from which there is or may be a “discharge of pollutants,” the construction of which commenced:

a. after promulgation of standards of performance under section 306 of the CWA which are applicable to such source, or

b. after proposal of standards of performance in accordance with section 306 of the CWA which are applicable to such source, but only if the standards are promulgated in accordance with section 306 within 120 days of their proposal. See S.C. Reg. 61-9.122.2.

New Source Performance Standards (NSPS) – technology-based standards for facilities that qualify as new sources under S.C. Reg. 61-9.122.2 and 122.29.

No Exposure – all industrial materials or activities are protected by a storm-resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. See S.C. Reg. 61-9.122.26(g).

Operator – any entity with a storm water discharge associated with industrial activity that meets either of the following two criteria:

a. The entity has operational control over industrial activities, including the ability to modify those activities; or

b. The entity has day-to-day operational control of activities at a facility necessary to ensure compliance with the permit (e.g., the entity is authorized to direct workers at a facility to carry out activities required by the permit).

Person – an individual, association, partnership, corporation, municipality, State or Federal agency, or an agent or employee thereof. See S.C. R.61-9. 122.2.

Point Source – any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete fissure, container, rolling stock, concentrated animal feeding operation, landfill leachate collection system, vessel, or other floating craft from which pollutants are or may be discharged. This term does not include return flows from irrigated agriculture or agricultural storm water runoff. See S.C. R.61-9. 122.2.

Pollutant – dredged spoil, solid waste, incinerator residue, filter backwash, sewage, garbage, sewage sludge, munitions, chemical wastes, biological materials, radioactive materials (except those regulated under the Atomic Energy Act [42 U.S.C. 2011, et seq.]), heat, wrecked or discarded equipment, rock, sand, cellar dirt, and industrial, municipal, and agricultural waste discharged into water. See S.C. R.61-9. 122.2.

Pollutant of Concern – A pollutant which causes or contributes to a violation of a water quality standard, including a pollutant which is identified as causing an impairment in a state's 303(d) list.

Primary Industrial Activity – includes any activities performed on-site which are (1) identified by the facility's primary SIC code; or (2) included in the narrative descriptions of 122.26(b)(14)(i), (iv), (v), or (vii), and (ix). [For co-located activities covered by multiple SIC codes, it is recommended that the primary industrial determination be based on the value of receipts or revenues or, if such information is not available for a particular facility, the number of employees or production rate for each process may be compared. The operation that generates the most revenue or employs the most personnel is the operation in which the facility is primarily engaged. In situations where the vast majority of on-site activity falls within one SIC code, that activity may be the primary industrial activity.] Narrative descriptions in S.C. R.61-9. 122.26(b)(14) identified above include: (i) activities subject to storm water effluent limitations guidelines, new source performance standards, or toxic pollutant effluent standards; (iv) hazardous waste treatment storage, or disposal facilities including those that are operating under interim status or a permit under subtitle C of the Resource Conservation and Recovery Act (RCRA); (v) landfills, land application sites and open dumps that receive or have received industrial wastes; (vii) steam electric power generating facilities; and (ix) sewage treatment works as defined at S.C. R.61-9.122.26(b)(14)(ix).

Qualified Personnel – personnel who possess the knowledge and skills to assess conditions and activities that could impact storm water quality at your facility, and who can also evaluate the effectiveness of control measures.

Reportable Quantity Release – a release of a hazardous substance at or above the established legal threshold that requires emergency notification. Refer to 40 CFR Parts 110, 117, and 302 for complete definitions and reportable quantities for which notification is required.

Runoff Coefficient – the fraction of total rainfall that will appear at the conveyance as runoff. See S.C. Reg. 61-9.122.26(b)(11).

Significant Materials – includes, but is not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under section 101(14) of CERCLA; any chemical the facility is required to report pursuant to section 313 of Title III of SARA; fertilizers; pesticides; and waste products such as ashes, slag and sludge that have the potential to be released with storm water discharges. See S.C. Reg. 61-9.122.26(b)(12).

Special Aquatic Sites – sites identified in 40 CFR 230 Subpart E. These are geographic areas, large or small, possessing special ecological characteristics of productivity, habitat, wildlife protection, or other important and easily disrupted ecological values. These areas are generally recognized as significantly influencing or positively contributing to the general overall environmental health or vitality of the entire ecosystem of a region.

Storm Water – storm water runoff, snow melt runoff, and surface runoff and drainage. See S.C. Reg. 61-9.122.26(b)(13).

Storm Water Discharges Associated with Construction Activity – a discharge of pollutants in storm water runoff from areas where soil disturbing activities (e.g., clearing, grading, or excavating), construction materials, or equipment storage or maintenance (e.g., fill piles, borrow areas, concrete truck washout, fueling), or other industrial storm water directly related to the construction process (e.g., concrete or asphalt batch plants) are located. See S.C. Reg. 61-9.122.26(b)(14)(x) and (15).

Storm Water Discharges Associated with Industrial Activity – the discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plant. The term does not include discharges from facilities or activities excluded from the NPDES program under Part 122. For the categories of industries identified in this section, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters (as defined at 40 CFR part 401); sites used for the storage and maintenance of material handling equipment; sites used for residual treatment, storage, or disposal; shipping and receiving areas; manufacturing buildings; storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product or waste product. The term excludes areas located on plant lands separate

from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities include those that are federally, State, or municipally owned or operated that meet the description of the facilities listed in S.C. Reg. 61-9.

122.26(b)(14). The term also includes those facilities designated under the provisions of S.C. Reg. 61-9. 122.26(a)(1)(v).

Substantially Identical Outfalls - outfalls that have generally similar industrial activities, control measures, exposed materials that may significantly contribute pollutants to stormwater, and runoff coefficients of their drainage areas.

Total Maximum Daily Load (TMDL) –a calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL includes wasteload allocations (WLA) for point source discharges; load allocations (LA) for nonpoint sources and/or natural background, and must include a margin of safety (MOS) and account for seasonal variations. (See section 303(d) of the Clean Water Act and 40 CFR 130.2 and 130.7).

Uncontaminated - free from the presence of pollutants attributable to industrial activity.

Water Quality Impaired – See 'Impaired Water'.

Water Quality Standards – definition of the water quality goals of a water body, or portion thereof, by designating the use or uses to be made of the water and by setting criteria necessary to protect the uses. States and EPA adopt water quality standards to protect public health or welfare, enhance the quality of water and serve the purposes of the Clean Water Act (See CWA sections 101(a)2 and 303(c)) and the S.C. Pollution Control Act, S.C. Code 48-1-10, et seq. Water quality standards also include an anti-degradation policy.

Waters of the State - means lakes, bays, sounds, ponds, impounding reservoirs, springs, wells, rivers, streams, creeks, estuaries, marshes, inlets, canals, the Atlantic Ocean within the territorial limits of the State, and all other bodies of surface or underground water, natural or artificial, public or private, inland or coastal, fresh or salt, which are wholly or partially within or bordering the State or within its jurisdiction.

Waters of the United States - means:

All waters which are currently used, were used in the past, or may be susceptible to use in interstate or foreign commerce, including all waters that are subject to the ebb and flow of the tide;

All interstate waters, including interstate "wetlands";

All other waters, such as interstate lakes, rivers, streams (including intermittent streams), mudflats, sandflats, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds, the use, degradation, or destruction of which would affect or could affect interstate or foreign commerce, including any such waters

a. Which are or could be used by interstate or foreign travelers for recreational or other purposes;

b. From which fish or shellfish are or could be taken and sold in interstate or foreign

commerce; or

c. Which are or could be used for industrial purposes by industries in interstate commerce;

All impoundments of waters otherwise defined as waters of the United States under this definition;

Tributaries of waters identified in paragraphs (1) through (4) of this definition;

The territorial sea; and

Wetlands adjacent to waters (other than waters that are themselves wetlands) identified in paragraphs 1 through 6 of this definition.

Waste treatment systems, including treatment ponds or lagoons designed to meet the requirements of the CWA (other than cooling ponds for steam electric generation stations as specified in 40 CFR 423) which also meet the criteria of this definition, are not waters of the United States. Waters of the United States do not include prior converted cropland. Notwithstanding the determination of an area's status as prior converted cropland by any other Federal agency, for the purposes of the CWA, the final authority regarding CWA jurisdiction remains with EPA.

“You” and “Your” – as used in this permit are intended to refer to the permittee, the operator, or the discharger as the context indicates and that party's facility or responsibilities. The use of “you” and “your” refers to a particular facility and not to all facilities operated by a particular entity. For example, “you must submit” means the permittee must submit something for that particular facility. Likewise, “all your discharges” would refer only to discharges at that one facility.

A.2. ABBREVIATIONS AND ACRONYMS

BAT – Best Available Technology
Economically Achievable

BCT - Best Conventional Pollutant Control
Technology

BOD₅ – Biochemical Oxygen Demand (5-
day test)

BMP – Best Management Practice

BPT – Best Practicable Control Technology
Currently Available

CERCLA – Comprehensive Environmental
Response, Compensation and Liability Act

CGP – NPDES Construction Stormwater
General Permit (SCR100000)

COD – Chemical Oxygen Demand

CWA – Clean Water Act (or the Federal
Water Pollution Control Act, 33 U.S.C.
§1251 *et seq*)

CWT – Centralized Waste Treatment

DMR – Discharge Monitoring Report

EPA – U. S. Environmental Protection
Agency

ESA – Endangered Species Act

FWS – U. S. Fish and Wildlife Service

IGP - NPDES Industrial Storm Water
General permit (SCR000000)

LA – Load Allocations

MDMR – MSGP Discharge Monitoring Report

MGD – Million Gallons per Day

MOS – Margin of Safety

MS4 – Municipal Separate Storm Sewer System

MSDS – Material Safety Data Sheet

NAICS – North American Industry Classification System

NEPA – National Environmental Policy Act

NHPA – National Historic Preservation Act

NMFS – U. S. National Marine Fisheries Service

NOI – Notice of Intent

NOT – Notice of Termination

NPDES – National Pollutant Discharge Elimination System

NRC – National Response Center

NRHP – National Register of Historic Places

NSPS – New Source Performance Standard

NTU – Nephelometric Turbidity Unit

OMB – U. S. Office of Management and Budget

ORW – Outstanding Resource Water

ONRW - Outstanding National Resource Water

OSM – U. S. Office of Surface Mining

PCA – the South Carolina Pollution Control Act, S.C. Code 48-1-10, et. seq.

POTW – Publicly Owned Treatment Works

RCRA – Resource Conservation and Recovery Act

RQ – Reportable Quantity

SARA – Superfund Amendments and Reauthorization Act

SHPO – State Historic Preservation Officer

SIC – Standard Industrial Classification

SMCRA – Surface Mining Control and Reclamation Act

SPCC – Spill Prevention, Control, and Countermeasures

SWPPP – Storm Water Pollution Prevention Plan

THPO – Tribal Historic Preservation Officer

TMDL – Total Maximum Daily Load

TSDf – Treatment, Storage, or Disposal Facility

TSS – Total Suspended Solids

USGS – United States Geological Survey

WLA – Wasteload Allocation

WQS – Water Quality Standard

South Carolina Industrial Storm Water General NPDES Permit - SCR000000

**Appendix B
Standard Permit Conditions**

S.C. Reg. 61-9 Sections Required to be Included in This Permit: 122.22; Pertinent Sections of 122.41 (all except (b) and (e)(2) - (4)); and 122.42(a).

Reg. 61-9.122.22 Signatories to permit applications and reports.

(a) Applications. All permit applications shall be signed as follows:

(1) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means:

(i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or

(ii) The manager of one or more manufacturing, production, or operating facilities, provided, the manager is authorized to make management decisions which govern the operation of the regulated facility including having the explicit or implicit duty of making major capital investment recommendations, and initiating and directing other comprehensive measures to assure long term environmental compliance with environmental laws and regulations; the manager can ensure that the necessary systems are established or actions taken to gather complete and accurate information for permit application requirements; and where authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

(3) For a municipality, State, Federal, or other public agency or public facility: By either a principal executive officer, mayor, or other duly authorized employee or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes:

(i) The chief executive officer of the agency, or

(ii) A senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrator, Region IV, EPA).

(b) All reports required by permits, and other information requested by the Department, shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

(1) The authorization is made in writing by a person described in paragraph (a) of this section;

(2) The authorization specifies either an individual or a position having responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and,

(3) The written authorization is submitted to the Department.

(c) Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Department prior to or together with any reports, information, or applications to be signed by an authorized representative.

(d) Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification: "I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Reg. 61-9.122.41 Conditions applicable to all permits.

The following conditions apply to all NPDES permits. Additional conditions applicable to NPDES permits are in section 122.42. All conditions applicable to NPDES permit shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the federal regulations (or the corresponding approved State regulations) must be given in the permit.

(a) Duty to comply.

The permittee must comply with all conditions of the permit. Any permit noncompliance constitutes a violation of the Clean Water Act and the Pollution Control Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. The Department's approval of wastewater facility Plans and Specifications does not relieve the permittee of responsibility to meet permit limits.

(1) The permittee shall comply with effluent standards or prohibitions established under section 307(a) of the Clean Water Act for toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

(2) Failure to comply with permit conditions or the provisions of this regulation may subject the permittee to civil penalties under S.C. Code Section 48-1-330 or criminal sanctions under S.C. Code Section 48-1-320. Sanctions for violations of the Federal Clean Water Act may be imposed in accordance with the provisions of 40 CFR Part 122.41(a)(2) and (3).

(3) A person who violates any provision of this regulation, a term, condition or schedule of compliance contained within a valid NPDES permit, or the State law is subject to the actions defined in the State law.

(b) Duty to reapply. *(See section 1.3.2 of this permit, related to continuation of permit coverage.)*

(c) Need to halt or reduce activity not a defense.

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

(d) Duty to mitigate.

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

(e) (1) Proper operation and maintenance.

The permittee shall at all times properly operate and maintain in good working order and operate as efficiently as possible all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the terms and conditions of this permit. Proper operation and maintenance includes effective performance based on design facility removals, adequate funding, adequate operator staffing and training and also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

(2) through (4). These sections are normally not pertinent to this permit but are incorporated by reference to S.C. R.61-9.122.41(e)(2) - (4), where pertinent.

(f) Permit actions.

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

(g) Property rights.

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

(h) Duty to provide information.

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

(i) Inspection and entry.

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

- (1) Enter upon the permittee's premises where a regulated facility or activity is located or

conducted, or where records must be kept under the conditions of this permit;

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act and Pollution Control Act, any substances or parameters at any location.

(j) Monitoring and records.

(1) (i) (A) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

(B) Samples shall be reasonably distributed in time, while maintaining representative sampling.

(C) No analysis, which is otherwise valid, shall be terminated for the purpose of preventing the analysis from showing a permit or water quality violation.

(ii) Flow Measurements.

(A) Where primary flow meters are required, appropriate flow measurement devices and methods consistent with accepted scientific practices shall be present and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements is consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of not greater than 10 percent from the true discharge rates throughout the range of expected discharge volumes. The primary flow device, where required, must be accessible to the use of a continuous flow recorder.

(B) Where permits require an estimate of flow, the permittee shall maintain at the permitted facility a record of the method(s) used in "estimating" the discharge flow (e.g., pump curves, production charts, water use records) for the outfall(s) designated on limits pages to monitor flow by an estimate.

(C) Records of any necessary calibrations must be kept.

(iii) The Department may designate a single, particular day of the month on which any group of parameters listed in the permit must be sampled. When this requirement is imposed in a permit, the Department may waive or alter compliance with the permit requirement for a specific sampling event for extenuating circumstances.

(iv) The Department may require that a permittee monitor parameters in the stream receiving his permitted discharge as necessary to evaluate the need for and to establish limits and conditions and to insure compliance with water quality standards (i.e., R.61-68).

(2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by R.61-9.503 or R.61-9.504); the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Department at any time.

(3) Records of monitoring information shall include:

- (i) The date, exact place, and time of sampling or measurements;
- (ii) The individual(s) who performed the sampling or measurements;
- (iii) The date(s) analyses were performed;
- (iv) The individual(s) who performed the analyses;
- (v) The analytical techniques or methods used; and
- (vi) The results of such analyses.

(4) Analyses for required monitoring must be conducted according to test procedures approved under 40 CFR Part 136 unless other test procedures have been specified in the permit or, in the case of sludge use or disposal, unless otherwise specified in R.61-9.503 or R.61-9.504.

(5) The PCA provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$25,000 or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment provided by the Clean Water Act is also by imprisonment of not more than 4 years.

(k) Signatory requirement.

(1) All applications, reports, or information submitted to the Department shall be signed and certified (See section 122.22).

(2) The PCA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$25,000 per violation, or by imprisonment for not more than two years per violation, or by both.

(l) Reporting requirements.

(1) Planned changes. The permittee shall give notice to the Department as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required only when:

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b); or

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under section 122.42(a)(i).

(iii) The alteration or addition results in a significant change in the permittee's sewage sludge or industrial sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan (included in the NPDES permit directly or by reference);

(2) Anticipated noncompliance. The permittee shall give advance notice to the Department of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

(3) Transfers. This permit is not transferable to any person except after notice to the Department. The Department may require modification or revocation and reissuance of the permit to change the name of permittee and incorporate such other requirements as may be

necessary under the Pollution Control Act and the Clean Water Act. (See section 122.61; in some cases, modification or revocation and reissuance is mandatory.)

(4) Monitoring reports. Monitoring results shall be reported at the intervals specified in the permit.

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Department for reporting results of monitoring of sludge use or disposal practices.

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR Part 136 or, in the case of sludge use or disposal, approved under 40 CFR Part 136 unless otherwise specified in R.61-9.503 or R.61-9.504, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Department.

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Department in the permit.

(5) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

(6) Twenty-four hour reporting.

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent reoccurrence of the noncompliance.

(ii) The following shall be included as information which must be reported within 24 hours under this paragraph.

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See section 122.44(g)).

(B) Any upset which exceeds any effluent limitation in the permit.

(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Department in the permit to be reported within 24 hours (See section 122.44(g)).

(iii) The Department may waive the written report on a case-by-case basis for reports under paragraph (1)(6)(i) of this section if the oral report has been received within 24 hours.

(7) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (1)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (1)(6) of this section.

(8) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Department, it shall promptly submit such facts or information.

(m) Bypass.

(1) Definitions.

(i) "Bypass" means the intentional diversion of waste streams from any portion of a

treatment facility.

(ii) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

(2) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded but only if it also is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions of paragraph (m)(3) and (m)(4) of this section.

(3) Notice.

(i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible, at least ten days before the date of the bypass.

(ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).

(4) Prohibition of bypass

(i) Bypass is prohibited, and the Department may take enforcement action against a permittee for bypass, unless:

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

(C) The permittee submitted notices as required under paragraph (m)(3) of this section.

(ii) The Department may approve an anticipated bypass, after considering its adverse effects, if the Department determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

(n) Upset.

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

(2) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

(3) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

- (i) An upset occurred and that the permittee can identify the cause(s) of the upset;
- (ii) The permitted facility was at the time being properly operated; and

(iii) The permittee submitted notice of the upset as required in paragraph (l)(6)(ii)(B) of this section (24 hour notice).

(iv) The permittee complied with any remedial measures required under paragraph (d) of this section.

(4) Burden of proof. In any enforcement proceeding, the permittee seeking to establish the occurrence of an upset has the burden of proof.

(o) Misrepresentation of Information.

(1) Any person making application for a NPDES discharge permit or filing any record, report, or other document pursuant to a regulation of the Department, shall certify that all information contained in such document is true. All application facts certified to by the applicant shall be considered valid conditions of the permit issued pursuant to the application.

(2) Any person who knowingly makes any false statement, representation, or certification in any application, record, report, or other documents filed with the Department pursuant to the State law, and the rules and regulations pursuant to that law, shall be deemed to have violated a permit condition and shall be subject to the penalties provided for pursuant to South Carolina Pollution Control Act section 48-1-320 or 48-1-330.

Reg. 61-9.122.42

(a) Existing manufacturing, commercial, mining, and silvicultural dischargers. In addition to the reporting requirements under section 122.41(1), all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the Department as soon as they know or have reason to believe:

(1) That any activity has occurred or will occur which would result in the discharge on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels":

(i) One hundred micrograms per liter (100 µg/l);

(ii) Two hundred micrograms per liter (200 µg/l) for acrolein and acrylonitrile; five hundred micrograms per liter (500 µg/l) for 2,4-dinitrophenol and for 2-methyl-4,6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;

(iii) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with section 122.21(g)(7); or

(iv) The level established by the Department in accordance with section 122.44(f).

(2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that discharge will exceed in the highest of the following "notification levels":

(i) Five hundred micrograms per liter (500 µg/l);

(ii) One milligram per liter (1 mg/l) for antimony;

(iii) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with section 122.21(g)(7).

(iv) The level established by the Department in accordance with section 122.44(f).
South Carolina Industrial Storm Water General NPDES Permit - SCR000000.

Appendix C [Reserved.]

South Carolina Industrial Storm Water General NPDES Permit - SCR000000

**Appendix D
Activities Covered**

Appendix D. Facilities and Activities Covered

Your permit eligibility is limited to discharges from facilities in the “sectors” of industrial activity summarized in Table D-1. These sector descriptions are based on Standard Industrial Classification (SIC) Codes and Industrial Activity Codes. References to “sectors” in this permit (e.g., sector-specific monitoring requirements) refer to these groupings.

Table D-1. Sectors of Industrial Activity Covered by This Permit		
Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code¹	Activity Represented
SECTOR A: TIMBER PRODUCTS		
A1	2421	General Sawmills and Planing Mills
A2	2491	Wood Preserving
A3	2411	Log Storage and Handling
A4	2426	Hardwood Dimension and Flooring Mills
	2429	Special Product Sawmills, Not Elsewhere Classified
	2431-2439 (except 2434)	Millwork, Veneer, Plywood, and Structural Wood (see Sector W)
	2448	Wood Pallets and Skids
	2449	Wood Containers, Not Elsewhere Classified
	2451, 2452	Wood Buildings and Mobile Homes
	2493	Reconstituted Wood Products
A5	2499	Wood Products, Not Elsewhere Classified
A5	2441	Nailed and Lock Corner Wood Boxes and Shook
SECTOR B: PAPER AND ALLIED PRODUCTS		
B1	2631	Paperboard Mills
B2	2611	Pulp Mills
	2621	Paper Mills
	2652-2657	Paperboard Containers and Boxes
	2671-2679	Converted Paper and Paperboard Products, Except Containers and Boxes
SECTOR C: CHEMICALS AND ALLIED PRODUCTS		
C1	2873-2879	Agricultural Chemicals
C2	2812-2819	Industrial Inorganic Chemicals

Table D-1. Sectors of Industrial Activity Covered by This Permit

Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code ¹	Activity Represented
C3	2841-2844	Soaps, Detergents, and Cleaning Preparations; Perfumes, Cosmetics, and Other Toilet Preparations
C4	2821-2824	Plastics Materials and Synthetic Resins, Synthetic Rubber, Cellulosic and Other Manmade Fibers Except Glass
C5	2833-2836	Medicinal Chemicals and Botanical Products; Pharmaceutical Preparations; in vitro and in vivo Diagnostic Substances; and Biological Products, Except Diagnostic Substances
	2851	Paints, Varnishes, Lacquers, Enamels, and Allied Products
	2861-2869	Industrial Organic Chemicals
	2891-2899	Miscellaneous Chemical Products
	3952 (limited to list of inks and paints)	Inks and Paints, Including China Painting Enamels, India Ink, Drawing Ink, Platinum Paints for Burnt Wood or Leather Work, Paints for China Painting, Artist's Paints and Artist's Watercolors
	2911	Petroleum Refining
SECTOR D: ASPHALT PAVING AND ROOFING MATERIALS AND LUBRICANTS		
D1	2951, 2952	Asphalt Paving and Roofing Materials
D2	2992, 2999	Miscellaneous Products of Petroleum and Coal
SECTOR E: GLASS, CLAY, CEMENT, CONCRETE, AND GYPSUM PRODUCTS		
E1	3251-3259	Structural Clay Products
	3261-3269	Pottery and Related Products
E2	3271-3275	Concrete, Gypsum, and Plaster Products
E3	3211	Flat Glass
	3221, 3229	Glass and Glassware, Pressed or Blown
	3231	Glass Products Made of Purchased Glass
	3241	Hydraulic Cement
	3281	Cut Stone and Stone Products
	3291-3299	Abrasive, Asbestos, and Miscellaneous Nonmetallic Mineral Products
SECTOR F: PRIMARY METALS		
F1	3312-3317	Steel Works, Blast Furnaces, and Rolling and Finishing Mills
F2	3321-3325	Iron and Steel Foundries
F3	3351-3357	Rolling, Drawing, and Extruding of Nonferrous Metals
F4	3363-3369	Nonferrous Foundries (Castings)
F5	3331-3339	Primary Smelting and Refining of Nonferrous Metals
	3341	Secondary Smelting and Refining of Nonferrous Metals
	3398, 3399	Miscellaneous Primary Metal Products
SECTOR G: METAL MINING (ORE MINING AND DRESSING)		
G1	1021	Copper Ore and Mining Dressing Facilities
G2	1011	Iron Ores

Table D-1. Sectors of Industrial Activity Covered by This Permit

Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code¹	Activity Represented
	1021	Copper Ores
	1031	Lead and Zinc Ores
	1041, 1044	Gold and Silver Ores
	1061	Ferroalloy Ores, Except Vanadium
	1081	Metal Mining Services
	1094, 1099	Miscellaneous Metal Ores
SECTOR H: [Reserved.] COAL MINES AND COAL MINING-RELATED FACILITIES		
SECTOR I: [Reserved.] OIL AND GAS EXTRACTION AND REFINING		
SECTOR J: [Reserved.] MINERAL MINING AND DRESSING		
SECTOR K: HAZARDOUS WASTE TREATMENT, STORAGE, OR DISPOSAL FACILITIES		
K1	HZ	Hazardous Waste Treatment, Storage, or Disposal Facilities, including those that are operating under interim status or a permit under subtitle C of RCRA
SECTOR L: LANDFILLS, LAND APPLICATION SITES, AND OPEN DUMPS		
L1	LF	All Landfill, Land Application Sites and Open Dumps
L2	LF	All Landfill, Land Application Sites and Open Dumps, except Municipal Solid Waste Landfill (MSWLF) Areas Closed in Accordance with 40 CFR 258.60
SECTOR M: AUTOMOBILE SALVAGE YARDS		
M1	5015	Automobile Salvage Yards
SECTOR N: SCRAP RECYCLING FACILITIES		
N1	5093	Scrap Recycling and Waste Recycling Facilities except Source-Separated Recycling
N2	5093	Source-separated Recycling Facility
SECTOR O: STEAM ELECTRIC GENERATING FACILITIES		
O1	SE	Steam Electric Generating Facilities, including coal handling sites
SECTOR P: LAND TRANSPORTATION AND WAREHOUSING		
P1	4011, 4013	Railroad Transportation
	4111-4173	Local and Highway Passenger Transportation
	4212-4231	Motor Freight Transportation and Warehousing
	4311	United States Postal Service
	5171	Petroleum Bulk Stations and Terminals
SECTOR Q: WATER TRANSPORTATION		
Q1	4412-4499	Water Transportation Facilities

Table D-1. Sectors of Industrial Activity Covered by This Permit

Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code ¹	Activity Represented
SECTOR R: SHIP AND BOAT BUILDING AND REPAIRING YARDS		
R1	3731, 3732	Ship and Boat Building or Repairing Yards
SECTOR S: AIR TRANSPORTATION FACILITIES		
S1	4512-4581	Air Transportation Facilities
SECTOR T: TREATMENT WORKS		
T1	TW	Treatment Works treating domestic sewage or any other sewage sludge or wastewater treatment device or system, used in the storage, treatment, recycling, and reclamation of municipal or domestic sewage, including land dedicated to the disposal of sewage sludge that are located within the confines of the facility, with a design flow of 1.0 mgd or more, or required to have an approved pretreatment program under 40 CFR Part 403. Not included are farm lands, domestic gardens or lands used for sludge management where sludge is beneficially reused and which are not physically located in the confines of the facility, or areas that are in compliance with section 405 of the CWA
SECTOR U: FOOD AND KINDRED PRODUCTS		
U1	2041-2048	Grain Mill Products
U2	2074-2079	Fats and Oils Products
U3	2011-2015	Meat Products
	2021-2026	Dairy Products
	2032-2038	Canned, Frozen, and Preserved Fruits, Vegetables, and Food Specialties
	2051-2053	Bakery Products
	2061-2068	Sugar and Confectionery Products
	2082-2087	Beverages
	2091-2099	Miscellaneous Food Preparations and Kindred Products
2111-2141	Tobacco Products	
SECTOR V: TEXTILE MILLS, APPAREL, AND OTHER FABRIC PRODUCT MANUFACTURING; LEATHER AND LEATHER PRODUCTS		
V1	2211-2299	Textile Mill Products
	2311-2399	Apparel and Other Finished Products Made from Fabrics and Similar Materials
	3131-3199	Leather and Leather Products (note: see Sector Z1 for Leather Tanning and Finishing)
SECTOR W: FURNITURE AND FIXTURES		
W1	2434	Wood Kitchen Cabinets
	2511-2599	Furniture and Fixtures
SECTOR X: PRINTING AND PUBLISHING		
X1	2711-2796	Printing, Publishing, and Allied Industries
SECTOR Y: RUBBER, MISCELLANEOUS PLASTIC PRODUCTS, AND MISCELLANEOUS MANUFACTURING INDUSTRIES		

Table D-1. Sectors of Industrial Activity Covered by This Permit

Subsector (May be subject to more than one sector/subsector)	SIC Code or Activity Code ¹	Activity Represented
Y1	3011	Tires and Inner Tubes
	3021	Rubber and Plastics Footwear
	3052, 3053	Gaskets, Packing and Sealing Devices, and Rubber and Plastic Hoses and Belting
	3061, 3069	Fabricated Rubber Products, Not Elsewhere Classified
Y2	3081-3089	Miscellaneous Plastics Products
	3931	Musical Instruments
	3942-3949	Dolls, Toys, Games, and Sporting and Athletic Goods
	3951-3955 (except 3952 – see Sector C)	Pens, Pencils, and Other Artists' Materials
	3961, 3965	Costume Jewelry, Costume Novelties, Buttons, and Miscellaneous Notions, Except Precious Metal
3991-3999	Miscellaneous Manufacturing Industries	
SECTOR Z: LEATHER TANNING AND FINISHING		
Z1	3111 (also see sector V.)	Leather Tanning and Finishing
SECTOR AA: FABRICATED METAL PRODUCTS		
AA1	3411-3499 (except 3479)	Fabricated Metal Products, Except Machinery and Transportation Equipment, and Coating, Engraving, and Allied Services.
	3911-3915	Jewelry, Silverware, and Plated Ware
AA2	3479	Fabricated Metal Coating and Engraving
SECTOR AB: TRANSPORTATION EQUIPMENT, INDUSTRIAL OR COMMERCIAL MACHINERY		
AB1	3511-3599 (except 3571-3579)	Industrial and Commercial Machinery, Except Computer and Office Equipment (see Sector AC)
	3711-3799 (except 3731, 3732)	Transportation Equipment Except Ship and Boat Building and Repairing (see Sector R)
SECTOR AC: ELECTRONIC, ELECTRICAL, PHOTOGRAPHIC, AND OPTICAL GOODS		
AC1	3571-3579	Computer and Office Equipment
	3812-3873	Measuring, Analyzing, and Controlling Instruments; Photographic and Optical Goods, Watches, and Clocks
	3612-3699	Electronic and Electrical Equipment and Components, Except Computer Equipment
SECTOR AD: NON-CLASSIFIED FACILITIES		
AD1	Other stormwater discharges designated by the Department as needing a permit (see S.C. Reg. 61-9.122.26(a)(9)(i)(C) & (D)) or any facility discharging stormwater associated with industrial activity not described by any of Sectors A-AC. NOTE: Facilities may not elect to be covered under Sector AD. Only the Department may assign a facility to Sector AD.	

¹ A complete list of SIC Codes can be found at: https://www.osha.gov/pls/imis/sic_manual.html
Conversions to and from the newer North American Industry Classification System” (NAICS)) can be obtained from the Internet at: <http://www.naics.com/naics-to-sic-crosswalk/> or in paper form from various locations in the document titled *Handbook of Standard Industrial Classifications*, Office of Management and Budget, 1987.

South Carolina Industrial Storm Water General NPDES Permit - SCR000000

**Appendix E
Procedures Relating to Endangered Species Protection**

Appendix E – [Reserved.]

South Carolina Industrial Storm Water General NPDES Permit - SCR000000

**Appendix F
Procedures Relating to Historic Properties Preservation**

Appendix F – [Reserved.]

South Carolina Industrial Storm Water General NPDES Permit - SCR000000

**Appendix G
Notice of Intent (NOI) Form**

Appendix G –Notice of Intent (NOI) Form

To obtain coverage under this permit, you must submit a NOI. You must submit the NOI in a Department specified format. See the Department's Industrial Stormwater webpage for the latest version of the form.

South Carolina Industrial Storm Water General NPDES Permit - SCR000000

**Appendix H
Notice of Termination (NOT) Form**

Appendix H – Notice of Termination (NOT) Form

To terminate coverage under this permit, you must submit a NOT. You must submit the NOT in a Department specified format. See the Department's Industrial Stormwater webpage for the latest version of the form.

South Carolina Industrial Storm Water General NPDES Permit - SCR000000

**Appendix I
Annual Reporting Form**

Appendix I – [Reserved.]

South Carolina Industrial Storm Water General NPDES Permit - SCR000000

Appendix J Calculating Hardness in Receiving Waters for Hardness Dependent Metals

Overview

EPA adjusted the benchmarks for six hardness-dependent metals (i.e., cadmium, copper, lead, nickel, silver, and zinc) to further ensure compliance with water quality standards. For any sectors required to conduct benchmark samples for a hardness-dependent metal, EPA includes 'hardness ranges' from which benchmark values are determined. To determine which hardness range to use, you must collect data on the hardness of your receiving water(s). Once the site-specific hardness data have been collected, the corresponding benchmark value for each metal is determined by comparing where the hardness data fall within 25 mg/L ranges, as shown in Table 1.

Table 1. Hardness Ranges to Be Used to Determine Benchmark Values for Cadmium, Copper, Lead, Nickel, Silver, and Zinc.

	Benchmark Values (mg/L, total)					
	Cadmium	Copper	Lead	Nickel	Silver	Zinc
0-24.99 mg/L	0.0005	0.0038	0.014	0.15	0.0007	0.04
25-49.99 mg/L	0.0008	0.0056	0.023	0.20	0.0007	0.05
50-74.99 mg/L	0.0013	0.0090	0.045	0.32	0.0017	0.08
75-99.99 mg/L	0.0018	0.0123	0.069	0.42	0.0030	0.11
100-124.99 mg/L	0.0023	0.0156	0.095	0.52	0.0046	0.13
125-149.99 mg/L	0.0029	0.0189	0.122	0.61	0.0065	0.16
150-174.99 mg/L	0.0034	0.0221	0.151	0.71	0.0087	0.18
175-199.99 mg/L	0.0039	0.0253	0.182	0.80	0.0112	0.20
200-224.99 mg/L	0.0045	0.0285	0.213	0.89	0.0138	0.23
225-249.99 mg/L	0.0050	0.0316	0.246	0.98	0.0168	0.25
250+ mg/L	0.0053	0.0332	0.262	1.02	0.0183	0.26

How to Determine Hardness for Hardness-Dependent Parameters.

You may select one of three methods to determine hardness, including; individual grab sampling, grab sampling by a group of operators which discharge to the same receiving water, or using third-party data. Regardless of the method used, you are responsible for documenting the procedures used for determining hardness values. Once the hardness value is established, you are required to include this information with your first benchmark monitoring results. You must retain all monitoring data in accordance with Part 7.5 of the permit. The three optional methods for determining hardness are detailed in the following sections.

(1) Permittee Samples for Receiving Stream Hardness

This method involves collecting samples in the receiving water and submitting these to a laboratory for analysis. If you elect to sample your receiving water(s) and submit samples for

analysis, hardness must be determined from the closest intermittent or perennial stream downstream of your point of discharge. The sample can be collected during either dry or wet weather. Collection of the sample during wet weather is more representative of conditions during stormwater discharges; however, collection of in-stream samples during wet weather events may be impracticable or present safety issues.

Hardness must be sampled and analyzed using approved methods as described in 40 CFR Part 136 (Guidelines Establishing Test Procedures for the Analysis of Pollutants).

(2) Group Monitoring for Receiving Stream Hardness

You can be part of a group of permittees discharging to the same receiving waters and collect samples that are representative of the hardness values for all members of the group. In this scenario, hardness of the receiving water must be determined using 40 CFR Part 136 procedures and the results shared by group members. To use the same results, hardness measurements must be taken on a stream reach within a reasonable distance of the discharge points of each of the group members.

(3) Collection of Third-Party Hardness Data

You can submit receiving stream hardness data collected by a third party provided the results are collected consistent with the approved 40 CFR Part 136 methods. These data may come from a local water utility, previously conducted stream reports, TMDL, peer reviewed literature, other government publications, or data previously collected by the permittee. Data should be less than 10 years old.

Water quality data for many of the nation's surface waters are available on-line or by contacting EPA or the Department. EPA's data system STORET, short for STORage and RETrieval, is a repository for receiving water quality, biological, and physical data and is used by state environmental agencies, EPA and other federal agencies, universities, private citizens, and many others. Similarly, state environmental agencies and the U.S. Geological Service (USGS) also have water quality data available that, in some instances, can be accessed online. "Legacy STORET" codes for hardness include: 259 hardness, carbonate; 260 hardness, noncarbonated; and 261 calcium + magnesium, while more recent, "Modern STORET" data codes include: 00900 hardness, 00901 carbonate hardness, and 00902 non-carbonate hardness; or the discrete measurements of calcium (00915) and magnesium (00925) can be used to calculate hardness. Hardness data historically has been reported as "carbonate," "non-carbonate," or "Ca + Mg." If these are unavailable, then individual results for calcium (Ca) and magnesium (Mg) may be used to calculate hardness using the following equation:

$$\text{mg/L CaCO}_3 = 2.497 (\text{Ca mg/L}) + 4.118 (\text{Mg mg/L})$$

When interpreting the data for carbonate and non-carbonate hardness, note that total hardness is equivalent to the sum of carbonate and non-carbonate hardness if both forms are reported. If only carbonate hardness is reported, it is more than likely that non-carbonate hardness is absent and the total hardness is equivalent to the available carbonate hardness.

South Carolina Industrial Storm Water General NPDES Permit - SCR000000

**Appendix K
No Exposure Certification Form**

See the Department's Industrial Stormwater webpage for the latest version of the form.



May 17, 2019

Georgetown County
Attn: Mr. Ray Funnye
PO Box 421270
Georgetown, SC 29442

Issuance of Modified Permit

RE: Request to Add Tarps to the List of Approved ADCs received via email on May 15, 2019
Georgetown County Class 3 Landfill – Permit #221001-1102
Georgetown County

Dear Mr. Funnye:

Enclosed is a modified Class 3 landfill permit for the Georgetown County Class 3 Landfill in Georgetown County. The permit was modified to add Tarps as an approved alternative daily cover. If you have any questions regarding this permit, please contact Justin Koon at (803) 898-1339 or koonjt@dhec.sc.gov.

Sincerely,

Juli E. Blalock, Director
Division of Mining and Solid Waste Management
Bureau of Land and Waste Management
S.C. Dept. of Health & Environmental Control

JEB/jtk

enc: Permit

cc: Marty Lindler, Manager and Jessica Price – SW Compliance
Larry Leblang – SW Permitting and Monitoring Section
Katherine Mann – Pee Dee EA Region, Myrtle Beach Office
Bernie Garrett, PE – bgarrett@garrett-moore.com
Ray Funnye – rfunnye@gtcounty.org
Michelle LaRocco – mlarocco@gtcounty.org
Bureau File #20212



BUREAU OF LAND AND WASTE MANAGEMENT
CLASS 3 LANDFILL
PERMIT No. 221001-1102

Date of Original Issuance: October 25, 1995

Date of Modification: May 17, 2019

Permission is hereby granted to:

Name of Facility: Georgetown County Class 3 Landfill
Permittee: Georgetown County
Address: PO Drawer 421270
Georgetown, South Carolina 29442
Contact: Mr. Ray Funnye, Director of Public Works
Phone: (843) 546-4189

for the operation of a commercial Class 3 Landfill located at 203 Landfill Drive in Georgetown, Georgetown County, SC. The approved footprint is approximately 90 acres and has a disposal capacity of approximately 12,350,000 cu. yd. UTM Coordinates of 3703295.22 N, 656022.09 E. The landfill is located on the parcel identified as Tax Map #02-1006-029-00-00.

This permit is issued pursuant to Sections 44-96-10 *et seq.* and 25A S.C. Code of Regulations Section 61-107.19 and 61-107.17. The authority granted hereunder is subject to the requirements of the aforementioned laws and regulations and the attached conditions.

A handwritten signature in blue ink that reads "Juli E. Blalock". The signature is written in a cursive style and is positioned above a horizontal line.

Juli E. Blalock, Director
Division of Mining and Solid Waste Management
Bureau of Land & Waste Management

GEORGETOWN COUNTY
CLASS 3 LANDFILL
PERMIT # 221001-1102

A. GENERAL CONDITIONS

1. The Permittee shall adhere to the Expansion design drawings, the report, and the specifications approved on August 2, 2018 (Docket #268), unless otherwise approved by the Department. Previously approved plans include the Original Application approved on October 25, 1995; and, the Expansion Application approved on July 30, 2002.
2. The Permittee's maximum yearly rate of disposal for this landfill is two hundred twenty-nine thousand five hundred eighty-two (229,582) tons per fiscal year (July 1 – June 30). Information concerning the rate of disposal must be included in the annual report, due by September 1st, as required by R.61-107.19, Part V, Subpart C, Section 258.29.c.
3. The facility may accept "special waste" in accordance with the most recently approved Special Waste Analysis and Implementation Plan. All Alternate Daily Covers must be approved by the Department.
4. The total open surface area allowed within the permitted waste disposal footprint is established based on the latest approved cost estimate. Any area within the waste disposal footprint not yet certified closed by the Department is considered open and must be covered by financial assurance. In order to increase the open area allowed, a new closure cost estimate must be submitted and approved by the Department and the financial assurance mechanism must be updated.
5. For an area to be considered closed, the following items shall be completed:
 - a. Official certification shall be submitted to the Department from a registered Professional Engineer in the State of South Carolina that the area has been closed in accordance with final cover requirements per Regulation 61-107.19 and the approved design drawings; and,
 - b. The area shall be inspected and deemed closed by Department staff in writing.
6. On or before July 1 of each year, the Permittee shall submit to the Department's Solid Waste Compliance Section an updated survey of the facility completed within the last 60 days that delineates the areas containing final cover and deemed closed by the Department per General Condition No. 4 and areas without final cover where necessary. Also, calculations that clearly indicate the amount of surface area not containing final cover where necessary shall be included in the annual update. The Permittee may submit a certification from a Profession Engineer containing the required information in lieu of a survey. The Permittee may be exempt from this requirement if the approved cost estimate covers closure of the entire **surface area** of the permitted landfill that has not been certified closed.

7. On or before July 1 of each year, the Permittee shall submit to the Department's Solid Waste Compliance Section certification from a Professional Engineer registered in the State of South Carolina that enough soil is currently available to construct the final cover system. The certification shall have been completed within the last 60 days of submittal to the Department. The Department may, where circumstances warrant, require that any documentation deemed necessary to make such certification be submitted to the Department for review. The Permittee is exempt from this requirement if the approved cost estimate includes 3rd party costs for the purchase and placement of off-site soils.
8. The financial assurance mechanism is required to be updated annually for inflation per Reg. 61-107.19, Part I, Section E.1.a(2).

B. SPECIAL CONDITIONS

1. The following Alternate Daily Covers are approved, unless directed otherwise by the Department:
 - a. Posi-Shell Base Mix using either water or Latex Paint;
 - b. TarpArmor tarpaulins as approved by letter dated August 24, 2012;
 - c. Material from Santee Cooper's Grainger ash pond approved on April 16, 2018; and,
 - d. VERD AC using either water or Latex Paint.

Additional Alternate Daily Covers must be approved by the Department prior to use.

2. The Permittee elected to not have the Coastal Stormwater Section of DHEC review the stormwater management and sediment control design plans as part of the expansion of the facility; therefore, the Permittee shall obtain coverage under the South Carolina NPDES General Permit SCR100000 for all construction activities related to the expansion.
3. While the Coal Combustion Residual (CCR) Monofill is permitted, additional information is required prior to operating in this area. The Permittee is required to contact the Department prior to beginning construction of the CCR Monofill and submitting necessary information for approval. The information includes, but is not limited to:
 - a. DHEC Coastal Stormwater review and approval;
 - b. Project information regarding generator of the waste, location of the waste, amount of waste in tons, annual rate of disposal being requested, and the proposed length of time of the project;
 - c. Any site changes that are needed in order to operate in separate areas and to handle additional traffic on-site; and,
 - d. An updated Operation & Maintenance Plan specifying the equipment and personnel necessary to operate the CCR monofill at the proposed disposal rate and any additional special operational requirements.

C. ENVIRONMENTAL MONITORING CONDITIONS

1. GROUNDWATER MONITORING SYSTEM

- a. The Permittee shall maintain a groundwater monitoring system consistent with the most recently approved Groundwater Monitoring Plan and as required in R. 61-107.19, Part V, Subpart E. The groundwater monitoring system shall consist of monitoring wells as designated in the most recently approved Groundwater Monitoring Plan and any other monitoring wells specified by the Department. Modifications to the current groundwater monitoring system shall be in accordance with the requirements of R.61-107.19, Part V, 258.51 of Subpart E.
- b. The Permittee shall perform all groundwater sampling activities in accordance with the most recently approved Groundwater Monitoring Plan and in accordance with the requirements of R. 61-107.19, Part V, 258.53 of Subpart E along with any subsequent modifications deemed necessary by the Department to uphold the intent of this permit.
- c. The Permittee shall evaluate analytical results in accordance with the most recently approved Groundwater Monitoring Plan and any subsequent modifications required by the Department.
- d. The Permittee must determine during each sampling event the groundwater elevation in each well relative to mean sea level (MSL) to the nearest hundredth of a foot. All elevations should be determined on the same day. The Permittee shall determine the total depth of each well on an annual basis.
- e. Groundwater samples shall be analyzed by a laboratory certified by the State of South Carolina.

2. ASSESSMENT OF GROUNDWATER IMPACT

If the Permittee determines that a groundwater protection standard has potentially been exceeded for one or more constituents during routine monitoring at any monitoring well at the relevant point of compliance, then the Permittee shall perform any necessary groundwater assessment actions in accordance with the requirements of R.61-107.19, Part V, 258.54.d of Subpart E.

3. METHANE GAS MONITORING

The Permittee shall maintain a methane monitoring system consistent with the most recently approved Methane Monitoring Plan and as required in R. 61-107.19, Part V, 258.23 of Subpart C. Methane monitoring shall be conducted on a quarterly basis and results shall be submitted in the Semiannual, and Annual Groundwater Monitoring Reports that are referenced in permit condition B.4.a. If methane gas levels are detected at levels that exceed the limits specified in R.61-107.19, Part V, 258.23.a of Subpart C, the Permittee shall perform the actions required in R. 61-107.19, Part V, 258.23.c of Subpart C.

4. REPORTING

- a. The Permittee shall submit to the Department on a semiannual basis, a properly bound report of findings (one hard and one electronic copy), in accordance with the following sampling schedule:

Sampling Schedule

No more than 60 days
prior to report submittal

Report Due

July 15 (Semiannual Report)
January 15 (Annual Report)

It is preferable for the hard copy to contain two-sided copies for text, analytical data (laboratory and tabular format), field measurements, etc. The semiannual report should contain a brief narrative of activities performed, and their findings, as well as a site figure with well locations clearly depicted. A comprehensive annual report shall be submitted that meets at a minimum the requirements set forth in R.61-107.19, Part V, Subpart E.1.h. A Professional Engineer or Geologist registered in the State of South Carolina must sign and seal the report. The contractor will submit both the paper and an electronic copy (i.e. CD or DVD) of the report(s). In addition, the report(s) shall also make a determination as to whether the monitoring well network continues to meet requirements of Permit Condition C.1.a.

- b. The reports shall be submitted to the SCDHEC Bureau of Land and Waste Management, Division of Mining and Solid Waste, Solid Waste Permitting and Monitoring Section. In accordance with R.61-107.19, Part V, 258.29 of Subpart C, the Facility is responsible for retaining records for no less than three years as part of the operating record, and should be able to provide them to the Department in a reasonable amount of time.