Final

Environmental Monitoring Plan
Snow Hill Sanitary Landfill
Worcester County, Maryland

Prepared for

Worcester County Commissioners
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CONTENTS

LIST OF TABLES

LIST OF FIGURES

LIST OF APPENDICES

LIST OF ACRONYMS AND ABBREVIATIONS

AL	action Level
ASD	alternate source demonstration
CFR	Code of Federal Regulations
CO_2	carbon dioxide
COMAR	Code of Maryland Regulations
EA	EA Engineering, Science, and Technology, Inc., PBC
EMP	Environmental Monitoring Plan
EPA	U.S. Environmental Protection Agency
GMP	gas monitoring probe
GWMP	Groundwater Monitoring Plan
IMP	Post-Closure Inspections and Maintenance Plan
IRP	Investigation and Remediation Plan
LEL	lower explosive limit
LFG	landfill gas
LFGP	Landfill Gas Monitoring Plan
MCL	Maximum Contaminant Level
MDE	Maryland Department of the Environment
O_2	Oxygen
PFAS	per- and polyfluoroalkyl substances
PQL	practical quantitation limit
QA	quality assurance
QC	quality control
RCRA	Resource Conservation and Recovery Act
VOC	volatile organic compound

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1. ENVIRONMENTAL MONITORING PLAN

1.1 REGULATORY COMPLIANCE

This Environmental Monitoring Plan (EMP) was prepared by EA Engineering, Science, and Technology, Inc., PBC (EA) for the Worcester County Snow Hill Sanitary Landfill (the Landfill) in accordance with Code of Maryland Regulations (COMAR) 26.04.07, federal regulations (40 Code of Federal Regulations [CFR] Parts 257 and 258), Maryland Department of the Environment (MDE) guidelines, and other applicable laws and regulations. The EMP will be renewed every 5 years from the date of approval.

The EMP includes the following plans:

- Groundwater Monitoring Plan **(GWMP)**
- Landfill Gas Monitoring Plan **(LFGP)**
- Post-Closure Inspections and Maintenance Plan **(IMP**) for closed landfills

The Landfill has an adjacent wetland that was created from a pre-existing borrow pond. The wetland was created during the closure of the Landfill, and the required monitoring of the wetland has been completed. Surface water monitoring is not performed at this site.

1.2 SITE HISTORY

The Landfill stopped receiving waste in 1990, prior to the 40 CFR 258 Resource Conservation and Recovery Act (RCRA) compliance date for landfill units that stopped receiving waste after 9 October 1991. COMAR does apply to Snow Hill Sanitary Landfill; therefore, additional requirements pursuant to 40 CFR 258 are implemented for the purpose of groundwater monitoring and analysis. The closure construction of the landfill was completed in the early Spring of 2006.

The Landfill has received residential, municipal, and industrial solid wastes. The Landfill was in operation from the early 1970s until March 1990, and is currently owned by Worcester County. Disposal of solid waste at the Landfill ceased with the opening of the Worcester County Central Landfill Facility in March 1990. The limits of waste can only be approximated from existing records and topography. A series of test pits were excavated in October 1993 to more accurately locate the limits of waste, in order that the proposed cap design will encompass the waste.

The GWMP includes semi-annual sampling and reporting of six wells at the Landfill.

The LFGP includes 22 landfill gas (LFG) probes and one on-site structure (attendant's shed). The attendant's shed is located on the western side of the property adjacent to the transfer station, which is used by employees for rest during work hours. The first LFG monitoring event was conducted in May 2006. Worcester County Department of Public Works (DPW) commenced landfill gas (LFG) monitoring at the closed Snow Hill Sanitary Landfill in May 2006 once

As a follow-up to the MDE letter dated 30 October 2007, LFG data were gathered over a 12-month period and the existing LFG remedial controls were evaluated. Based on the data collected over the 12-month evaluation period, MDE issued a letter on 21 October 2008 stating that the County was required to submit an LFG Remediation Plan. The Remediation Plan was submitted by the County to MDE on 24 December 2008 and approved by MDE on 28 May 2009. The County began retrofitting LFG vents in April 2009 per the Remediation Plan. The Interim Status Report was submitted to MDE on 1 July 2010. In a letter to MDE dated 17 June 2011, the County stated that it would be installing additional gas monitoring probes. The County installed six temporary gas monitoring probes and first sampled during the June 2012 sampling event. A letter from MDE dated 7 January 2013 stated the following: as there were continued lower explosive limit (LEL) exceedances in gas probes along the southern/southeastern boundary and to the north in the vicinity of GP-3 and GP-18, the County must propose additional gas probe locations along the boundary or submit a plan based on a trench evaluation to remediate the exceedances within 30 days of the receipt of this letter. The County, upon receipt of this letter, requested and received an extension to comply by 26 February 2013.

The County submitted an LFG migration mitigation plan, which included an LFG trench design, on 25 February 2013. In a letter dated 12 June 2013, MDE provided guidance on proceeding with the LFG trench pilot study and installation of proposed gas probe GP-18A. The County installed GP-18A and initiated monitoring during the September 2013 sampling event. Construction of the engineered passive LFG trench pilot study was completed on 7 May 2014. Per the LFG migration mitigation plan, LFG concentrations along the property boundary near the LFG trench pilot study have been monitored monthly since the installation completion date.

On 15 April 2015, MDE issued a letter requesting that the County submit a plan to fully remediate all gas probes with LEL exceedances. An evaluation of the pilot study and recommendations were presented in a letter to MDE dated 12 June 2015. EA recommended extending the passive LFG trench in an effort to immediately decrease the concentration of methane gas in gas probes GP-9 through GP-11 and temporarily applying a vacuum to the gas probes with high methane gas concentrations to extract pockets of concentrated LFG. On 3 February 2016, substantial completion of the Phase II passive LFG trench extension was achieved. As a result of the passive LFG trench extension, LFG probes GP-8, GP-9, GP-10, and GP-11 were moved slightly closer to the property boundary. Following installation of Phase II of the LFG migration control trench, methane concentrations within GP-9, GP-10, and GP-11 were significantly reduced. However, sporadic exceedances were still recorded. As a result, the County took measures to mitigate exceedances and evaluate other potential sources of sporadic exceedances.

The County is currently, and as an ongoing maintenance operation, repairing or replacing components of existing solar-powered LFG candlestick flares. Additionally, the County has retrofitted several existing LFG vents with the solar-powered LFG candlestick flares. In Spring 2016, EA assisted the County with retrofits to the existing geomembrane liner in the area of GP-9. The retrofits included excavation and installing a supplemental section of geomembrane by overlapping the existing geomembrane to impede gas flow from the trench to the probe. The

subsequent monitoring event performed on 11 April 2017 resulted in a 0 percent methane concentration in GP-9. A similar evaluation was planned and performed for GP-10 in June 2017. On 31 May 2017, MDE issued a letter requesting that upon completion of the evaluation near GP-10, the County submit data from the two subsequent monthly events near GP-9 and GP-10. Data were submitted for MDE via email on 18 July 2017.

Based on the Report of Observation by MDE dated 28 February 2019, several wind turbines along the southeast landfill perimeter were not spinning. The report also documented that the concrete base of the gas monitoring probe in the area southwest of the homeowner drop-off area was elevated. The County repaired the non-functioning wind turbines in Spring 2020. The County also removed the existing concrete base and installed a new concrete base flush with the existing ground.

On behalf of the County, EA submitted a letter to MDE on 1 April 2019, requesting a modification in the LFG monitoring frequency from monthly to bi-monthly (every other month) to accommodate the reduction in methane gas concentration in the LFG monitoring probes located near the property boundary. In a letter dated 22 April 2019, MDE approved the request for LFG monitoring frequency reduction at the Landfill.

1.3 LOCATION

The Landfill is located approximately 0.5 mile northeast of Snow Hill, Maryland, and occupies an approximately 29-acre site, 11 acres of which were used for solid waste disposal. The Landfill's coordinates are 38° 10' 56.5" N, 75° 22' 45.8" W. This unlined landfill was capped in 2004 with an impermeable liner system and an LFG management system. Located at the entrance of the transfer station is an attendant's shed, used by employees to rest during work. The regional and local location maps are provided on Figures 1 and 2, respectively.

1.4 REGIONAL GEOLOGY AND HYDROGEOLOGY

Worcester County, Maryland is located within the Delmarva Peninsula Region of the Coastal Plain Physiographic Province. The Landfill is located in the Salisbury Plain District of the Atlantic Coastal Plain Province. The regional geology of Worcester County is comprised of the unconsolidated sedimentary strata of the Holocene, Pleistocene, and Miocene epochs. These strata dip to the east and are generally alternating layers of silt, sand, and clay. Geology at the site is generally consistent with the regional geology. According to the Geologic map of Worcester County (1968 and 1978), the geologic formations underlying the site are the Omar Formation and the Beaverdam Sand. These formations generally consist of undifferentiated gray to buff sand and gravel, gray to brown lignitic silt and clay, occasional boulders, and rare shell beds. Surficial deposits occur as intercalated fluvial sands and marsh muds, well sorted, stabilized sand dunes, shell-bearing estuarine clays and silts and beach zone sands that are Wisconsin to Holocene in age. Subsurface deposits of pre-Wisconsin age consist of buff to reddish-brown sand and gravel locally incised into Miocene sediments, estuarine to marine white to gray sands, and gray to blue, shell-bearing clays.

Groundwater flows through unconsolidated sand, silt and gravel pores of multiple sedimentary rock aquifers in Worcester County. The aquifer directly underlying the Landfill is a predominantly unconfined, water table aquifer known as the Surficial, or Columbia, aquifer. The Surficial aquifer flows mainly to the south with a range in elevation from greater than 70 feet above sea level in Cecil County to 199 feet below sea level near Salisbury. The composition of the Surficial aquifer is varying shades of gray, pale yellow, white, and brown loose, very fine to coarse-grained sand and ranges in thickness from 10 feet in the central and northern Eastern Shore to over 230 feet in central Wicomico County. The three major aquifers, which underlie the Surficial aquifer, in Worcester County are the unconfined aquifers known as the Pocomoke, Ocean City and Manokin aquifers. The Pocomoke aquifer is the shallowest and youngest of the three aquifers and the Manokin the deepest and the oldest. The regional geological map is provided on Figure 3.

1.5 LOCAL GEOLOGY

Logs of the subsurface geology were completed during installation of the groundwater monitoring well borings. The boring logs show primarily fine to medium-grained sand with some interbedded layers of silt and clay to a depth of 25 feet below surface grade. Generally, coarser grained sand was encountered as depth increased. All groundwater wells are screened into the uppermost aquifer (Surficial aquifer). The local geological map is provided on Figure 4.

2. GROUNDWATER MONITORING PLAN

This GWMP addresses the sampling and analysis that will occur as part of the post-closure monitoring. A semi-annual report on water quality will be submitted to the MDE containing a summary and interpretation of the analytical results of the monitoring locations sampled and analyzed as defined in this plan.

This GWMP has been developed to comply with the regulations set forth in 40 CFR 258, Subpart E, "Groundwater Monitoring and Corrective Action." This GWMP addresses detection monitoring, as defined in 40 CFR 258.24. Should a statistically significant increase over background of the constituents tested in this program be detected, an assessment monitoring program as outlined in 40 CFR 258.55 will be implemented.

The detailed site history, location, and geology of the Landfill is presented under Sections 1.2, 1.3, and 1.4 of this EMP, respectively.

2.1 HISTORICAL GROUNDWATER RESULTS

Groundwater samples were analyzed for volatile organic compounds (VOCs), total metals, and inorganic parameters quarterly for 1 year in 2002 to establish significant data for statistical analysis, and since then semi-annually in accordance with MDE Monitoring Parameters Table I and II. These parameters are potentially available from waste material from the unlined fill areas. The upgradient well is SH-EA-6, while the downgradient wells are SH-EA-1, SH-EA-2, SH-EA-3, SH-EA-4, and SH-EA-5. The findings indicate that very few downgradient wells show concentrations elevated above background levels to a significant degree. Very few organic constituents have been detected in upgradient and downgradient wells over the history of this site. Historical analytical results are included in Appendix A.

Statistical exceedances for chlorobenzene, arsenic, barium, lead, and zinc are consistent with historical data. Chlorobenzene was detected above the practical quantitation limit (PQL) at monitoring well SH-EA-4 for 33 out of 45 sampling events, but never above the Maximum Contaminant Level (MCL). Chlorobenzene was detected above the PQL but below the MCL in SH-EA-4 during the Fall 2024 monitoring event.

Arsenic has historically been detected above the MCL in monitoring well SH-EA-4. Arsenic was detected below the PQL in SHEA-4 during the Fall 2024 monitoring event. Arsenic is a naturally occurring element, and the statistical exceedance is not believed to be associated with groundwater contamination caused by the Landfill, but a naturally occurring variation in the groundwater.

Barium was detected above the PQL in monitoring wells SH-EA-2 and SH-EA-4 since monitoring began in May 2003 and June 2002, respectively; however, there have been no MCL exceedances observed for barium in these monitoring wells. Barium was detected above the PQL in SH-EA-2 and SH-EA-4 during the Fall 2024 monitoring event. Barium is a naturally occurring element, and the statistical exceedance is not believed to be associated with

groundwater contamination caused by the Landfill, but a naturally occurring variation in the groundwater.

Lead has historically been detected above the PQL in monitoring well SH-EA-1. Lead was not detected in SH-EA-1 during the Fall 2024 monitoring event. Lead is a naturally occurring element, and the statistical exceedance is not believed to be associated with groundwater contamination caused by the Landfill, but a naturally occurring variation in the groundwater.

Zinc has historically been detected above the PQL in monitoring well SH-EA-2. Zinc was detected above the PQL in SH-EA-2 during the Fall 2024 monitoring event. There is no MCL for zinc. Zinc is a naturally occurring element, and the statistical exceedance is not believed to be associated with groundwater contamination caused by the Landfill, but a naturally occurring variation in the groundwater.

2.2 MONITORING NETWORK

The GWMP includes semi-annual sampling of six wells at the Landfill. The groundwater well locations are provided on Figure 5. Table 1 presents wells that are in the monitoring program. The groundwater well construction documents are provided in Appendix B. On behalf of the County, EA contacted MDE's Water and Science Administration requesting assistance with the missing well construction documentation. In response, MDE confirmed in a letter dated 13 November 2024 that the requested documentation was unavailable. All available construction documents as well as the MDE letter are provided in Appendix B.

Table 1. Groundwater Monitoring Well Network[1]

Description	Number	Date of Installation	Coordinates[2]		Well Diameter (inches)	Total Well Depth (feet)	Top of Casing Elevation (feet above MSL)	Screen Interval (feet)	Screened Aquifer
			Northing	Easting					
Downgradient Monitoring Well	SH-EA-01	12/08/1987	192553.97'	177876 4.28'	4	25.0	12.71	15 to 25	Surficial
Downgradient Monitoring Well	SH-EA-02	12/10/1987	192369.62'	177902 9.52'	4	75.0	13.40	55 to 75	Surficial
Downgradient Monitoring Well	SH-EA-03	12/09/1987	191877.51'	177881 1.48'	4	25	15.28	15 to 25	Surficial
Downgradient Monitoring Well	SH-EA-04	06/19/1991	192252.20'	177837 7.43'	4	26.0	17.78	15 to 25	Surficial
Downgradient Monitoring Well	SH-EA-05	06/17/1991	192037.82'	177812 0.73'	4	26.0	18.46	15 to 25	Surficial
Upgradient Monitoring Well	SH-EA-06	03/26/2003	191355.66'	177816 4.63'	4	28.5	22.70	7.5 to 27.5	Surficial

Notes:
1. Low-flow purging and sampling began in Spring 2016.
2. The Landfill is in Maryland State Plane 83 US survey foot coordinates and the National Geodetic Vertical Datum of 1929.

MSL = Mean Sea Level

2.3 GROUNDWATER FLOW

Water level gauging at monitoring wells within the network is utilized to prepare a groundwater contour map (Figure 6) and to determine the groundwater flow direction. The contour map reflecting the measurements will be included with the semi-annual report.

2.4 SEMI-ANNUAL REPORTING REQUIREMENTS

A semi-annual report on water quality for the Landfill will be submitted to MDE containing a summary and interpretation of the analytical results of the monitoring locations sampled and analyzed as defined in this plan. The report will be submitted to MDE within 90 days of the close of every first and third calendar quarters in the preferred format of a searchable electronic PDF, unless otherwise requested. In the report, a qualified groundwater scientist, as defined in 40 CFR 258.50(g), will evaluate the results and advise of any changes in water quality or any exceedance of the state and federal MCL, action level (AL), or other health standards. The report will also include the following:

- A site plan with the most current topographic map depicting the monitoring well locations.

- A complete copy of the laboratory data, and the qualified groundwater scientist interpretive findings.

- A discussion of the data, including the identification of those monitoring locations that show influences attributable to the presence of landfill leachate and any results which exceed MCLs.

- Discussion of the quality assessment and quality control procedures and data used to ensure that the data collected are reliable, if those procedures vary from those included in this monitoring plan.

- Historical data presented in a time series format and analysis of the data. Historical data from each well will be presented in a tabular format. The report discussion will include historical data trends.

- As described in Section 2.10.1 of this plan, statistical analysis of the groundwater monitoring network data will be performed and evaluated.

2.5 SAMPLING SCHEDULE

Groundwater sampling will be conducted on a semi-annual basis in accordance with 40 CFR 258. Semi-annual sampling events will occur during the periods of January through March, and July through September of each year. The sampling will be performed by a qualified groundwater scientist or supervised qualified environmental technicians, adhering to the groundwater monitoring frequency specified in this GWMP.

2.6 SAMPLING METHOD

A qualified groundwater scientist shall ensure that a water quality sample is collected from each groundwater monitoring well and/or surface water monitoring point. Each sample must be analyzed using qualified independent laboratories certified for water quality analysis by MDE (Laboratories). The qualified groundwater scientist shall also ensure that Laboratories achieve the desired practical quantitation limit (PQL) concentration (with a reporting limit ≤ PQL) using only the most sensitive analytical methods listed in 40 CFR 136, 141, 143, and SW-846. This applies to each required parameter listed in MDE Monitoring Parameters Tables I and II (Appendix C) and any applicable/required parameters listed in 40 CFR 258 during each environmental monitoring event to meet monitoring requirements.

The groundwater samples from monitoring wells will be collected in accordance with the U.S. Environmental Protection Agency's (EPA) low stress (low flow) purging and sampling standard operating procedure. Per MDE's letter dated 2 January 2024, samples will be collected and analyzed for per- and polyfluoroalkyl substances (PFAS), including PFOA, PFOS, PFHxS, PFNA, PFBS, and HFPO-DA (commonly referred to as a GenX Chemical), starting on 1 July 2024. PFAS sampling will be conducted in accordance with EA's standard operating procedure for PFAS sampling. EA will ensure that the PFAS sampling equipment, clothing, and personal

protective equipment are utilized. This includes wearing synthetic or 100 percent cotton clothing that has been well-laundered without the use of fabric softener, using powderless nitrile gloves, and minimizing the use of sunscreen and bug spray. If spray is necessary for health and safety, its use will be documented in the field sampling logs. Additionally, proper sample handling and transfer procedure will be followed.

2.6.1 Well Inspection

During each semi-annual event, the well condition will be inspected and documented on the low-flow sampling form (Appendix D). The County will be notified of the maintenance needs immediately after the sampling is completed. All repair or maintenance tasks shall be corrected or performed within 30 days of their observance; per COMAR 26.04.07.22C.

2.6.2 Water Level Determination

After the physical inspection has been completed, the static water levels will be determined for all wells to be sampled prior to initiation of any purging and sampling activities. The depth to water and the elevation at the top of well casing reference point will be used to calculate the groundwater elevation at the well. Because these data will be used to construct groundwater contour maps, it is essential that they be as accurate as possible. All water level determinations will be made to the nearest 0.01 foot and recorded in Appendix D.

A water level indicator will be used and the depth to water measured by lowering the precleaned probe of the electronic sounder into the well slowly until the indicator (buzzer or meter) is activated. After an indication of water penetration has been achieved, the probe will be slowly raised and lowered until the indicator accurately registers the water surface. The water level will be referenced to the source point on the casing marked when the casing stick-up was measured. The water level will be determined to the nearest 0.01 foot.

2.6.3 Cross-Contamination Prevention

To be sure that cross-contamination via water-level sounding equipment does not occur, it is necessary to decontaminate equipment between each well. This will be done by wiping the sounding device with a paper towel saturated with a non-phosphate detergent as retrieved. Probes are rinsed with a non-phosphate detergent and spray-rinsed with deionized water between samplings.

2.6.4 Purging Process and Protocol

Low-flow purging and sampling methods (less than 0.5 liter per minute) were performed at the Landfill beginning in Spring 2016 and have continued for each event thereafter. The low-flow purging and sampling will be performed in accordance with the EPA 2017 low-flow purging and sampling procedure.

Sampling and purging will be accomplished using a clean, stainless steel submersible pump and discharge hose that is lowered to the screened interval midpoint. Care shall be taken as to not

disturb the well while lowering the non-dedicated pump and tubing into the well. The portable generator should be placed on level ground approximately 15 feet away from and downwind from the well. All generator maintenance (oil and fueling) is to be performed off-site.

A flow-through cell containing the instrumentation header will be connected to the pump discharge and well purging will begin at a pumping rate of less than 0.5 liter per minute, unless a different purge rate is established for the well. The flow cell will be filled completely, taking care not to cause entrapment of air in the system. The pumping rate will then be adjusted in order to stabilize the water level within the well, if necessary.

During the purging of the well, water quality parameters will be monitored and recorded every 3 to 5 minutes, as well as purge rate, volume purged, and depth to water. Water quality parameters monitored during purging are listed in Section 2.6.7. Purging of the standing water will be considered complete when three consecutive readings of the water quality indicator parameters agree within EPA's groundwater purging stabilization criteria (Table 2). EPA's groundwater purging stabilization criteria for each indicator field parameter must be met before water quality sample collection may begin. As no contamination has been detected at the closed landfills, no treatment or special disposal is required for purged well water. Information regarding well purging will be recorded on a low-flow sampling record form (Appendix D).

Table 2. Groundwater Purging Stabilization Criteria

Indicator Field Parameters	
Parameter	**Stabilization Criteria**
pH	± 0.1 unit
Specific Conductance	3 percent
Temperature	3 percent
Oxidation/Reduction Potential	± 10 millivolts
Dissolved Oxygen	10 percent for values greater than 0.5 milligram per liter; if three dissolved oxygen values are less than 0.5 milligram per liter, consider the values as stabilized
Turbidity	10 percent for values greater than 5 nephelometric turbidity units; if three consecutive values are less than 5 nephelometric turbidity units, consider the values as stabilized

Note:
Stabilization has been achieved once the above criteria have been met for three (3) consecutive readings, taken 5-minutes apart or as appropriate.

2.6.5 Sampling Procedure

Prior to sampling, the discharge tubing will be disconnected from the flow-through cell and it will be made certain that the water being discharged by the pump is not silty and no bubbles are observed in the discharge tubing. Sample containers will be filled by allowing the pump discharge to flow gently down the inside of the containers with as little agitation or aeration as possible. Containers that contain preservative will not be filled to overflowing and will be thoroughly mixed after filling by upending. Samples for volatile organics will be collected in a

manner that will minimize aeration and so that containers are free of bubbles and headspace. Each pre-labeled container will be placed in a cooler containing ice and a sample entry will be made on the chain-of-custody form (Appendix E).

Additionally, if needed as a result of mechanical equipment failure, groundwater sample collection will be accomplished with an equivalent low stress groundwater pump for groundwater purging and sampling.

2.6.6 Field Filtration

In accordance with 40 CFR 258, no samples will be field filtered.

2.6.7 Field Analysis

During the purging of the well, water quality parameters will be monitored and recorded every 3 to 5 minutes, as well as purge rate, volume purged, and depth to water. Water quality parameters, including temperature, pH, oxidation-reduction potential, dissolved oxygen, turbidity, and specific conductance, will be determined in the field. These determinations will be made using individual meters or a single unit utilizing multiple probes.

2.6.8 Sample Handling

When sampling has been completed, the qualified environmental technician will maintain strict custody control over the samples and will deliver the samples to the laboratory or a laboratory transport service. The completed chain-of-custody form(s) will accompany the samples to the laboratory, where they will be relinquished from the qualified environmental technician or laboratory transport service and given to appropriate lab personnel. An example chain-of-custody form is included in Appendix E. Other documentation such as field data logs, etc., will be retained by responsible project personnel and will be included in the groundwater monitoring report.

2.7 ANALYTICAL PARAMETERS AND LAB ANALYSIS

2.7.1 Parameters

All samples collected will be analyzed for the constituents identified in MDE Monitoring Parameters Table I and II (Appendix C), which comprise Appendix I of Subpart E of 40 CFR 258.

2.7.2 Analytical Laboratory Procedures

All analytical work shall be completed in accordance with standard EPA protocols where such exist. When necessary, cation/anion balance will be calculated as recommended by Section 1030 E Checking Correctness of Analysis of Standard Methods (Clesceri et al. 1999). The anion and cation sums, when expressed as milliequivalents per liter, must balance because

all potable waters are electrically neutral. The test is based on the percentage difference defined in Standard Methods.

A qualified independent laboratory certified for water quality analysis by MDE will perform all analyses. Quality assurance (QA)/quality control (QC) shall be assured through the accredited laboratory's quality assurance manual.

The laboratory will report analytical results based on the PQLs as defined by MDE Monitoring Parameters Tables I and II, shown in Table 3 in this document. Alternate PQLs are requested for total magnesium, alkalinity, chloride, and turbidity. A PQL variance letter for these analytes was submitted to MDE on 19 July 2024, and MDE approved the request on 26 November 2024. The letter is included in Appendix F of this EMP.

Table 3. Monitoring Parameters and Analytical Method

Monitoring Parameters	Method	Units	PQL
Volatile Organic Compounds			
Acetone	8260D Rev. 4	µg/L	5.0
Acrylonitrile	8260D Rev. 4	µg/L	5.0
Benzene	8260D Rev. 4	µg/L	1.0
Bromochloromethane	8260D Rev. 4	µg/L	1.0
Bromomethane	8260D Rev. 4	µg/L	1.0
2-Butanone	8260D Rev. 4	µg/L	5.0
Carbon disulfide	8260D Rev. 4	µg/L	1.0
Carbon tetrachloride	8260D Rev. 4	µg/L	1.0
Chlorobenzene	8260D Rev. 4	µg/L	1.0
Chloroethane; Ethyl chloride	8260D Rev. 4	µg/L	1.0
Chloromethane	8260D Rev. 4	µg/L	1.0
1,2-Dibromo-3-chloropropane; DBCP	8011 Rev. 0	µg/L	0.04
1,2-Dibromoethane; Ethylene dibromide; EDB	8011 Rev. 0	µg/L	0.04
Dibromomethane	8260D Rev. 4	µg/L	1.0
1,2 – Dichlorobenzene	8260D Rev. 4	µg/L	1.0
1,4 – Dichlorobenzene	8260D Rev. 4	µg/L	1.0
Trans-1,4-dichloro-2-butene	8260D Rev. 4	µg/L	5.0
1,1-Dichloroethane	8260D Rev. 4	µg/L	1.0
1,2-Dichloroethane	8260D Rev. 4	µg/L	1.0
1,1-Dichloroethene	8260D Rev. 4	µg/L	1.0
Cis-1,2-Dichloroethene	8260D Rev. 4	µg/L	1.0
Trans-1,2-Dichloroethene	8260D Rev. 4	µg/L	1.0
Methylene chloride	8260D Rev. 4	µg/L	1.0
Methyl *Tert*-Butyl Ether; (MTBE)	8260D Rev. 4	µg/L	2.0
1,2-Dichloropropane	8260D Rev. 4	µg/L	1.0
Trans-1,3-Dichloropropene	8260D Rev. 4	µg/L	1.0
Cis-1,3-Dichloropropene	8260D Rev. 4	µg/L	1.0
Ethylbenzene	8260D Rev. 4	µg/L	1.0
2-Hexanone	8260D Rev. 4	µg/L	5.0
Iodomethane	8260D Rev. 4	µg/L	1.0
4-Methyl-2-pentanone	8260D Rev. 4	µg/L	5.0
Styrene	8260D Rev. 4	µg/L	1.0
1,1,1,2-Tetrachloroethane	8260D Rev. 4	µg/L	1.0
1,1,2,2-Tetrachloroethane	8260D Rev. 4	µg/L	1.0

Monitoring Parameters	Method	Units	PQL
Volatile Organic Compounds			
Tetrachloroethene; (PCE)	8260D Rev. 4	µg/L	1.0
Toluene	8260D Rev. 4	µg/L	1.0
1,1,1-Trichloroethane	8260D Rev. 4	µg/L	1.0
1,1,2-Trichloroethane	8260D Rev. 4	µg/L	1.0
Trichloroethene; (TCE)	8260D Rev. 4	µg/L	1.0
Trichlorofluoromethane; (CFC-11)	8260D Rev. 4	µg/L	1.0
1,2,3-Trichloropropane	8260D Rev. 4	µg/L	1.0
Vinyl acetate	8260D Rev. 4	µg/L	1.0
Vinyl chloride	8260D Rev. 4	µg/L	1.0
o-Xylene	8260D Rev. 4	µg/L	1.0
m-+*p*-Xylenes	8260D Rev. 4	µg/L	1.0
Bromodichloromethane	8260D Rev. 4	µg/L	1.0
Dibromochloromethane	8260D Rev. 4	µg/L	1.0
Bromoform	8260D Rev. 4	µg/L	1.0
Chloroform	8260D Rev. 4	µg/L	1.0
PFAS			
Perfluorooctanoic acid (PFOA)	1633 Rev. A	ng/L	4.0
Perfluorooctanesulfonic acid (PFOS)	1633 Rev. A	ng/L	4.0
Perfluorononanoic acid (PFNA)	1633 Rev. A	ng/L	4.0
Perfluorohexanesulfonic acid (PFHxS)	1633 Rev. A	ng/L	3.0
Hexafluoropropylene oxide dimer acid (HFPO-DA; GenX)	1633 Rev. A	ng/L	5.0
Perfluorobutanesulfonic acid (PFBS)	1633 Rev. A	ng/L	3.0
Elements and Indicator Monitoring Parameters			
Total Antimony	6020B Rev. 2	µg/L	2
Total Arsenic	6020B Rev. 2	µg/L	2
Total Barium	6020B Rev. 2	µg/L	10
Total Beryllium	6020B Rev. 2	µg/L	2
Total Cadmium	6020B Rev. 2	µg/L	4
Total Calcium	6020B Rev. 2	µg/L	80
Total Chromium	6020B Rev. 2	µg/L	10
Total Cobalt	6020B Rev. 2	µg/L	10
Total Copper	6020B Rev. 2	µg/L	10
Total Iron	6020B Rev. 2	µg/L	5
Total Lead	6020B Rev. 2	µg/L	2
Total Magnesium[1]	6020B Rev. 2	µg/L	100
Total Manganese	6020B Rev. 2	µg/L	10
Total Mercury	6020B Rev. 2	µg/L	0.2
Total Nickel	6020B Rev. 2	µg/L	11
Total Potassium	6020B Rev. 2	µg/L	390
Total Selenium	6020B Rev. 2	µg/L	35
Total Silver	6020B Rev. 2	µg/L	10
Total Sodium	6020B Rev. 2	µg/L	200
Total Thallium	6020B Rev. 2	µg/L	2
Total Vanadium	6020B Rev. 2	µg/L	10
Total Zinc	6020B Rev. 2	µg/L	10
Alkalinity[1]	2320 B-2021	mg/L	5.0
Ammonia (as N)	350.1 Rev. 2.0	mg/L	1.0
Chemical oxygen demand	410.4 Rev. 2.0	mg/L	10
Chloride[1]	300.0 Rev. 2.1	mg/L	0.5
Hardness	2340 C-2021	mg/L	0.50

Monitoring Parameters	Method	Units	PQL
Volatile Organic Compounds			
Nitrate (as N)	300.0 Rev. 2.1	mg/L	0.06
pH (Field)	Field measured	S.U.	0.1
pH (Laboratory)	4500-H^+ B-2021	S.U.	0.1
Specific conductance (Field)	Field measured	µS/cm	1.0
Specific conductance (Laboratory)	2510 B-2021	µS/cm	1.0
Sulfate	300.0 Rev. 2.1	mg/L	0.38
Total dissolved solids	2540 C-2020	mg/L	10
Turbidity[1]	180.1 Rev. 2.0	NTU	0.5

Notes:
1. MDE approved PQL variances for alkalinity (2320 B-2021), chloride (300.0 Rev. 2.1), total magnesium (6020B Rev. 2), and turbidity (180.1 Rev. 2.0); refer to Appendix F.

µg/L = microgram(s) per liter (parts per billion, ppb)
µS/cm = microsiemen(s) per centimeter
mg/L = milligram(s) per liter
ng/L = nanogram per liter (parts per trillion, ppt)
PFAS = Per- and Polyfluoroalkyl Substances
NTU = nephelometric turbidity units
PQL = Practical Quantitation Limit
S.U. = standard units

All analytical results below the PQL that can be estimated by the laboratory will be reported with a J qualifier. J values must be reported. The PQLs will be reviewed and revised every 5 years. A variance application request will be submitted to MDE before November 2029 to justify continued approval and to determine whether a more sensitive method or a qualified laboratory is necessary, per COMAR 26.04.07.26.

2.8 QUALITY CONTROL MEASURES

QA/QC protocols will be employed during all monitoring events to check the uniformity of the data and to ensure field QC criteria and laboratory QA criteria. Adhering to the sampling and reporting procedures in Section 2.6, Sampling Method, will be important, and the following QA and QC measures below will help ensure quality data collection. Completed chain-of-custody forms will be attached to the semi-annual groundwater report. An example chain-of-custody is presented in Appendix E.

All instrumentation will be calibrated prior to transport to the field and, where provided for, recalibrated during usage. Field meters will be calibrated on a daily basis. All equipment shall be properly decontaminated prior to each use. Information shall be recorded on Form 4-1. The instrument calibration logs can be found in Appendix G.

All equipment used to collect samples and any equipment that might contact the sample will be decontaminated to avoid cross-contamination and/or the introduction of outside contaminants into the sample. All non-dedicated equipment shall be decontaminated utilizing a non-phosphate detergent and grade de-ionized water prior to use in monitoring wells.

A qualified groundwater scientist will oversee qualified environmental technicians who will sample monitoring wells identified within this plan on a semi-annual basis.

Duplicate samples for precision will also be collected at a frequency of one per site per event.

2.8.1 Field Quality Control Samples/Blanks

Trip blanks, a field blank and a rinsate (equipment) blank will be collected at the Landfill and analyzed as field quality control measures in accordance with MDE's requirements and industry standards as follows:

- Trip Blank: 1 per sample cooler with volatiles
- Field Blank: 1 per day per matrix (1 per 20 water samples)
- Equipment Blank: 1 per day per matrix (1 per 20 water samples)

Trip blanks will be prepared during each sampling event by the laboratory and will be delivered to the laboratory accompanying the field samples with the purpose of evaluating if VOC contamination from ambient air is introduced into the samples during sample handling or transportation. Each trip blank will be analyzed for volatile organics and will be prepared prior to field sampling. Trip blanks will be sealed and labeled and will never be opened during any sampling activities.

The field blank will be prepared by pouring deionized water provided by the laboratory directly into the sample containers while on-site and will be used to determine if there was ambient contamination in the field or in the laboratory. Field blanks will be collected and analyzed for the same groundwater parameters as the groundwater monitoring wells as field quality control measures.

The rinsate (equipment) blank will be prepared by running deionized water through and/or over decontaminated equipment and into the sample containers. The rinsate (equipment) blank will accompany the groundwater samples to the laboratory for analytical testing and will be used to determine the effectiveness of the decontamination process and procedures.

The field quality control samples will not be shared between two or more landfill facilities. All samples, blanks, and duplicates, along with their corresponding data, will be landfill site-specific. The semi-annual monitoring report will only contain laboratory data that pertains to that landfill's environmental monitoring event and data.

2.9 ACTION PLAN – GROUNDWATER EXCEEDANCES

If analytical results from water quality samples collected from any sources associated with the landfill or surrounding properties exceed MCL, numerical criteria for toxic substances, AL, or other health standard screening levels persistently (≥2) and/or for the first time, then the landfill owner, operator, or permittee must notify MDE in writing by email within 24 hours of receipt of the analytical data detecting this occurrence. The notification should include details for each exceedance, specifying first-time exceedances, the expected resampling date or the acceptance of the exceedance results, and the optional submission of an alternate source demonstration (ASD) report. Within 30 days, resample each water monitoring point that had an exceedance, notify

MDE in writing by email of the resampling results, and submit to MDE an ASD report (optional). First-time or persistent exceedances necessitate the development of an Investigation and Remediation Plan (IRP). If MDE determines that an IRP is warranted, then within 60 days of the original exceedance detection or confirmation/verification, an IRP will be submitted to MDE, outlining the exceedance detection frequency, the lateral and vertical extent of contamination, potential causes of increased contaminant concentrations, and remedial and corrective actions to be taken based on the cause, nature, and extent of the contaminant plume migration; also include a schedule for the implementation of the remedial measures. The MDE-approved IRP must be implemented within 90 days of approval.

The standards for VOC monitoring parameters and inorganic parameters are provided in Tables 4 and 5, respectively.

Table 4. Monitoring Criteria for VOC Parameters

VOC Monitoring Parameters	Units	MCL	Cleanup STD
Acetone	µg/L		1400
Acrylonitrile	µg/L		
Benzene	µg/L	5.0	5.0
Bromochloromethane	µg/L		
Bromomethane	µg/L		0.75
2-Butanone	µg/L		560
Carbon disulfide	µg/L		81
Carbon tetrachloride	µg/L	5.0	5.0
Chlorobenzene	µg/L	100	100
Chloroethane	µg/L		
Chloromethane	µg/L		19
1,2-Dibromo-3-chloropropane; (DBCP)[1]	µg/L	0.20	0.20
1,2 – Dibromoethane; (EDB)[1]	µg/L	0.05	0.050
Dibromomethane	µg/L		
1,2 – Dichlorobenzene	µg/L	600	
1,4 – Dichlorobenzene	µg/L	75	
Trans-1,4-dichloro-2-butene	µg/L		
1,1-Dichloroethane	µg/L		2.8
1,2-Dichloroethane	µg/L	5.0	5.0
1,1-Dichloroethene	µg/L	7.0	7.0
Cis-1,2-Dichloroethene	µg/L	70	70
Trans-1,2-Dichloroethene	µg/L	100	100
Methylene chloride	µg/L	5.0	5.0
Methyl *Tert*-Butyl Ether; (MTBE)	µg/L		20
1,2-Dichloropropane	µg/L	5.0	5.0
Trans-1,3-Dichloropropene	µg/L		
Cis-1,3-Dichloropropene	µg/L		
Ethylbenzene	µg/L	700	700
2-Hexanone	µg/L		
Iodomethane	µg/L		
4-Methyl-2-pentanone	µg/L		630
Styrene	µg/L	100	100
1,1,1,2-Tetrachloroethane	µg/L		
1,1,2,2-Tetrachloroethane	µg/L		0.076
Tetrachloroethene; (PCE)	µg/L	5.0	5.0

VOC Monitoring Parameters	Units	MCL	Cleanup STD	
Toluene	µg/L	1000	1000	
1,1,1-Trichloroethane	µg/L	200	200	
1,1,2-Trichloroethane	µg/L	5.0	5.0	
Trichloroethene; (TCE)	µg/L	5.0	5.0	
Trichlorofluoromethane; (CFC-11)	µg/L			
1,2,3-Trichloropropane	µg/L			
Vinyl acetate	µg/L			
Vinyl chloride	µg/L	2.0	2.0	
o-Xylene	µg/L	10,000 (total)	10,000	
m-+*p*-Xylenes	µg/L			
Bromodichloromethane	µg/L	80 (total)	80	
Dibromochloromethane	µg/L		80	
Bromoform	µg/L		80	
Chloroform	µg/L		80	
PFAS	**Units**	**MCL**	**HI MCL**	**HBWC**
Perfluorooctanoic acid (PFOA)	ng/L	4.0		
Perfluorooctanesulfonic acid (PFOS)	ng/L	4.0		
Perfluorononanoic acid (PFNA)	ng/L	10	1.0 (unitless)	10
Perfluorohexanesulfonic acid (PFHxS)	ng/L	10		10
Hexafluoropropylene oxide dimer acid (HFPO-DA; GenX)	ng/L	10		10
Perfluorobutanesulfonic acid (PFBS)	ng/L			2000

Notes:
µg/L = microgram per liter (parts per billion, ppb)
Cleanup STD = MDE Cleanup Standards for Groundwater (for Assessment Monitoring)
HI MCL = Hazard Index MCL (Mixture of two or more: PFNA, PFHxS, HFPO-DA, and PFBS)
HBWC = Health-Based Water Concentrations
MCL = Maximum Contaminant Level
ng/L = nanogram per liter (parts per trillion, ppt)
PFAS = Per- and Polyfluoroalkyl Substances
VOC = Volatile Organic Compound

Table 5. Monitoring Criteria for Elements and Indicator Parameters

Parameters	Units	MCL/SMCL	Cleanup STD
Total Antimony	µg/L	6	6.0
Total Arsenic	µg/L	10	10
Total Barium	µg/L	2000	2000
Total Beryllium	µg/L	4	4.0
Total Cadmium	µg/L	5	5.0
Total Calcium*	µg/L		
Total Chromium	µg/L	100	100
Total Cobalt*	µg/L		
Total Copper^{+}	µg/L	1300 (AL)	1300
Total Iron**	µg/L	300	1400
Total Lead	µg/L	15 (AL)	15
Total Magnesium*	µg/L		
Total Manganese**	µg/L	50	43
Total Mercury	µg/L	2	2.0
Total Nickel^{+}	µg/L	100	39
Total Potassium*	µg/L		
Total Selenium	µg/L	50	50
Total Silver**	µg/L	100	9.4

Parameters	Units	MCL/SMCL	Cleanup STD
Total Sodium*	µg/L		
Total Thallium	µg/L	2	2.0
Total Vanadium*	µg/L		8.6
Total Zinc**	µg/L	5000	600
Alkalinity*	mg/L		
Ammonia (as N)*	mg/L		
Chemical oxygen demand*	mg/L		
Chloride**	mg/L	250	
Hardness*	mg/L		
Nitrate (as N)	mg/L	10	
pH**	S.U.	6.5-8.5	
Specific conductance*	µS/cm		
Sulfate**	mg/L	250	
Total dissolved solids**	mg/L	500	
Turbidity	NTU	5	

Notes:
* = No MCL
** = Secondary MCL
+ = No MCL but recommended level by the U.S. Environmental Protection Agency

µg/L = microgram per liter (parts per billion, ppb)
µS/cm = microsiemen(s) per centimeter
AL = Action Level
Cleanup STD = MDE Cleanup Standards for Groundwater (for Assessment Monitoring)
MCL = Maximum Contaminant Level
mg/L = milligram per liter (parts per million, ppm)
NTU = nephelometric turbidity unit(s)
SMCL = Secondary Maximum Contaminant Level
S.U. = standard unit(s)

Based on EA's evaluation, the County will notify MDE of a first-time exceedance of an MCL, AL, or other health standard in writing within 24 hours of receipt of the analytical data. Upon detection of the exceedance for the first time, the location will be re-sampled within 30 days and analyzed for the exceedance by the same analytical laboratory.

If Worcester County determines, pursuant to Section 2.10, Data Analysis and Reporting, that there is a new statistically significant increase over background for one or more of the constituents listed in Tables 4 and 5 of this EMP at any monitoring well, Worcester County will place notice to this effect in the operating record of the Landfill and notify MDE within the semi-annual report.

Worcester County would then establish an assessment monitoring program meeting the requirements of 40 CFR 258.55 within 90 days, unless the County demonstrates that a source other than the Landfill caused the contamination, or that the statistically significant increase resulted from an error in sampling, analysis, statistical evaluation, or variation in groundwater quality. If it is determined that a source other than the Landfill caused contamination or there was some other aforementioned error, a report documenting this demonstration will be certified by a qualified groundwater scientist, or approved by MDE, and be placed in the operating record within 60 days of verification. If a successful demonstration is made and documented, Worcester

County will continue detection monitoring in accordance with this plan, and not institute the assessment monitoring program.

2.10 DATA ANALYSIS AND REPORTING

The data analysis in the semi-annual groundwater report will include a summary table of all of the current monitoring event data, a copy of the complete laboratory data, time series analysis, and historical data.

2.10.1 Statistical Analysis

The objective of the analysis is to determine if there is a statistically significant increase over background values for each parameter at each downgradient well. This goal is met by statistically analyzing the groundwater data that have been collected on the site. The analysis will determine if the Landfill may be impacting groundwater. Low-flow sampling techniques were utilized beginning with the Spring 2016 sampling event. Since sufficient sampling data have been obtained, the statistical analysis dataset was updated to exclude historical data collected prior to the Spring 2016 event.

The concentrations observed in the downgradient wells are compared to the concentrations observed in the upgradient wells. If the downgradient samples show significantly higher concentrations than the upgradient samples, statistically, it can be said the Landfill is affecting the groundwater quality.

The groundwater data will be analyzed to identify statistically significant increases in accordance with 2009 Unified Guidance. The Mann-Whitney U test (also known as the Wilcoxon rank sum test) will be utilized to evaluate the null hypothesis that the downgradient samples are consistent with the upgradient samples, against the one-sided alternative hypothesis that the downgradient samples exceed the upgradient. The Mann-Whitney U test is a nonparametric test that does not assume a data distribution (e.g., normal distribution), and compares the mean ranks of two groups of data and tests the null hypothesis that both groups come from the same population.

Hypothesis tests, such as the Mann-Whitney U test, are evaluated at a specified Type I error rate that represents the probability of falsely concluding that downgradient well concentrations exceed upgradient well concentrations (i.e., a false positive error). When multiple tests are conducted (from different wells and different constituents), the probability of a Type I error is compounded. The Bonferroni correction compensates for that increase by testing each individual hypothesis at a significance level of α / n, where α is the network-wide significance level, and n is the number of individual tests being conducted. A maximum network-wide Type I (i.e., false positive) error rate of 5 percent is required by 40 CFR 258.53(h)(2); however, a Type I error rate no less than 1 percent shall be applied to any single test.

Statistical analyses are performed for over 60 parameters at each downgradient well. Using the Bonferroni adjustment to account for multiple statistical comparisons, a Type I error rate of much less than 1 percent per analysis would result, so a Type I error rate of 1 percent was used as the minimum allowable under 40 CFR 258.52(h)(2).

For each sampling event, an average concentration from the upgradient wells will be calculated. The collection of average upgradient concentrations for all sampling events is then compared to the concentrations for all sampling events at each of the downgradient wells. For each downgradient well, the upgradient and downgradient concentrations are combined and ranked (the lowest concentration is assigned a rank of one). Tied concentrations are ranked equally by averaging the ranks that would be assigned to the tied group if they were not tied.

The sum of the ranks, the number of upgradient observations, and the number of downgradient observations are used to calculate the Mann-Whitney Test Statistic (U). The calculated U for each well/analyte pair is compared to a critical U value which is published in tables in statistical texts. Critical U values are based on the number of samples in the upgradient group and at each downgradient well. Therefore, the critical U values vary from analyte-to-analyte and from well-to-well. If the calculated U is greater than the critical U, there is no exceedance at 99 percent confidence (a 1 percent Type I error rate for each analysis). Likewise, if the calculated U is less than the critical U, there is an exceedance.

Should a new statistically significant increase over background of the constituents tested in this program be detected, an assessment monitoring program as outlined in 40 CFR 258.55 will be implemented if an alternate source cannot be determined.

3. LANDFILL GAS MONITORING PLAN

3.1 SITE DESCRIPTION

The detailed site history, location, and geology of the Landfill is presented under Sections 1.2, 1.3, and 1.4 of this EMP, respectively.

This LFGP has been developed to comply with the regulations set forth in 40 CFR 258.23, "Explosive Gases Control," and COMAR 26.04.07.03(9), "Explosive Gases." Per a letter from MDE dated 31 May 2017, the Landfill's LFGP is to be updated every 5 years.

This LFGP addresses routine methane monitoring, as defined in 40 CFR 258.23. Should a gas level exceed the maximum limit, a remedial action program must be established and implemented as defined in 40 CFR 258.23.

3.2 HISTORICAL LFG RESULTS

The County commenced LFG monitoring at the closed Snow Hill Sanitary Landfill in May 2006 once the closure construction of the landfill was completed, which occurred in the early Spring of 2006.

In 2016, a passive LFG trench extension was installed along the southeastern property boundary. After 2018, a substantial reduction in methane values below the LEL has been observed at all monitoring probes along the southeastern property boundary: GP-8, GP-9, GP-10, and GP-11. Historical methane results are included in Appendix H.

Since 2018, LEL exceedances were observed in monitoring probes GP-3, GP-5, GP-12, GP-13, GP-14, and GP-18. All of these probes, except GP-5, are not located along the perimeter of the Landfill property. GP-5 is located along the eastern boundary of the site adjacent to the perennial Purnell Pond. GP-5 had a methane LEL exceedance during the October 2023 monitoring event.

3.3 GAS MONITORING PROBE LOCATION, SCHEDULE, AND FREQUENCIES

In accordance with the aforementioned regulations, the concentration of methane gas generated by the Landfill cannot exceed the LEL (5 percent by volume) for methane at the facility's property boundary and 25 percent of the LEL for methane (1.25 percent by volume) at any of the onsite structures.

3.3.1 GMP Installation and Location

There are 22 LFG probes and one onsite structure (attendant's shed) (Figure 7) at the Landfill. The LFG monitoring points listed in Table 6 shall be monitored on a quarterly basis and reported on a semi-annual frequency to MDE. Due to the age of the landfill, no LFG monitoring probe construction documentation is available. On behalf of the County, EA contacted MDE's Water and Science Administration requesting assistance with the missing well construction

documentation. In response, MDE confirmed in a letter dated 13 November 2024, that the requested documentation was unavailable. The MDE letter is included in Appendix I.

Table 6. LFG Monitoring Probe Locations

Description	Number	Date of Installation	Location	Coordinates[1] (Easting)	Coordinates[1] (Northing)
Gas Monitoring Probe	GP-1	05/2006[2]	Northwestern Property Line	1777967.21'	191915.83'
Gas Monitoring Probe	GP-2	05/2006[2]	Northwestern Property Line	1778143.94'	192107.92'
Gas Monitoring Probe	GP-3	05/2006[2]	Northwest of Closure Cap	1778507.04'	192373.60'
Gas Monitoring Probe	GP-4	05/2006[2]	Northwest of Closure Cap	1778731.13'	192561.31'
Gas Monitoring Probe	GP-5	05/2006[2]	Northeastern Property Line	1778975.70'	192465.24'
Gas Monitoring Probe	GP-6	05/2006[2]	Northeastern Property Line	1779134.22'	192297.74'
Gas Monitoring Probe	GP-7	05/2006[2]	Southeastern Property Line	1778953.49'	192026.22'
Gas Monitoring Probe	GP-8	05/2006[2]	Southeastern Property Line	1778799.47'	191891.25'
Gas Monitoring Probe	GP-9	05/2006[2]	Southeastern Property Line	1778647.79'	191764.52'
Gas Monitoring Probe	GP-10	05/2006[2]	Southeastern Property Line	1778492.32'	191627.71'
Gas Monitoring Probe	GP-11	05/2006[2]	Southeastern Property Line	1778339.40'	191495.97'
Gas Monitoring Probe	GP-12	05/2006[2]	South of Closure Cap	1778164.80'	191672.14'
Gas Monitoring Probe	GP-13	05/2006[2]	South of Closure Cap	1778228.80'	191832.63'
Gas Monitoring Probe	GP-14	05/2006[2]	South of Closure Cap	1778123.84'	191964.73'
Gas Monitoring Probe	GP-15	05/2006[2]	South of Closure Cap	1778036.11'	191887.54'
Gas Monitoring Probe	GP-16	05/2012[2]	Southeastern Property Line	1778185.79'	191372.80'
Gas Monitoring Probe	GP-17	05/2012[2]	Northwestern Property Line	1778330.36'	192297.51'
Gas Monitoring Probe	GP-18	05/2012[2]	Northwest of Closure Cap	1778586.15'	192487.14'
Gas Monitoring Probe	GP-18A	05/2012[2]	Northwestern Property Line	1778562.49'	192526.54'
Gas Monitoring Probe	GP-19	05/2012[2]	Northwestern Property Line	1778767.79'	192638.10'
Gas Monitoring Probe	GP-20	05/2012[2]	Southeastern Property Line	1777579.33'	190970.30'
Gas Monitoring Probe	GP-21	05/2012[2]	Southeastern Property Line	1777742.83’	191081.59’
Onsite Structure [3]	Attendant’s Shed (AS)		Transfer Station Entrance		

Notes:

1. The Landfill is in Maryland State Plane 83 US survey foot coordinates and the National Geodetic Vertical Datum of 1929.
2. Based on historical data, it was estimated that LFG probes GP-1 through GP-15 were installed in May 2006, and probes GP-16 through GP-21 were installed in May 2012.
3. Gas measurements are to be taken at the various locations within and along the exterior to attendant’s shed. Locations of utility penetrations of the building, floor slab, and confined areas within to be monitored.

3.3.2 Other Structures Monitored

In addition to sampling the gas monitoring probes, LFG monitoring will take place at one onsite structure, the attendant's shed. The attendant's shed is located on the western side of the property adjacent to the transfer station. The Landfill is open 6 days a week and closed on Wednesdays.

Gas monitoring activities will be conducted in a similar manner as the gas monitoring of the LFG monitoring probes. However, the monitoring activities within the attendant's shed are intended to monitor the LFG amounts as a non-point source rather than as point source such as the gas monitoring probes. Gas monitoring at the aforementioned onsite structure is to be taken at the various locations within and exterior to each building.

3.3.3 Monitoring Frequency

Quarterly monitoring will occur at a minimum at the Landfill and in conjunction with quarterly monitoring at other Worcester County solid waste facilities. Quarterly LFG monitoring shall occur every third month, consistently within the same four designated months annually (e.g., February, May, August, and November), with each monitoring event conducted during the respective month. It is most desirable to sample LFG when the atmospheric pressure is falling or at its lowest, which typically occurs in mid-afternoon. Barometric pressure affects LFG and probes because it is the lowest in the afternoon and directly causes the probe methane concentration and static pressure to be at their highest levels. High or positive static pressures can indicate the potential of LFG migration due to the lack of vacuum or draw influence on the probe.

3.3.4 Gas Monitoring Parameters and Methods

All LFG samples will be collected and analyzed for the constituents listed in Table 7, which comprise general measurements of gas monitoring at probes and structures.

Table 7. LFG Monitoring Parameters and Methods

Parameter	Method
Static Pressure (inches of water)	Field measured
Methane (percent by volume and LEL)	Field measured
Oxygen (percent by volume)	Field measured
Carbon Dioxide (percent by volume)	Field measured
Barometric Pressure (inches of water)	Field measured

Quarterly monitoring of the 22 LFG probes, and attendant's shed will be performed for the parameters described in Table 7. These parameters are to include LEL and percent methane, static pressure, and percent of oxygen (O_2) and carbon dioxide (CO_2). An LFG Probe Monitoring Form example is attached in Appendix J.

3.4 ACTION PLAN - LFG LEL EXCEEDANCES

If a concentration of methane gas generated by the Landfill facility is detected and exceeds the LEL for methane at a landfill facility property boundary or 25 percent LEL in facility structures, then the owner, operator, or permittee must:

- Immediately take all necessary steps/actions to ensure protection of human health and safety (e.g., evacuation and ventilation), and notify MDE.

- Notify MDE in writing by email within 24 hours of the detected exceedance. The notification should provide details for each LEL exceedance, describe the protective actions taken, the expected resampling date, and the optional submission date of an LFG ASD report.

- Within 30 days of the occurrence of the LEL exceedance, resample each LFG monitoring point that detected an LEL exceedance, notify MDE in writing by email of the LFG resampling results, and also submit to MDE an LFG ASD report (optional).

- Persistent (≥2) LEL exceedances necessitate the development of an LFG IRP.

- Within 60 days of the original LEL exceedance detection, an LFG IRP report shall be submitted to MDE, outlining the methane detection frequency, the lateral and vertical extent of methane migration, a nature and extent study, potential causes of increased gas concentrations, the remedial and corrective actions to be taken based on the cause and remedy, and include a schedule for the implementation of the remedial measures.

- The MDE-approved LFG IRP report shall be implemented within 90 days of approval. MDE may require public notification for nearby residents within 1,000 feet of the property boundary.

3.5 GMP MAINTENANCE AND EQUIPMENT

During each quarterly monitoring event, the LFG probes will be inspected, and maintenance requirements will be noted in the field log. EA will inform Worcester County about the repair needs. All repair or maintenance tasks shall be corrected or performed within 30 days of their observance; per COMAR 26.04.07.22C.

3.5.1 Physical Inspection and Observation of Gas Monitoring Probes

Upon arrival at each gas monitoring probe, the condition of the probe and surrounding area will be noted, using Appendix J, LFG Probe Monitoring Form. This will include, but should not be limited to security, evidence of tampering, evidence of physical damage, probe integrity, evidence of breakage or heaving of the concrete pad, if present, and evidence of surface infiltration. Information and evidence of tampering, breakage, damage, and ignition failure for

the LFG probes shall also be noted on the inspection form, as well as pertinent information relating to the operation and appearance of the LFG probes.

3.5.2 LFG Monitoring Equipment

LFG will be monitored with portable hand-held instruments. Common instruments include, but are not limited to, the GEM 2000. These instruments were specifically designed by Landtec for use on landfills to monitor LFG control systems, extraction systems, perimeter probes, and structures.

The GEM 2000 will be utilized at the Landfill in performing the LFG monitoring. This instrument is an all-weather, self-contained portable monitor, which has an infrared gas analyzer and an internal sample pump capable of drawing a gas sample at up to 80 inches of vacuum. This monitoring device automatically samples and analyzes methane, CO_2, O_2, and static pressure.

3.5.3 LFG Monitoring Procedures

LFG sampling will be accomplished with a certified and calibrated LFG-monitoring instrument. It is imperative that before any monitoring occurs, the sampling instrument be calibrated. Calibration is a critical process that needs to be performed to ensure that LFG measurements are accurate, and the calibration procedure is specified by the instrument's manufacturer. The calibration form is attached in Appendix K.

Gas monitoring at the probes and structures will occur once calibration is complete. First, the probe pressure will be obtained by attaching one end of a rubber hose or Teflon tubing to the monitoring instrument sampling port and the other end of the hose or tubing to the probe quick connect or sampling fitting. Static pressure should always be recorded prior to any purging or sampling of LFG at the desired sampling point. It is strongly recommended prior to any monitoring or purging that manufacturer's instructions of the selected instrument be followed and understood. This process will ensure that the recorded data are accurate.

The probe or structure will then be purged using the monitoring instrument. The objective of purging is to remove soil gas from voids surrounding the gas monitoring probe screened interval as shown on Figure 8. This is performed to make certain that the methane gas is present in the probe perforated zone and the gravel pack encasing the perforated probe pipe. The purging process usually occurs for two probe volumes and is complete once stabilized readings are shown on the instrument screen. While evaluating methane, it is desirable to record and observe both maximum and stabilized readings.

Concentrations of measured gases including methane, %LEL, CO_2, and O_2 can be recorded on Appendix J, LFG Probe Monitoring Form. All measured readings, notes, or any observations observed while monitoring each sampling point should be placed and recorded on the form presented in Appendix J.

After monitoring occurs at each gas probe, the probe should be resealed and should always remain sealed until monitoring occurs again.

4. POST-CLOSURE INSPECTIONS AND MAINTENANCE PLAN

In accordance with COMAR 26.04.07.22, closed landfills are required to conduct post-closure inspections at least semi-annually unless an alternative schedule is approved. A blank Landfill Post-Closure Inspections and Maintenance Plan (IMP) is attached in Appendix L. The IMP requires both visual inspections of vegetation, final cover, drainage, and LFG wells, as well as monitoring of surface water and groundwater. Each completed IMP will be included with the corresponding semi-annual groundwater report.

REFERENCES

Clesceri, L.S., A.E. Greenberg, and A.D. Eaton. 1999. *Standard Methods for the Examination of Water and Wastewater*. 20th Edition. American Public Health Association, American Water Works Association, Water Environment Federation.

Code of Federal Regulations Title 40 Chapter I *Environmental Protection Agency* Subchapter I *Solid Wastes* Part 258 Appendix I

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U.S. Environmental Protection Agency (EPA). Region I. 2017. *Low Stress (Low Flow) Purging and Sampling. Procedure for the Collection of Groundwater Samples from Monitoring Wells*. EQASOP-GW4. Quality Assurance Unit, North Chelmsford, Massachusetts. 30 July 1996. Revised 19 September 2017.

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Figures

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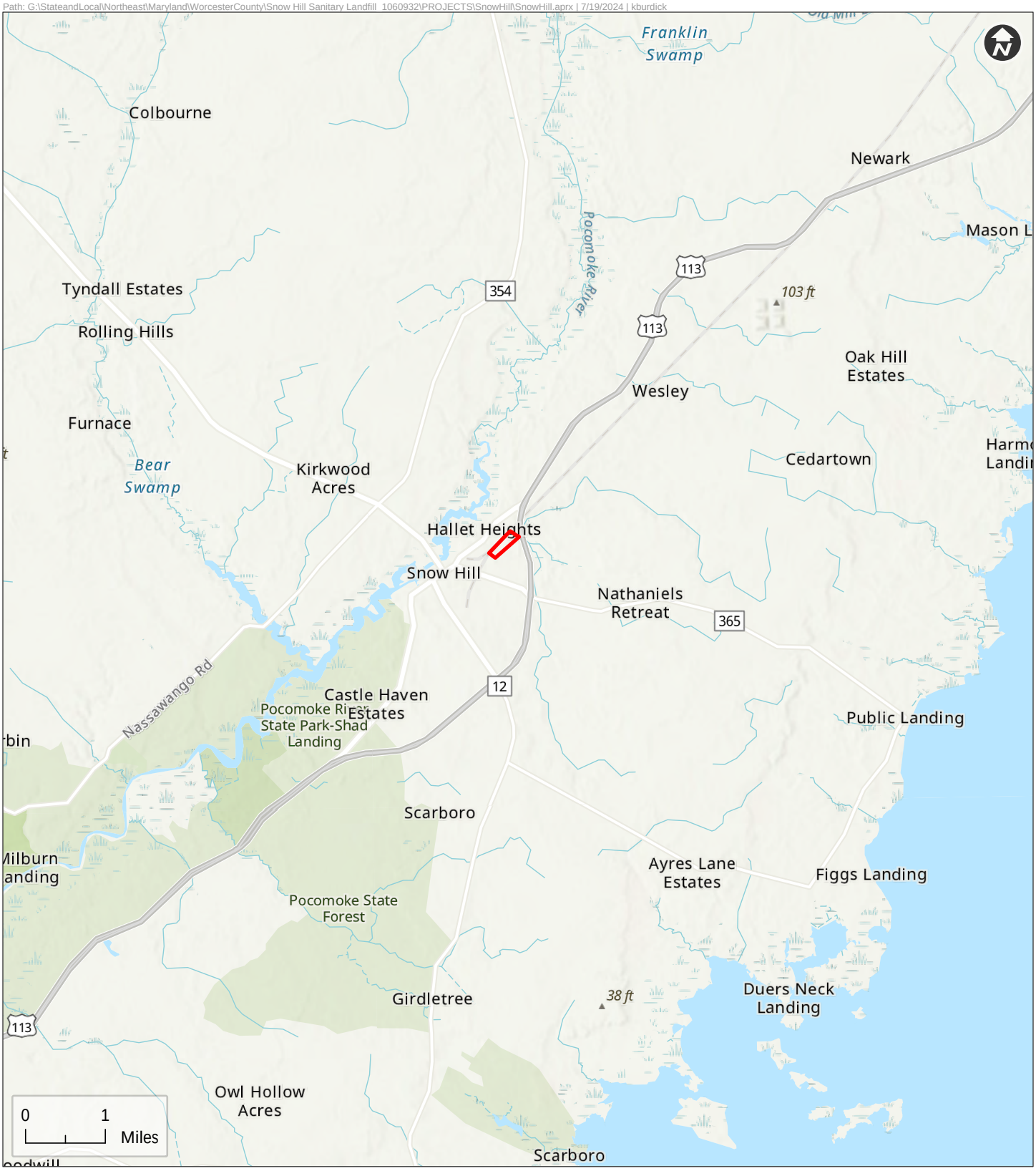

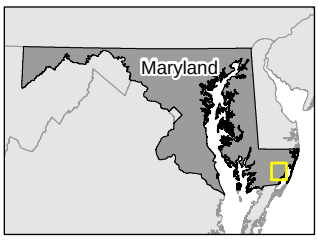

Legend

Snow Hill Sanitary Landfll Property Boundary

Snow Hill Sanitary Landfll

Worcester County, Maryland

Snow Hill Sanitary Landfll Locaton Map (Regional)

Figure 1

Map Date: 7/19/2024: Data Source: ESRI, 2023: Projecton: NAD 1983 State Plane Maryland US Foot

Legend

Snow Hill Sanitary Landfll Property Boundary

Snow Hill Sanitary Landfll
Worcester County, Maryland

Snow Hill Sanitary Landfll Locaton Map (Local)

Figure 2

Map Date: 6/11/2025: Data Source: ESRI, 2023: Projecton: NAD 1983 State Plane Maryland US Foot

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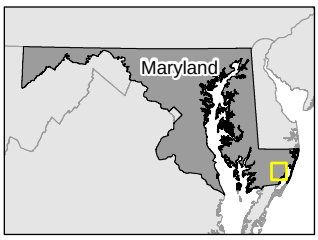


Legend

Quarternary Deposits – Undifferentated gray to buf sand and gravel, gray to brown lignitc silt and clay, occasional boulders, and rare shell beds

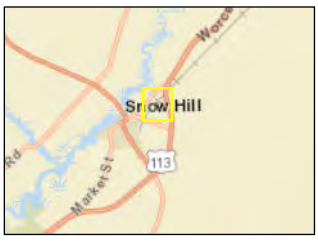
Snow Hill Sanitary Landfll

Snow Hill Sanitary Landfll
Worcester County, Maryland

Snow Hill Sanitary Landfll Geological Map (Regional)

Figure 3

Map Date: 7/19/2024: Data Source: ESRI, 2023, USGS: Projecton: NAD 1983 State Plane Maryland US Foot



Legend

Quarternary Deposits – Undifferentated gray to buf sand and gravel, gray to brown lignitc silt and clay, occasional boulders, and rare shell beds

Snow Hill Sanitary Landfll

Snow Hill Sanitary Landfll
Worcester County, Maryland

Snow Hill Sanitary Landfll Geological Map (Local)

Figure 4

Map Date: 6/11/2025: Data Source: ESRI, 2023, USGS: Projecton: NAD 1983 State Plane Maryland US Foot

LEGEND

EXISTING CONTOUR — — 25 - —
PROPERTY LINE
EXISTING SPOT ELEVATION (IN FEET) x 39.5
EXISTING MONITORING WELL SH-EA-3
EXISTING PAVED ROAD
EXISTING EARTH ROAD
EXISTING STREAM/WATERBODY
TREES
TREE LINE
EXISTING FENCE
EXISTING STRUCTURES
LIMIT OF CLOSURE CAP LINER
EXISTING ELECTRIC POLE

N

200 100 0 200

GRAPHIC SCALE IN FEET

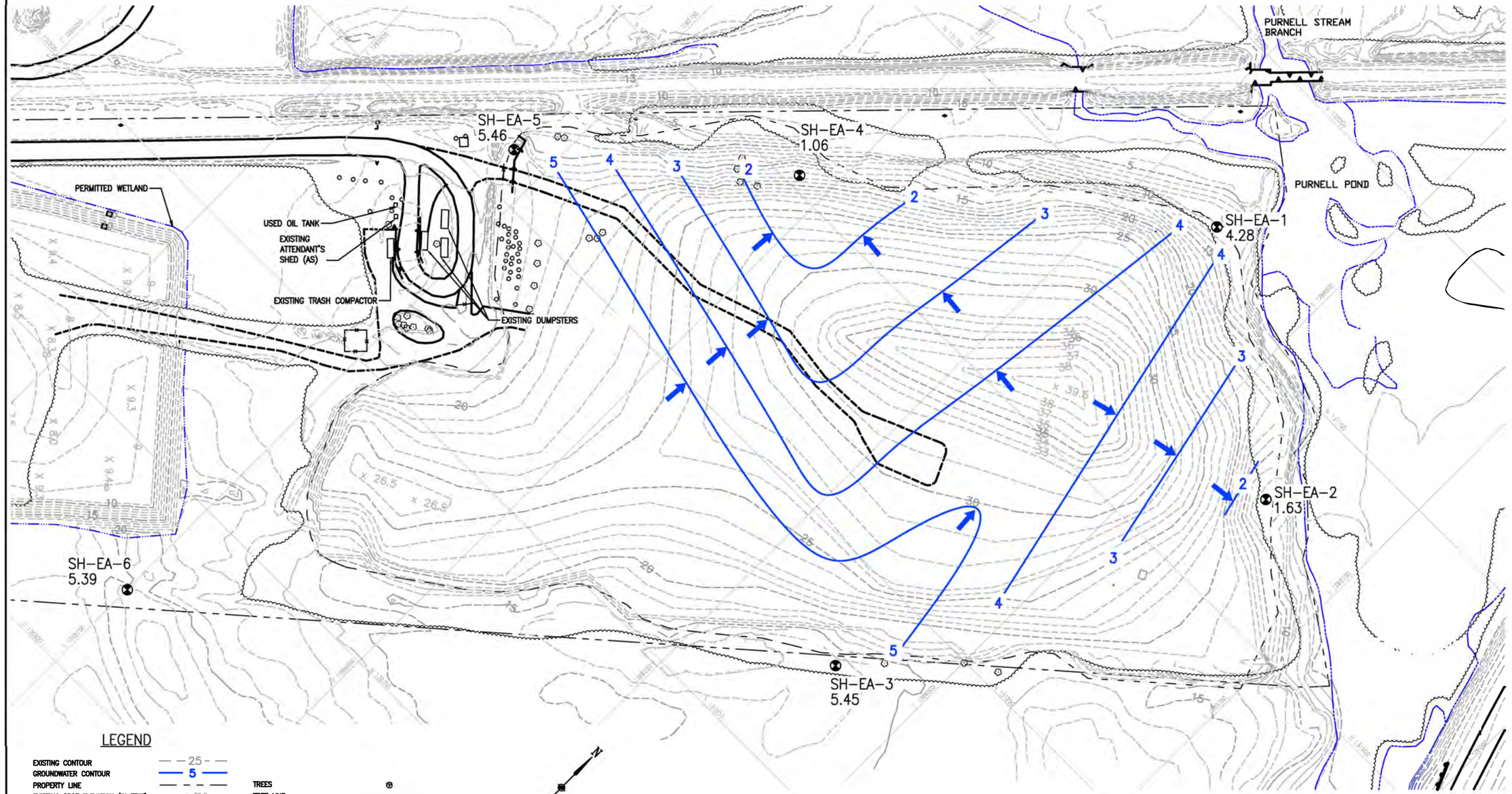
(LOVETON) G:\PROJECTS\62250906 - WORCESTER CLOSED GW 16-19\2022 GWMP FIGURES\FIGURE 5 EMP SNOW HILL EXISTING GW WELL LOCATIONS.DWG [SITE MAP

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

SNOW HILL SANITARY LANDFILL
ENVIRONMENTAL MONITORING PROGRAM
WORCESTER COUNTY, MARYLAND

SNOW HILL SANITARY LANDFILL
EXISTING GROUNDWATER WELL LOCATIONS

DESIGNED BY	DRAWN BY	DATE	PROJECT NO.	FILE NAME
SS	MP/CVH/JS	JULY 2024	10609.32	–
CHECKED BY	PROJECT MGR.	SCALE	DRAWING NO.	FIGURE
LJO	DK	AS SHOWN	–	5



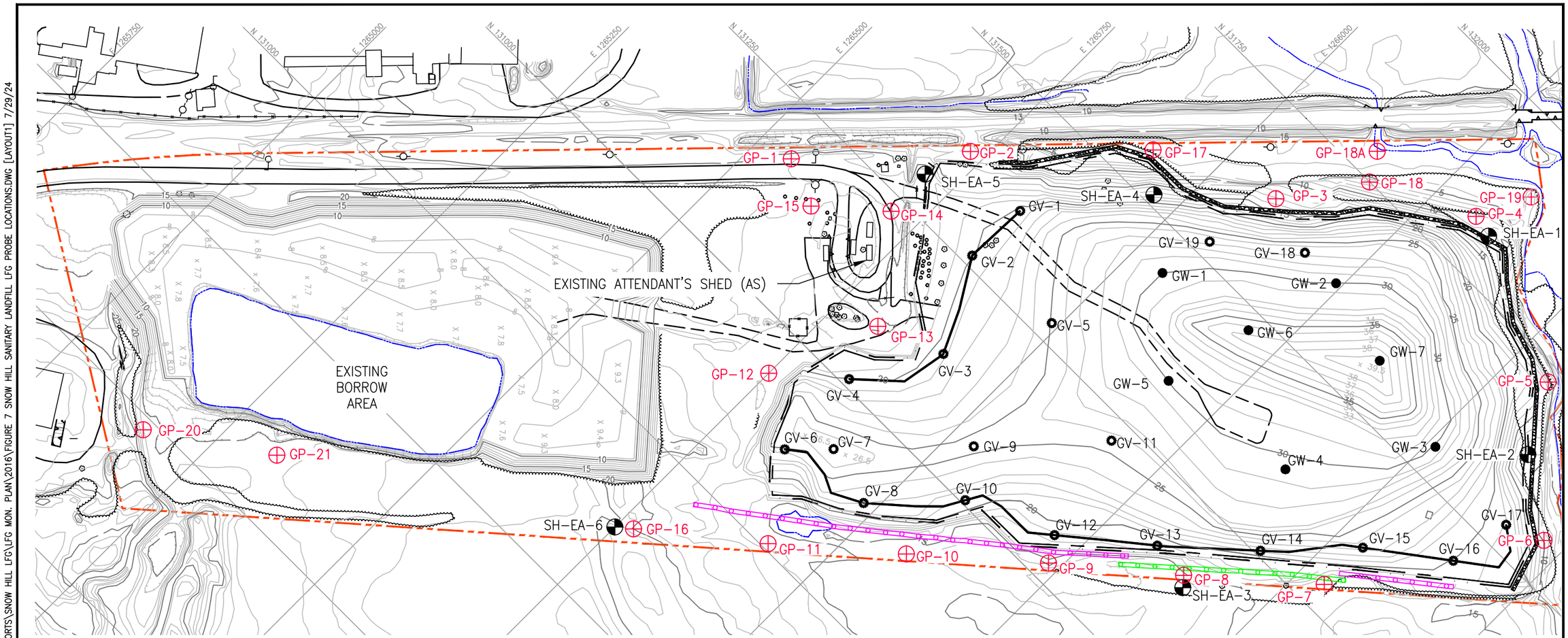
(LOVETON) Q:\PROJECTS\62509.06 - WORCESTER CLOSED GW 16-19\2025 SPRING\SNOW HILL GW CONTOURS SPRING 2025.DWG [LAYOUT] 6/11/25

EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC., PBC

SNOW HILL SANITARY LANDFILL
FACILITY MONITORING PROGRAM
WORCESTER COUNTY, MARYLAND

GROUNDWATER CONTOUR MAP
MARCH 2025 SAMPLING EVENT

DESIGNED BY	DRAWN BY	DATE	PROJECT NO.	FILE NAME
LJO	AW	APRIL 2025	62509.15	–
CHECKED BY	PROJECT MGR.	SCALE	DRAWING NO.	FIGURE
PL	DOK	AS SHOWN	–	6



LEGEND

- EXISTING MAJOR CONTOUR
- EXISTING MINOR CONTOUR
- EXISTING PROPERTY LINE
- EXISTING SPOT ELEVATION (IN FEET) x 7.7
- EXISTING MONITORING WELL EA-6
- EXISTING PAVED ROAD
- EXISTING EARTH ROAD
- EXISTING STREAM/WATERBODY
- EXISTING TREE
- EXISTING TREE LINE
- EXISTING FENCE
- EXISTING STRUCTURES
- EXISTING LIMIT OF CLOSURE CAP LINER
- EXISTING UTILITY POLE
- EXISTING DEEP GAS WELL GW-1
- EXISTING SHALLOW GAS VENT GV-1
- EXISTING GAS MONITORING PROBE GP-1
- EXISTING GAS COLLECTION TRENCH
- REVISED LIMIT OF WASTE
- EXISTING GABION WALL
- PHASE I – PASSIVE GAS VENTS AND TRENCH
- PHASE II – PASSIVE GAS VENTS AND TRENCH PGV-1 PGV-14
- EXISTING ATTENDANT'S SHED AS

150 75 0 150
GRAPHIC SCALE IN FEET

N

NOTES:
1. GAS MONITORING PROBES GP-7, GP-8, GP-9, GP-11, AND GP-10 WERE MOVED TO NEW LOCATIONS AS PART OF THE PHASE II CONSTRUCTION.
2. PHASE II AS-BUILT LOCATIONS PROVIDED BY CONTRACTOR DATED 9/27/2016.

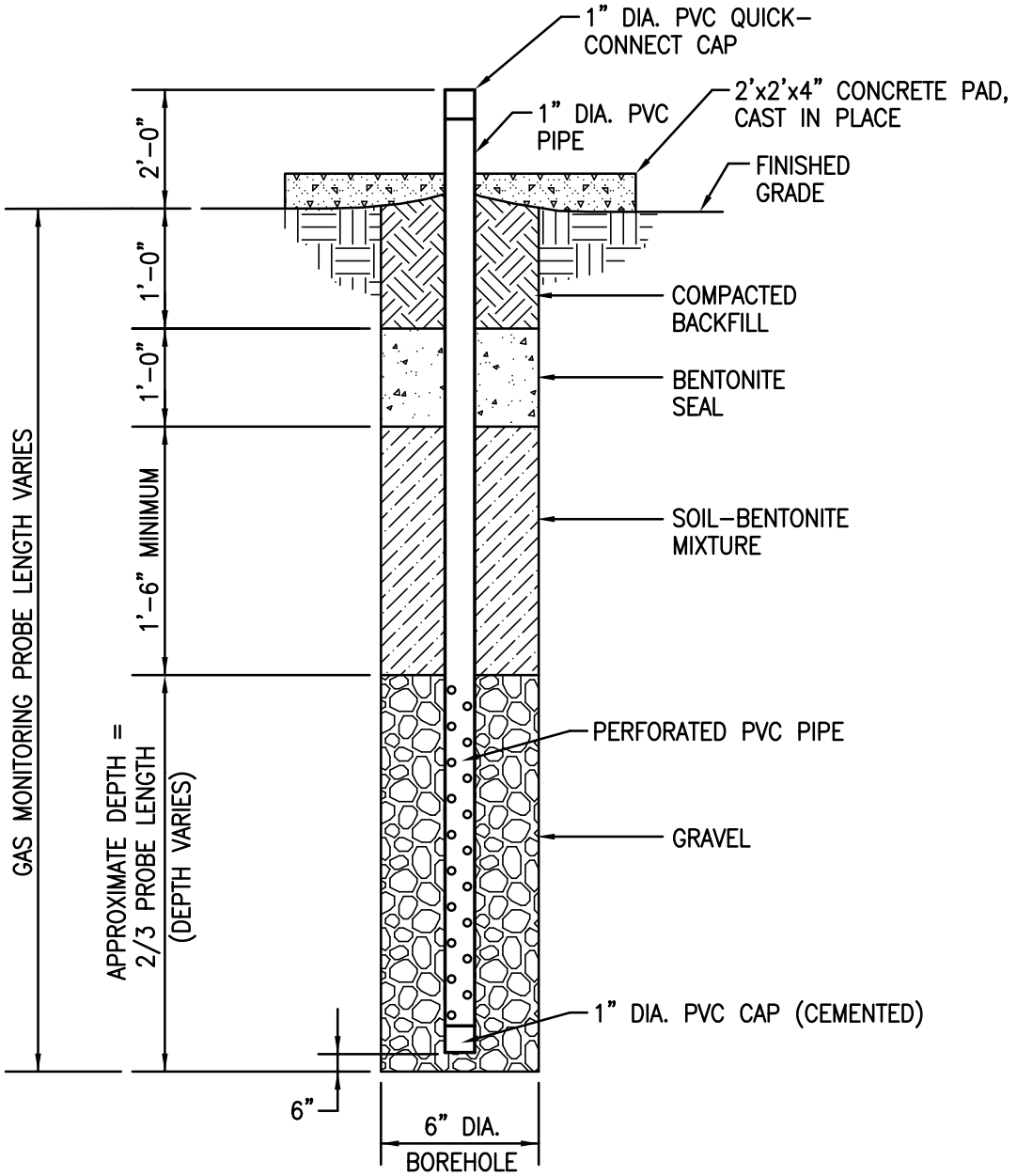
FILE PATH: P:\STATE & LOCAL\COUNTY\WORCESTER\PROJECTS\1060904 AND 1060932\REPORTS\SNOW HILL LFG\LFG MON. PLAN\2016\FIGURE 7 SNOW HILL SANITARY LANDFILL LFG PROBE LOCATIONS.DWG [LAYOUT1] 7/29/24

EA ENGINEERING, SCIENCE, AND TECHNOLOGY INC., PBC

SNOW HILL SANITARY LANDFILL
ENVIRONMENTAL MONITORING PLAN
WORCESTER COUNTY, MARYLAND

LFG PROBE LOCATIONS

DESIGNED BY	DRAWN BY	DATE	PROJECT NO.
AB	NWH	JULY 2024	10609.32
CHECKED BY	PROJECT MGR.	DRAWING NO.	FIGURE
LJO	GAT	–	7



GAS MONITORING PROBE DETAIL

NOT TO SCALE

(TYPICAL OF 15)

EA ENGINEERING, SCIENCE, AND TECHNOLOGY

SNOW HILL SANITARY LANDFILL
ENVIRONMENTAL MONITORING PLAN
WORCESTER COUNTY, MARYLAND

GAS MONITORING PROBE DETAIL

PROJECT MGR	DESIGNED BY	DRAWN BY	CHECKED BY	SCALE	DATE	PROJECT NO	FIGURE
GAT	GBL	JAP	LJO	NONE	JULY 2024	1060932	8

Appendix A

Historical Groundwater Analytical Results

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Historical Groundwater Analytical Results
2002 – 2016

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Snow Hill Landfill
Monitoring Location SH-EA-1 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH (SU)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity (uS/cm)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10												
06/02	16	0.5 U	5 U	11.5	--	6	0.13	--	6.10	--	--	301	--	--	1	16.4	92	100	--
10/02	14	0.5 U	5	4.8	--	26	0.09	--	5.30	--	--	88	--	--	8	15.8	38	5	--
01/03	14	0.5 U	11	6.6	--	17	0.05 U	--	5.30	--	--	86	--	--	14	13.4	58	15	--
05/03	9	0.5 U	29.9	10.9	--	3.1	0.05 U	--	5.30	--	--	154	--	--	2.6	15.8	50	5.9	--
09/03	8.9	0.2 U	10	10.7	--	3.86	0.211	--	5.77	--	--	68	--	--	1.58	16.5	49	8.4	--
03/04	9.1	0.2 U	10 U	8.64	--	2.99	0.25	--	6.00	--	--	65	--	--	2.06	15.1 U	67	2.9	--
11/04	14	0.2 U	10 U	12.1	--	2.3	0.28	--	5.90	--	--	88	--	--	1.66	15.8	10 U	3.7	--
07/05	131	0.4	12	15.2	--	119	0.06 U	--	7.68	--	--	336	--	--	16	18.1	202	3.3	--
03/06	23	0.2 U	10 U	22.2	--	9.2	0.06 U	--	5.70	--	--	128	--	--	1.97	14	94	4.2	--
10/06	589	8.29	30	24.8	--	337	0.06 U	--	6.21	--	--	612	--	--	2.98	--	430	3.9	--
04/07	89	1.32	46	29.9	--	65.5	0.06 U	--	6.28	--	--	10 U	--	--	0.38 U	--	142	1.5	--
11/07	195	1.28	14	15.7	--	178	0.89	--	6.16	--	--	367	--	--	3.56	--	267	1.3	--
04/08	151	1.17	15	13.7	--	145	0.06 U	--	5.86	--	--	377	--	--	5.5	--	218	2.9	--
10/08	45	0.5	10 U	13.1	--	29.2	0.28	--	5.87	--	--	134	--	--	--	--	98	5.7	--
05/09	15	0.2 U	10 U	8.61	--	10.3	0.77	--	5.76	--	--	86	--	--	5.24	--	57	7.4	--

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH (SU)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity (uS/cm)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10												
10/09	170	0.67 J	8 J	7	--	133	0.38	--	6.73	--	--	294	--	--	2.8	--	207	2.17	--
04/10	22	0.43 J	1 U	13.1	--	12	0.96	--	5.71	--	--	115.5	--	--	3.3	--	92	6.81	--
10/10	73	0.51 J	2 U	8.8	--	68	0.008 U	--	--	5.81	6.19	--	191.4	179	7	16.8	141	6.43	--
03/11	267	1.2	5 J	5.7	--	245	0.07 U	--	--	6.87	7.02	--	387	466	1.6	--	299	3.28	--
09/11	193	0.65 J	8 J	6.2	--	166	0.1	--	--	5.76	6.36	--	384	355	2.1	18.09	203	1.84	--
03/12	236	1.49	18	6	--	273	0.057 U	--	--	6.43	7.01	--	484	499	1.5	16.93	319	8.61	--
09/12	47	0.04 U	4 J	9.6	--	35.3	0.34	--	--	5.32	6.61	--	100	135	5.2	17.71	125	1.79	--
04/13	25	0.04 U	2 U	7.2	0	26	0.48	128.8	--	5.80	6.40	--	106	84	6.3	14.7	33	2.82	3.6
10/13	10	0.151 J	3 J	9.7	--	2	0.84	--	--	5.44	6.26	--	74	71	5.8	15.83	67	4.11	6.8
04/14	65	0.576 J	31	8.5	4.95	72	0.88	10.7	--	6.26	6.81	--	330	161	4.9	16.65	113	44.2	22.4
05/14	--	--	--	--	3.39	--	--	146.7	--	5.57	--	--	77	--	--	14.39	--	--	9.3
08/14	49	0.234 J	13	7.3	0	56	0.5	77.6	--	6.06	6.90	--	133	135	5	17.49	114	3.17	2.7
04/15	11	1 U	10 U	7	2.84	5	0.98	239.2	6.31	5.39	--	62	58	--	6	--	59	5.13	10.5
08/15	7.08	0.2 U	10 U	7.15	3.98	1.92	0.75	181.8	--	5.00	5.59	--	64	65	5.21	16.81	38	2.94	0.6
03/16	10.3	0.2 U	10 U	7.24	0.55	4.4	0.815	197.1	--	4.85	6.47	--	67	113	5.66	14.49	48	3.43	41.4
09/16	6.28	0.2 U	10 U	6.32	2.23	1.4	0.781	250.8	--	5.09	5.30	--	57.8	61	5.74	18	37	3.43	8.9

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002
06/02	0.002 U	0.005 U	0.028	0.002 U	0.004 U	2.3	0.005 U	0.005 U	0.021	6.2	0.012	0.52	0.027	0.001 U
10/02	0.002 U	0.005 U	0.031	0.002 U	0.004 U	2	0.005 U	0.005 U	0.005 U	0.95	0.005 U	2.8	0.075	0.001 U
01/03	0.002 U	0.0051	0.016	0.002 U	0.004 U	1.9	0.005 U	0.005 U	0.005 U	12	0.005 U	2.9	0.15	0.001 U
05/03	0.002 U	0.005 U	0.011	0.002 U	0.004 U	0.88	0.005 U	0.005 U	0.005 U	1.5	0.0094	0.23	0.008	0.001 U
09/03	2 U	2 U	0.01	2 U	4 U	1.14	8 U	6 U	0.007	1.07	0.008	0.248	0.008	0.0002 U
03/04	0.002 U	0.002 U	0.01	0.002 U	0.004 U	0.883	0.008 U	0.006 U	0.003 U	0.218	0.003	0.192	0.007	0.0002 U
11/04	0.002 U	0.002 U	0.011	0.002 U	0.004 U	0.674	0.008 U	0.006 U	0.003 U	0.556	0.005	0.152	0.007	--
07/05	0.002 U	0.002 U	0.106	0.002 U	0.004 U	36.1	0.008 U	0.006 U	0.01	1.82	0.011	7.12	0.119	0.0002 U
03/06	0.002 U	0.002 U	0.017	0.002 U	0.004 U	2.8	0.008 U	0.006 U	0.003 U	1.29	0.009	0.523	0.005 U	0.0002 U
10/06	0.002 U	0.002 U	0.141	0.002 U	0.004 U	105	0.008 U	0.006 U	0.003 U	3.28	0.002 U	18.3	0.22	0.0002 U
04/07	0.002 U	0.002 U	0.055	0.0005 U	0.004 U	20.4	0.005 U	0.005 U	0.005 U	2.14	0.002 U	3.54	0.13	0.0002 U
11/07	0.002 U	0.002 U	0.06	0.0005 U	0.004 U	57.7	0.005 U	0.005 U	0.005 U	2.13	0.004	8.22	0.21	0.0002 U
04/08	0.002 U	0.002 U	0.05	0.0005 U	0.004 U	47.1	0.005 U	0.005 U	0.005 U	1.88	0.002 U	6.69	0.18	0.0002 U
10/08	0.002 U	0.002	0.032	0.0005 U	0.004 U	9.22	0.005 U	0.005 U	0.005 U	0.24	0.005	1.5	0.049	0.0002 U
05/09	0.0022 U	0.002 U	0.011	0.0005 U	0.004 U	3.46	0.005 U	0.005 U	0.005 U	0.659	0.013	0.392	0.029	0.0002 U
10/09	0.00077 U	0.001 U	0.031	0.0003 U	0.00037 U	45.8	0.00077 U	0.0019 U	0.0048 J	0.59	0.0075	5.7	0.36	0.00011 J
04/10	0.00077 U	0.001 U	0.023	0.0003 U	0.00037 U	3.1	0.00077 U	0.0019 U	0.0019 U	0.16	0.0031	0.64	0.031	0.0000300 U
10/10	0.00074 U	0.0015 J	0.033	0.00085 J	0.00062 J	20.3	0.0014 J	0.002 J	0.0076 J	0.2	0.0053	2.6	0.18	0.0000360 J
03/11	0.00074 U	0.001 U	0.051	0.0003 U	0.00037 U	78	0.0011 J	0.0019 U	0.0019 U	2.7	0.0027	10.5	0.62	0.00017 U
09/11	0.00074 U	0.001 U	0.055	0.0003 U	0.00037 U	55.1	0.00087 J	0.0019 U	0.0045 J	3.1	0.0055	6.6	0.6	0.00017 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002
03/12	0.00074 U	0.001 U	0.044	0.0003 U	0.00037 U	78.7	0.0012 J	0.0019 U	0.0019 U	2.9	0.006	9.4	0.51	0.00017 U
09/12	0.00074 U	0.001 U	0.016	0.0003 U	0.00037 U	12	0.00076 J	0.0019 U	0.0028 J	0.32	0.0057	1.3	0.11	0.00017 U
04/13	0.00074 U	0.001 U	0.012	0.0003 U	0.00037 U	6.3	0.00074 U	0.0019 U	0.0033 J	0.11	0.0045	0.73	0.052	0.00017 U
10/13	0.00074 U	0.001 U	0.013	0.0003 U	0.00037 U	1.1	0.00074 U	0.0019 U	0.0019 U	0.057	0.003	0.16	0.012	0.00017 U
04/14	0.00074 U	0.001 U	0.022	0.00046 J	0.00037 U	22.3	0.0024 J	0.0019 U	0.0052 J	11.7	0.026	2.6	0.35	0.00017 U
05/14	0.00066 U	0.001 U	0.0085 J	0.00033 U	0.00033 U	0.9	0.00091 J	0.0016 U	0.0016 U	0.51	0.0037	0.12	0.018	0.00017 U
08/14	0.00074 U	0.001 U	0.022	0.0003 U	0.00037 U	15.5	0.0022 J	0.0019 U	0.0019 U	1.4	0.0044	1.8	0.2	0.00017 U
04/15	0.002 U	0.002 U	0.013	0.00043 J	0.004 U	0.74	0.01 U	0.01 U	0.01 U	1.6	0.0063	0.1	0.086	0.0002 U
08/15	0.002 U	0.002 U	0.0123	0.000267 J	0.004 U	0.632	0.000401 J	0.000542 J	0.0022 J	0.332	0.0031	0.0841	0.0171	0.0002 U
03/16	0.001 U	0.002 U	0.0199	0.00032 J	0.0005 U	1.41	0.001 J	0.0012	0.001 J	0.866	0.0075	0.203	0.0254	0.0002 U
09/16	0.002 U	0.004 U	0.0153	0.00034 J	0.001 U	0.429	0.00083 J	0.00072 J	0.00088 J	0.623	0.0076	0.0828 J	0.0165	0.0002 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Total Metals

	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL			0.05			0.002		
06/02	0.005 U	0.25	0.005 U	0.005 U	14	0.002 U	0.005 U	0.063
10/02	0.013	1.1	0.005 U	0.005 U	6.2	0.002 U	0.005 U	0.067
01/03	0.005 U	0.92	0.005 U	0.005 U	8.6	0.002 U	0.005 U	0.05 U
05/03	0.005 U	1.7	0.005 U	0.005 U	11	0.002 U	0.0081	0.05 U
09/03	11 U	1.48	2 U	1 U	11.6	2 U	0.009	0.036
03/04	0.011 U	2.52	0.002 U	0.001 U	12	0.002 U	0.005 U	0.008
11/04	0.011 U	1.82	0.002 U	0.001 U	13.8	0.002 U	0.005	0.008
07/05	0.011 U	5.56	0.002 U	0.001 U	21.5	0.002 U	0.014	0.019
03/06	0.011 U	1.98	0.002 U	0.001 U	17.5	0.002 U	0.005 U	0.003 U
10/06	0.011 U	17.4	0.002	0.001 U	17.4	0.002 U	0.005 U	0.003 U
04/07	0.005 U	4.9	0.002 U	0.001 U	22.7	0.002 U	0.01 U	0.007
11/07	0.005 U	7.55	0.002 U	0.001 U	11.8	0.002 U	0.01 U	0.005 U
04/08	0.005 U	5.9	0.002 U	0.001 U	15.3	0.002 U	0.01 U	0.005 U
10/08	0.006	2.41	0.002 U	0.001 U	12.7	0.002 U	0.01 U	0.015
05/09	0.005 U	1.07	0.05 U	0.001 U	10.3	0.002 U	0.01 U	0.018
10/09	0.0019 U	4	0.0074 J	0.00077 U	8.8	0.00051 J	0.0042 J	0.008 J
04/10	0.0019 U	2.2	0.0019 U	0.00077 U	14.5	0.0003 U	0.00077 U	0.0093 J
10/10	0.0024 J	2.9	0.0043 J	0.00074 U	10.4	0.001 J	0.00074 U	0.015
03/11	0.0025 J	5.8	0.0019 U	0.00074 U	4	0.0003 U	0.0013 J	0.0065 J
09/11	0.0019 U	4.6	0.0019 U	0.00074 U	6.7	0.0003 U	0.0024 J	0.012

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Total Metals

	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL			0.05			0.002		
03/12	0.0019 U	5.4	0.0019 U	0.00074 U	4.2	0.0003 U	0.0015 J	0.0049 J
09/12	0.0019 U	2.2	0.0022 J	0.00074 U	11.8	0.0003 U	0.002 J	0.0088 J
04/13	0.0019 U	1.7	0.0019 U	0.00074 U	10.4	0.0003 U	0.0008 J	0.0067 J
10/13	0.0019 U	1.8	0.0019 U	0.00074 U	13.4	0.0003 U	0.001 J	0.0059 J
04/14	0.0019 U	2.2	0.0019 U	0.00074 U	9.6	0.0003 U	0.0045 J	0.011
05/14	0.0016 U	1.6	0.0016 U	0.00066 U	13.3	0.00033 U	0.00093 J	0.0034 J
08/14	0.0019 U	2.3	0.0019 U	0.00074 U	10.4	0.0003 U	0.00074 U	0.008 J
04/15	0.011 U	1.7	0.35 U	0.01 U	11.3	0.002 U	0.0017 J	0.012
08/15	0.000814 J	1.68	0.00043 J	0.001 U	10.9	0.002 U	0.000793 J	0.0105
03/16	0.002 U	1.93	0.002 U	0.0005 U	11.3	0.0005 U	0.0023	0.0081 J
09/16	0.004 U	1.68	0.00049 J	0.001 U	10.3	0.001 U	0.0026	0.0094 J

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5	
06/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
10/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
01/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	0.6 J	1 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5	
10/09	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U
04/10	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U
10/10	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U
03/11	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
09/11	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
03/12	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
09/12	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
04/13	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
10/13	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
04/14	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
08/14	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
04/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
03/16	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U	1 U	1 U	5 U	10 U	10 U	10 U	20 U	20 U	1 U	5 U
09/16	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Volatile Organic Compounds

	Bromodichloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)
MCL	80	80			5	100		80		70		80	700	10000				5	10000
06/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	--	1 U	--	1 U	1 U	--
10/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
01/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	2.6	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
03/06	1 U	1 U	1 U	1 U	1 U	0.9 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--
04/07	1 U	1 U	1 U	1 U	1 U	0.7 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Volatile Organic Compounds

	Bromodichloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)
MCL	80	80			5	100		80		70		80	700	10000				5	10000
10/09	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	0.16 U	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--
04/10	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	0.16 U	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--
10/10	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	0.16 U	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--
03/11	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
09/11	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.58 J	--
03/12	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
09/12	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/13	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
10/13	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/14	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
08/14	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.27 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.5 JB	1 U	1 U	1 U	1 U	--	1 U	2 U	1 U	1 U	--
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/16	1 U	4 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U
09/16	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Volatile Organic Compounds

	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100	5	1000	100			5			2	10000
06/02	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	3 U
10/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
01/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Volatile Organic Compounds

	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100	5	1000	100			5			2	10000
10/09	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
04/10	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
10/10	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
03/11	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
09/11	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
03/12	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
09/12	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/13	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
10/13	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/14	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
08/14	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/15	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1.6 U	1 U	1 U
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/16	5 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	10 U	1 U	1 U
09/16	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH (SU)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity (uS/cm)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10												
05/03	9.5	0.5 U	68.3	13.5	--	61	0.05 U	--	5.50	--	--	267	--	--	5.6	16.5	168	75.5	--
09/03	70	0.2 U	10 U	12	--	58.5	2.36	--	5.86	--	--	209	--	--	4.42	15.2	145	20	--
03/04	102	0.2 U	10 U	13.4	--	82.6	0.789	--	6.80	--	--	273	--	--	5.79	12.6	180	5.1	--
11/04	107	0.2 U	10 U	13.5	--	80.5	0.44	--	6.90	--	--	282	--	--	5.98	16.2	140	4.8	--
07/05	102	0.2 U	10 U	13.7	--	74	0.56	--	8.15	--	--	266	--	--	6	16.7	184	20	--
03/06	97	0.2 U	10 U	14.4	--	69.1	0.06 U	--	6.12	--	--	254	--	--	5.96	14.4	190	130	--
10/06	128	1.68	19	27.5	--	98.1	0.06 U	--	7.01	--	--	305	--	--	1.35	--	194	19	--
04/07	125	1.38	42	30.2	--	98.7	0.06 U	--	6.31	--	--	306	--	--	0.38 U	--	190	11	--
11/07	110	1.59	18	19.7	--	68.6	0.06 U	--	6.15	--	--	227	--	--	0.38 U	--	154	9.6	--
04/08	117	1.7	13	20.7	--	86.5	0.06 U	--	5.84	--	--	324	--	--	1.67	--	160	1.9	--
10/08	65	0.46	10 U	21.4	--	41.3	0.06 U	--	5.84	--	--	179	--	--	--	--	120	16	--
05/09	108	2.38	10 U	12.3	--	86.1	0.06 U	--	6.12	--	--	277	--	--	2.39	--	142	321	--
10/09	91	0.04 U	13	8.4	--	77	0.32	--	7.08	--	--	193	--	--	8.3	--	130	119	--
04/10	89	3.06	1 U	20.8	--	60	0.018 U	--	5.35	--	--	192.6	--	--	4.1	--	142	9.98	--
10/10	93	3.42	2 U	24.3	--	68	0.2	--	--	5.95	6.34	--	211	248	3.8	16.6	136	8.25	--

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH (SU)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity (uS/cm)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10												
03/11	93	3.52	2 U	26.7	--	51	0.14	--	--	6.25	6.39	--	263	256	2.2	--	144	19.9	--
09/11	129	3.98	6 J	29.2	--	103	0.07 U	--	--	5.49	6.74	--	16	326	5.8	18.21	135	21.2	--
03/12	105	3.02	5 J	22.4	--	75	0.22	--	--	6.12	6.27	--	286	281	5	18.1	181	21	--
09/12	95	3.83	4 J	22.4	--	63.3	0.14	--	--	6.13	6.83	--	226	241	2.9	16.27	143	23.2	--
04/13	127	5.69	6 J	24.1	0	94	0.24	5	--	5.88	6.73	--	301	303	4.2	14.96	176	12.4	4.1
10/13	83	5.25	4 J	18.1	--	57	0.22	--	--	6.16	6.86	--	220	222	3.9	14.98	142	13	9.7
04/14	140	0.335 J	21	26	3.13	102	0.34	2.4	--	5.87	6.76	--	460	347	3.5	14.69	204	7.81	-4.6 J
08/14	91	6.35	14	22.9	0	64	0.28	22.3	--	6.10	7.00	--	253	249	3.6	16.33	134	8.92	2.3
04/15	121	7.95	10 U	23.4	2.18	75	0.42	7	6.85	6.02	--	277	281	--	2.6	--	148	13.3	10.6
08/15	51.7	4.52	10 U	14.2	2.02	28.8	0.398	64.3	--	5.94	5.73	--	160	189	2.35	15.55	90	13.6	12.1
03/16	110	8.2	14	21.6	0.9	77.8	0.534	-46.1	--	6.01	5.86	--	327	353	2.2	15.09	110	6.51	42.2
09/16	20.4	1.38	10 U	10.9	3.08	15.7	0.797	136.9	--	5.74	5.41	--	69.5	101	1.82	17.6	45	16.4	7.8

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002
05/03	0.002 U	0.005 U	0.044	0.002 U	0.004 U	15	0.005 U	0.005 U	0.005 U	7	0.005 U	5.6	0.25	0.001 U
09/03	2 U	2 U	0.034	2 U	4 U	14.8	0.019	6 U	0.014	2.09	0.004	5.2	0.05	0.0002 U
03/04	0.002 U	0.002 U	0.03	0.002 U	0.004 U	20.8	0.008 U	0.006 U	0.007	0.893	0.002 U	7.46	0.033	0.0002 U
11/04	0.002 U	0.002 U	0.027	0.002 U	0.004 U	20.2	0.008 U	0.006 U	0.003 U	0.531	0.002 U	7.31	0.006	--
07/05	0.002 U	0.003	0.039	0.002 U	0.004 U	18.8	0.008 U	0.006 U	0.005	2.63	0.002 U	6.58	0.111	0.0002 U
03/06	0.002 U	0.002 U	0.127	0.002 U	0.004 U	16.8	0.008 U	0.006 U	0.003 U	18.4	0.002 U	6.59	0.407	0.0002 U
10/06	0.002 U	0.002 U	0.18	0.002 U	0.004 U	24	0.008 U	0.006 U	0.003 U	12.5	0.002 U	9.26	0.374	0.0002 U
04/07	0.002 U	0.002 U	0.181	0.0005 U	0.004 U	24.4	0.005 U	0.005 U	0.006	11.7	0.002 U	9.17	0.339	0.0002 U
11/07	0.002 U	0.002 U	0.155	0.0005 U	0.004 U	16.7	0.005 U	0.005 U	0.005 U	8.72	0.003	6.54	0.229	0.0002 U
04/08	0.002 U	0.002 U	0.107	0.0005 U	0.004 U	24	0.005 U	0.005 U	0.005 U	8.37	0.002 U	6.46	0.291	0.0002 U
10/08	0.002 U	0.002 U	0.127	0.0005 U	0.004 U	9.86	0.005 U	0.005 U	0.005 U	7.17	0.002 U	4.07	0.161	0.0002 U
05/09	0.0022 U	0.0029	0.149	0.0005 U	0.004 U	24.4	0.005 U	0.007	0.005 U	37.3	0.01	6.13	0.289	0.0002 U
10/09	0.00077 U	0.001 U	0.062	0.0003 U	0.00037 U	20.7	0.0076 J	0.0019 U	0.0034 J	6.2	0.0032	5.8	0.081	0.0000820 J
04/10	0.00077 U	0.001 U	0.24	0.0003 U	0.00037 U	13.8	0.00077 U	0.0019 U	0.0019 U	7	0.00077 U	5.4	0.21	0.0000300 U
10/10	0.00074 U	0.001 U	0.3	0.00046 J	0.00039 J	12.3	0.0013 J	0.0024 J	0.0026 J	7	0.00074 U	5.5	0.18	0.0000300 U
03/11	0.00074 U	0.001 U	0.26	0.0003 U	0.00037 U	15.4	0.00081 J	0.0023 J	0.0023 J	6.1	0.00074 U	5.8	0.24	0.00017 U
09/11	0.00074 U	0.001 U	0.36	0.0003 U	0.00037 U	19.2	0.00081 J	0.0019 U	0.0025 J	7.9	0.00074 U	8	0.27	0.00017 U
03/12	0.00074 U	0.001 U	0.31	0.0003 U	0.00037 U	17.7	0.00099 J	0.0019 U	0.0029 J	6.2	0.00074 U	7	0.21	0.00017 U
09/12	0.00074 U	0.001 U	0.21	0.0003 U	0.00037 U	15.2	0.0039 J	0.0028 J	0.0059 J	8.3	0.0021	6.2	0.2	0.00017 U
04/13	0.00074 U	0.001 U	0.36	0.0003 U	0.00037 U	22.1	0.00074 U	0.0019 U	0.0026 J	9.8	0.00074 U	8.3	0.3	0.00017 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002
10/13	0.00074 U	0.001 U	0.29	0.0003 U	0.00037 U	11.3	0.00074 U	0.0029 J	0.0025 J	6.1	0.0009 J	4.8	0.17	0.00017 U
04/14	0.00074 U	0.001 U	0.33	0.0003 U	0.00037 U	23.9	0.00078 J	0.0019 U	0.0019 J	9.9	0.00074 U	9.5	0.33	0.00017 U
08/14	0.00074 U	0.001 U	0.33	0.0003 U	0.00037 U	12.9	0.00074 U	0.0019 U	0.0019 U	5.8	0.00074 U	5.6	0.21	0.00017 U
04/15	0.002 U	0.002 U	0.29	0.002 U	0.004 U	20	0.00088 J	0.01 U	0.01 U	8.2	0.002 U	8	0.25	0.0002 U
08/15	0.002 U	0.002 U	0.189	0.0005 U	0.004 U	7.01	0.000336 J	0.001 J	0.0027 J	3.65	0.000301 J	2.75	0.0849	0.0002 U
03/16	0.001 U	0.00055 J	0.278	0.0005 U	0.0005 U	19	0.001 J	0.0016	0.0033	6.02	0.00036 J	7.35	0.271	0.0002 U
09/16	0.002 U	0.004 U	0.0928	0.00012 J	0.001 U	4.02	0.0015 J	0.0012	0.0049	3.2	0.0016 J	1.37	0.0379	0.0002 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Total Metals

	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL			0.05			0.002		
05/03	0.005 U	2.6	0.005 U	0.005 U	22	0.002 U	0.005 U	0.05 U
09/03	11 U	3.27	2 U	1 U	20.4	2 U	5 U	0.1
03/04	0.011 U	4.42	0.002 U	0.001 U	26.5	0.002 U	0.005 U	0.013
11/04	0.011 U	3.36	0.002 U	0.001 U	25.2	0.002 U	0.005 U	0.011
07/05	0.011 U	2.72	0.002 U	0.001 U	23.7	0.002 U	0.005 U	0.003 U
03/06	0.011 U	2.46	0.002 U	0.001 U	24.9	0.002 U	0.005 U	0.003 U
10/06	0.011 U	4.16	0.002 U	0.001 U	27.3	0.002 U	0.005 U	0.003
04/07	0.005 U	3.92	0.002 U	0.001 U	25.5	0.002 U	0.01 U	0.021
11/07	0.005 U	3.45	0.002 U	0.001 U	20.7	0.002 U	0.01 U	0.048
04/08	0.005 U	4.21	0.002 U	0.001 U	17	0.002 U	0.01 U	0.005 U
10/08	0.006	2.18	0.002 U	0.001 U	17.2	0.002 U	0.01 U	0.031
05/09	0.005 U	4.18	0.05 U	0.001 U	11.9	0.002 U	0.005	0.328
10/09	0.0021 J	4.2	0.0058 J	0.00077 U	12.4	0.00051 J	0.011	0.038
04/10	0.0019 U	4.1	0.0019 U	0.00077 U	19.5	0.0003 U	0.00077 U	0.056
10/10	0.002 J	3.6	0.0031 J	0.0011 J	18.5	0.00045 J	0.00074 U	0.032
03/11	0.0019 U	4.4	0.0021 J	0.00074 U	17.4	0.0003 U	0.00074 U	0.03
09/11	0.0019 U	4.9	0.0019 U	0.00074 U	25.2	0.0003 U	0.0015 J	0.021
03/12	0.0019 U	4.5	0.0019 U	0.00074 U	21.5	0.0003 U	0.00085 J	0.05
09/12	0.0026 J	4.8	0.0026 J	0.00074 U	16.8	0.0003 U	0.0027 J	0.062
04/13	0.0019 U	5.9	0.0019 U	0.00074 U	21.4	0.0003 U	0.00079 J	0.037

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Total Metals

	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL			0.05			0.002		
10/13	0.0019 U	4.3	0.0019 U	0.00074 U	18.1	0.0003 U	0.0014 J	0.047
04/14	0.0019 U	6.8	0.0019 U	0.00074 U	21.9	0.0003 U	0.0011 J	0.039
08/14	0.0019 U	4.6	0.0019 U	0.00074 U	18.1	0.0003 U	0.0023 J	0.028
04/15	0.011 U	6.9	0.35 U	0.01 U	21.1	0.002 U	0.00077 J	0.043
08/15	0.000765 J	3.68	0.000419 J	0.001 U	12.2	0.002 U	0.001 J	0.075
03/16	0.002 U	7.17	0.002 U	0.0005 U	20	0.0005 U	0.0015	0.0592
09/16	0.0015 J	2.88	0.004 U	0.001 U	9.79	0.001 U	0.0026	0.0798

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5	
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 J	5 U	5 U	5.5	5 U	1 U	1 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.9 J	5 U	5 U	5 U	5 U	5 U	3.5	1 U
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.3	5 U	5 U	5 U	5 U	5 U	4	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1.7	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
10/09	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U
04/10	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U
10/10	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.56 J	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.91 J	0.33 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5	
03/11	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	1.1	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	1.9	0.32 U
09/11	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.87 J	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	1.6	0.32 U
03/12	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.7 J	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	1.2	0.32 U
09/12	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.49 J	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.72 J	0.32 U
04/13	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	1.2	0.32 U
10/13	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.46 J	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.76 J	0.32 U
04/14	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.41 J	0.32 U	0.24 U	0.86 J	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	1	0.32 U
08/14	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
04/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U	1 U	1 U	1 U	1 U	0.6 J	5 U	5 U	5 U	5 U	5 U	0.97 J	1 U
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	0.26 J	1 U
03/16	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U	1 U	1 U	5 U	10 U	10 U	10 U	20 U	20 U	1 J	5 U
09/16	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Volatile Organic Compounds

	Bromodichloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)
MCL	80	80			5	100		80		70		80	700	10000				5	10000
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	3.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--
04/07	1 U	1 U	1 U	1 U	1 U	4.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1.8	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	2.4	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	0.7 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
10/09	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	0.16 U	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--
04/10	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	1.8	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--
10/10	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	2.6	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Volatile Organic Compounds

	Bromodichloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)
MCL	80	80			5	100		80		70		80	700	10000				5	10000
03/11	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	5.7	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
09/11	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	4	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.68 J	--
03/12	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
09/12	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	2.2	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/13	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
10/13	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/14	0.27 U	0.4 U	0.39 U	0.28 J	0.31 U	2.7	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
08/14	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	2.5	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.27 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/15	1 U	1 U	1 U	1 U	1 U	2.6	1 U	1 U	0.45 JB	1 U	1 U	1 U	1 U	--	1 U	2 U	1 U	1 U	--
08/15	1 U	1 U	1 U	1 U	1 U	0.83 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/16	1 U	4 U	1 U	5 U	1 U	3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U
09/16	1 U	1 U	1 U	1 U	1 U	0.1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Volatile Organic Compounds

	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100	5	1000	100			5			2	10000
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/09	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
04/10	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
10/10	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.84 J	0.61 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Volatile Organic Compounds

	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100	5	1000	100			5			2	10000
03/11	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
09/11	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
03/12	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
09/12	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/13	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
10/13	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/14	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
08/14	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/15	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1.6 U	1 U	1 U
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/16	5 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	10 U	1 U	1 U
09/16	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH (SU)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity (uS/cm)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10												
06/02	13	0.5 U	13	5.28	--	20	0.17	--	5.40	--	--	110	--	--	4	15.1	90	75	--
10/02	16	0.5 U	11	10.5	--	8	0.18	--	6.00	--	--	307	--	--	1	16.7	54	15	--
01/03	8	0.5 U	5 U	7.9	--	2 U	0.12	--	5.60	--	--	312	--	--	1 U	15.2	58	13	--
05/03	20	0.5 U	5 U	6.5	--	16	0.05 U	--	5.30	--	--	113	--	--	12.3	12.6	53	13.9	--
09/03	10	0.2 U	12	10.9	--	15.3	0.06 U	--	5.30	--	--	74	--	--	7.53	14.5	53	23	--
03/04	13	0.2 U	10 U	6.31	--	18.6	0.06 U	--	5.59	--	--	83	--	--	10.2	12	74	3	--
11/04	8.7	0.2 U	10 U	6.25	--	14.1	0.09	--	5.63	--	--	79	--	--	9.73	15.6	52	12	--
07/05	12	0.2 U	10 U	5.41	--	15.3	0.13	--	5.64	--	--	71	--	--	9.46	15.2	40	2.6	--
03/06	8.9	0.2 U	10 U	8.55	--	14	0.09	--	5.52	--	--	77	--	--	8.05	12.8	10 U	3.5	--
10/06	398	0.2 U	10 U	9.24	--	14.1	0.08	--	5.88	--	--	78	--	--	8.56	--	66	0.91	--
04/07	6.2	0.2 U	10 U	7.9	--	16.6	0.11	--	5.88	--	--	80	--	--	13.1	--	75	19	--
11/07	18	0.23	10 U	11.2	--	20.7	1.89	--	5.65	--	--	102	--	--	17.1	--	83	0.52	--
04/08	12	0.2 U	10 U	5.5	--	18.4	0.08	--	5.24	--	--	99	--	--	18	--	50	0.66	--
10/08	9.7	0.2 U	10 U	6.83	--	13.4	0.09	--	5.45	--	--	66	--	--	--	--	61	20	--
05/09	6.4	0.23	12	4.9	--	22	0.06 U	--	5.40	--	--	97	--	--	28.5	--	50	350	--

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH (SU)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity (uS/cm)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10												
10/09	14	0.34 J	5 J	6.3	--	24	0.08	--	5.70	--	--	98	--	--	24.4	--	81	7.35	--
04/10	2 U	0.12 J	1 U	4.5	--	16	0.28	--	4.97	--	--	65.8	--	--	16.3	--	58	38.1	--
10/10	2	0.13 J	2 U	4.3	--	24	0.34	--	--	4.78	4.97	--	69	65	20.6	15.5	63	52.4	--
03/11	18	0.21 J	2 U	4.7	--	4	0.14	--	--	5.55	5.70	--	76	99	21.4	--	84	26.4	--
09/11	12	0.11 J	2 U	3.7	--	24	0.07 U	--	--	3.34	5.94	--	143	77	17.6	14.92	23	27.4	--
03/12	29	0.215 J	2 U	6	--	32	0.057 U	--	--	5.40	5.96	--	144	112	16.2	16.16	94	5.95	--
09/12	11	0.04 U	2 U	5.9	--	17.9	0.1	--	--	5.34	5.82	--	98	81	16.3	16.35	84	2.81	--
04/13	5 U	0.04 U	2 U	3.8	0	22	0.18	250.5	--	4.87	5.63	--	87	54	14	13.91	70	56.6	109.7
10/13	4	0.103 J	6 J	4.2	--	22	0.36	--	--	5.74	5.77	--	73	58	13.7	14.44	57	21.4	18.5
04/14	7	0.058 J	2 U	4.5	3.28	20	0.34	174.9	--	5.19	5.75	--	185	56	10.9	12.05	67	69.4	53
08/14	0.8 U	0.03 U	2 U	4.3	0	16	0.36	167.4	--	5.05	6.04	--	54	55	12.1	14.92	51	24	38.1
04/15	4	1 U	10 U	2.5	1.67	15	0.2	6.5	5.95	5.91	--	46	50	--	14.1	--	41	12.2	7.5
08/15	2.6	0.0826 J	10 U	3.48	6.25	14	0.378	266.1	--	4.86	5.17	--	165	60	13.5	18.98	40	10.9	1.5
03/16	2.92	0.2 U	10 U	3.64	3.5	14.4	0.495	297.3	--	4.62	5.32	--	92	103	12.6	13.07	28	3.37	39
09/16	3.72	0.2 U	8 J	3.84	4.38	14.8	0.493	262.3	--	4.85	5.23	--	55.8	61	11.7	17	41	61.5	7.9

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002
06/02	0.002 U	0.005 U	0.02	0.002 U	0.004 U	1.6	0.005 U	0.005 U	0.009	11	0.005 U	3	0.071	0.001 U
10/02	0.002 U	0.005 U	0.021	0.002 U	0.004 U	2.1	0.005 U	0.005 U	0.005 U	2.3	0.006	0.54	0.005 U	0.0002
01/03	0.002 U	0.005 U	0.0076	0.002 U	0.004 U	0.94	0.005 U	0.005 U	0.005 U	2.1	0.0092	0.14	0.0064	0.001 U
05/03	0.002 U	0.005 U	0.013	0.002 U	0.004 U	1.5	0.005 U	0.005 U	0.005 U	9.3	0.005 U	2.9	0.24	0.001 U
09/03	2 U	0.01	0.02	2 U	4 U	1.52	0.013	6 U	0.009	8.04	0.003	2.79	0.039	0.0002 U
03/04	0.002 U	0.002 U	0.02	0.002 U	0.004 U	1.83	0.008 U	0.006 U	0.003 U	5.12	0.002 U	3.41	0.243	0.0002 U
11/04	0.002 U	0.003	0.019	0.002 U	0.004 U	1.34	0.008 U	0.006 U	0.003 U	5.43	0.002 U	2.6	0.165	--
07/05	0.002 U	0.003	0.021	0.002 U	0.004 U	1.75	0.008 U	0.006 U	0.003 U	4.41	0.002 U	2.65	0.224	0.0002 U
03/06	0.002 U	0.002 U	0.013	0.002 U	0.004 U	1.46	0.008 U	0.006 U	0.003 U	5.08	0.002 U	2.52	0.31	0.0002 U
10/06	0.002 U	0.002 U	0.018	0.002 U	0.004 U	1.51	0.008 U	0.006 U	0.011	4.26	0.002 U	2.5	0.237	0.0002 U
04/07	0.002 U	0.002	0.015	0.0005 U	0.004 U	1.92	0.005 U	0.005 U	0.005 U	5.84	0.002 U	2.86	0.329	0.0002 U
11/07	0.002 U	0.002 U	0.019	0.0005 U	0.004 U	2.5	0.005 U	0.005 U	0.005 U	10.1	0.002 U	3.51	0.472	0.0002 U
04/08	0.002 U	0.002 U	0.019	0.0005 U	0.004 U	2.19	0.005 U	0.005 U	0.005 U	4.99	0.002 U	3.15	0.315	0.0002 U
10/08	0.002 U	0.006	0.02	0.0005 U	0.004 U	1.5	0.005 U	0.005 U	0.005 U	5.62	0.002 U	2.35	0.127	0.0004
05/09	0.0022 U	0.034	0.02	0.0005 U	0.004 U	2.94	0.005 U	0.005 U	0.005 U	111	0.002 U	3.57	0.336	0.0002 U
10/09	0.00077 U	0.001 U	0.024	0.0003 U	0.00037 U	2.2	0.0017 J	0.0019 U	0.0019 U	6.9	0.00077 U	3.3	0.31	0.0000940 J
04/10	0.00077 U	0.0049	0.024	0.0003 U	0.00037 U	1.5	0.00077 U	0.0019 U	0.0019 U	11.5	0.00077 U	2.1	0.15	0.0000300 U
10/10	0.00074 U	0.007	0.024	0.00051 J	0.00047 J	1.6	0.0017 J	0.0019 U	0.0025 J	21.7	0.0012 J	2.2	0.12	0.00029 J
03/11	0.00074 U	0.0033	0.031	0.0003 U	0.00037 U	2.7	0.00074 U	0.0019 U	0.0019 U	11.7	0.00074 U	3.3	0.43	0.00017 U
09/11	0.00074 U	0.0061	0.033	0.0003 U	0.00037 U	2	0.00095 J	0.0019 U	0.0019 U	9.3	0.00074 U	2.7	0.26	0.00032 J

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002
03/12	0.00074 U	0.0028	0.036	0.0003 U	0.00037 U	3.2	0.0008 J	0.0019 U	0.0019 U	9.7	0.00074 U	3.7	0.46	0.00017 U
09/12	0.00074 U	0.0016 J	0.032	0.0003 U	0.00037 U	2.2	0.00074 U	0.0019 U	0.0019 U	4	0.00074 U	3	0.3	0.00017 U
04/13	0.00074 U	0.0028	0.023	0.0003 U	0.00037 U	2	0.00088 J	0.0019 U	0.0019 U	8.3	0.00074 U	2	0.26	0.00017 U
10/13	0.00074 U	0.0014 J	0.023	0.0003 U	0.00037 U	1.8	0.00074 U	0.0019 U	0.0019 U	3.3	0.00074 U	2.1	0.17	0.00017 U
04/14	0.00074 U	0.0066	0.021	0.0003 U	0.00037 U	2	0.0011 J	0.0019 U	0.0019 U	32.5	0.0011 J	2.2	0.27	0.00017 U
08/14	0.00074 U	0.001 U	0.021	0.0003 U	0.00037 U	1.6	0.00074 U	0.0019 U	0.0019 U	5.2	0.00074 U	1.8	0.21	0.00017 U
04/15	0.002 U	0.002 U	0.02	0.002 U	0.004 U	1.8	0.00091 J	0.01 U	0.01 U	4.2	0.002 U	1.9	0.2	0.0002 U
08/15	0.002 U	0.000358 J	0.0234	0.0005 U	0.004 U	1.86	0.000271 J	0.000241 J	0.0012 J	1.45	0.002 U	2.29	0.164	0.0002 U
03/16	0.001 U	0.00054 J	0.0212	0.00011 J	0.0005 U	1.77	0.00096 J	0.0011	0.002 U	0.567	0.001 U	2.41	0.15	0.0002 U
09/16	0.002 U	0.0032 J	0.0249	0.00015 J	0.001 U	1.74	0.0015 J	0.0003 J	0.00082 J	12.2	0.0013 J	2.54	0.119	0.0000540 J

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Total Metals

	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL			0.05			0.002		
06/02	0.005 U	0.1	0.005 U	0.005 U	5.7	0.002 U	0.005 U	0.05 U
10/02	0.005 U	2.2	0.005 U	0.005 U	13	0.002 U	0.005 U	0.05 U
01/03	0.005 U	1.6	0.005 U	0.005 U	12	0.002 U	0.0073	0.05 U
05/03	0.005 U	0.67	0.005 U	0.005 U	6.8	0.002 U	0.005 U	0.05 U
09/03	11 U	0.993	2 U	1 U	7.91	2 U	5 U	0.064
03/04	0.011 U	1.55	0.002 U	0.001 U	7.05	0.002 U	0.005 U	0.004
11/04	0.011 U	1.24	0.002 U	0.001 U	6.31	0.002 U	0.005 U	0.003 U
07/05	0.011 U	1.13	0.002 U	0.001 U	5.34	0.002 U	0.005 U	0.003 U
03/06	0.011 U	0.779	0.002 U	0.001 U	4.86	0.002 U	0.005 U	0.003 U
10/06	0.016	1.42	0.002 U	0.001 U	5.13	0.002 U	0.005 U	0.003 U
04/07	0.005 U	1.47	0.002 U	0.001 U	4.48	0.002 U	0.01 U	0.005 U
11/07	0.005 U	1.94	0.002 U	0.001 U	5.24	0.002 U	0.01 U	0.005 U
04/08	0.005 U	1.64	0.002 U	0.001 U	4.92	0.002 U	0.01 U	0.025
10/08	0.006	1.33	0.002 U	0.001 U	4.39	0.002 U	0.01 U	0.032
05/09	0.005 U	1.57	0.05 U	0.001 U	4.18	0.002 U	0.007	0.036
10/09	0.0019 U	2.7	0.0062 J	0.00077 U	4.6	0.00048 J	0.0015 J	0.0031 J
04/10	0.0019 U	2.3	0.0019 U	0.00077 U	4.1	0.0003 U	0.00077 U	0.0019 U
10/10	0.0065 J	2.2	0.003 J	0.0011 J	4.2	0.00048 J	0.001 J	0.0058 J
03/11	0.0019 U	3.5	0.0019 U	0.00074 U	3.8	0.0003 U	0.00074 U	0.0032 J
09/11	0.0019 U	4.1	0.0019 U	0.00074 U	3.2	0.0003 U	0.0035 J	0.003 J

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Total Metals

	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL			0.05			0.002		
03/12	0.0019 U	4.2	0.0019 U	0.00074 U	3.6	0.0003 U	0.001 J	0.0046 J
09/12	0.0019 U	4.3	0.002 J	0.00074 U	3.5	0.0003 U	0.00074 U	0.015
04/13	0.0019 U	3.1	0.0019 U	0.00074 U	3.4	0.0003 U	0.00074 U	0.0075 J
10/13	0.0019 U	3	0.0019 U	0.00074 U	4	0.0003 U	0.00074 U	0.0041 J
04/14	0.0019 U	3.2	0.0019 U	0.00074 U	2.8	0.0003 U	0.0028 J	0.003 J
08/14	0.0019 U	3	0.0019 U	0.00074 U	3.3	0.0003 U	0.00074 U	0.015
04/15	0.011 U	3	0.35 U	0.01 U	2.7	0.002 U	0.01 U	0.0047 J
08/15	0.000497 J	3.01	0.002 U	0.001 U	2.85	0.002 U	0.00015 J	0.0121
03/16	0.002 U	2.5	0.002 U	0.0005 U	2.67	0.0005 U	0.0005 U	0.015 U
09/16	0.004 U	2.3	0.004 U	0.001 U	2.73	0.001 U	0.0019	0.03 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5	
06/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
10/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
01/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5	
10/09	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U
04/10	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U
10/10	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U
03/11	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
09/11	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
03/12	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
09/12	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
04/13	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
10/13	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
04/14	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
08/14	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
04/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
03/16	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U	1 U	1 U	5 U	10 U	10 U	10 U	20 U	20 U	1 U	5 U
09/16	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Volatile Organic Compounds

	Bromodichloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)
MCL	80	80			5	100		80		70		80	700	10000				5	10000
06/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	--	1 U	--	1 U	1 U	--
10/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
01/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Volatile Organic Compounds

	Bromodichloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)
MCL	80	80			5	100		80		70		80	700	10000				5	10000
10/09	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	0.16 U	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--
04/10	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	0.16 U	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--
10/10	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	0.16 U	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--
03/11	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
09/11	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
03/12	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
09/12	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/13	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
10/13	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/14	0.27 U	0.4 U	0.55 J	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
08/14	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.27 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.43 JB	1 U	1 U	1 U	1 U	--	1 U	2 U	1 U	1 U	--
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/16	1 U	4 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U
09/16	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Volatile Organic Compounds

	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100	5	1000	100			5			2	10000
06/02	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	3 U
10/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
01/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Volatile Organic Compounds

	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100	5	1000	100			5			2	10000
10/09	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
04/10	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
10/10	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
03/11	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
09/11	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
03/12	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
09/12	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/13	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
10/13	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/14	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
08/14	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/15	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1.6 U	1 U	1 U
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/16	5 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	10 U	1 U	1 U
09/16	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-4 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH (SU)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity (uS/cm)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10												
06/02	539	20.1	111	9.2	--	330	0.05 U	--	6.40	--	--	125	--	--	1 U	17.1	504	4900	--
10/02	510	20	80	10.3	--	340	0.05 U	--	6.30	--	--	911	--	--	1 U	17.8	424	900	--
01/03	572	20.2	65	12.6	--	330	0.05 U	--	6.30	--	--	920	--	--	1 U	15	438	400	--
05/03	434	22.8	262	2.9	--	260	0.05 U	--	6.10	--	--	990	--	--	1 U	15.6	396	594	--
09/03	453	28	70	1.08	--	310	0.06 U	--	6.11	--	--	866	--	--	0.38 U	17.4	406	376	--
03/04	529	27.4	60	8.89	--	335	0.06 U	--	6.36	--	--	954	--	--	0.38 U	14.9	370	255	--
11/04	460	29.8	65	9.43	--	313	0.1	--	6.45	--	--	1044	--	--	0.99	15.9	400	297	--
07/05	428	23.8	54	9.53	--	326	0.07	--	6.53	--	--	847	--	--	0.38 U	17.2	390	323	--
03/06	463	20.5	61	9.53	--	326	0.06 U	--	6.26	--	--	703	--	--	0.53	15.2	474	468	--
10/06	604	0.2 U	67	11.6	--	360	0.06 U	--	6.04	--	--	763	--	--	0.38 U	--	479	310	--
04/07	1135	20	75	16	--	371	0.06 U	--	6.34	--	--	935	--	--	0.38 U	--	433	295	--
11/07	635	29.3	80	17.2	--	387	0.06 U	--	6.29	--	--	910	--	--	0.38 U	--	527	340	--
04/08	565	30.6	89	16.4	--	420	0.06 U	--	6.27	--	--	1140	--	--	0.38 U	--	465	180	--
10/08	643	29.5	160	15.6	--	362	0.06 U	--	6.22	--	--	1050	--	--	--	--	680	1100	--
05/09	574	30.5	97	16.8	--	358	0.06 U	--	6.22	--	--	1095	--	--	0.38 U	--	480	479	--

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH (SU)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity (uS/cm)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10												
10/09	669	32.2	57	20.1	--	384	0.02 U	--	6.45	--	--	1040	--	--	0.42	--	527	296	--
04/10	493	28.8	66	20.4	--	379	0.018 U	--	6.49	--	--	1032	--	--	0.87 U	--	494	1930	--
10/10	474	31	55	24	--	318	0.008 U	--	--	6.11	6.51	--	1019	912	0.063 U	17.1	419	492	--
03/11	472	32.4	44	20.3	--	324	0.07 U	--	--	6.74	6.56	--	830	892	11.5	--	445	693	--
09/11	509	31.2	48	21.2	--	309	0.07 U	--	--	5.98	6.49	--	1119	1030	0.34 U	17.72	648	570	--
03/12	488	33.9	67	21.9	--	119	0.08	--	--	6.37	6.80	--	1091	1080	0.38	18.98	485	423	--
09/12	535	34.6	60	24.5	--	332	0.057 U	--	--	6.49	6.75	--	1020	1110	0.22 U	18.32	410	198	--
04/13	513	37.4	56	22.9	0	478	0.057 U	-60.7	--	6.12	6.72	--	950	1070	0.32 J	16.59	417	269	53.7
10/13	423	32.8	43	24.1	--	269	1.1	--	--	6.46	6.80	--	1028	936	0.22 U	18.43	384	694	81.6
04/14	447	34.5	56	24.4	2.29	298	0.057 U	-68.5	--	6.17	6.73	--	1166	1010	0.22 U	16.46	394	295	127.8
08/14	406	33.6	2 U	24.2	0	271	0.024 U	-55.1	--	6.31	6.93	--	970	948	0.14 U	17.1	435	174	40.3
04/15	441	39.8	45	24.6	2.09	269	0.06 U	-39.8	6.80	5.90	--	891	10	--	0.2 J	--	406	312	34
08/15	391	38.9	55	23.7	4.19	265	0.05 U	259.3	--	4.92	6.20	--	49	1030	1 U	14.29	366	211	10
02/16	412	40.6	61	24.8	0.29	263	0.05 U	-81.1	--	6.12	6.21	--	975	992	1 U	16.88	323	107	68.5
09/16	371	38.5	55	22.6	0.13	245	0.05 U	-79.8	--	6.37	6.11	--	943	898	0.607 J	18.3	310	292	53.8

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)	Nickel, Total (mg/L)	Potassium, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002		
06/02	0.002 U	0.005 U	1.2	0.002 U	0.004 U	95	0.005 U	0.005 U	0.021	150	0.026	29	2.3	0.001 U	0.005 U	3.3
10/02	0.002 U	0.006	1.1	0.002 U	0.004 U	120	0.005 U	0.005 U	0.005 U	120	0.026	26	1.3	0.001 U	0.007	32
01/03	0.002 U	0.0054	1	0.002 U	0.004 U	89	0.005 U	0.005 U	0.0093	100	0.012	26	0.93	0.001 U	0.005 U	31
05/03	0.002 U	0.005 U	0.81	0.002 U	0.004 U	71	0.022	0.005 U	0.011	97	0.022	21	0.9	0.001 U	0.0056	22
09/03	2 U	0.006	0.819	2 U	4 U	82.5	0.01	6 U	3 U	85	0.007	25.3	0.78	0.0002 U	11 U	29.6
03/04	0.002 U	0.004	0.857	0.002 U	0.004 U	90.5	0.008 U	0.006 U	0.003 U	94.9	0.003	26.5	0.865	0.0002 U	0.011 U	29.8
11/04	0.002 U	0.003	0.725	0.002 U	0.004 U	84	0.008 U	0.006 U	0.003 U	77.9	0.004	25	0.778	--	0.011 U	30
07/05	0.002 U	0.005	0.688	0.002 U	0.004 U	90.8	0.008 U	0.006 U	0.005	86.8	0.002 U	24.1	0.715	0.0002 U	0.011 U	24.2
03/06	0.002 U	0.005	0.645	0.002 U	0.004 U	89.9	0.008 U	0.006 U	0.004	97.7	0.006	24.6	0.796	0.0002 U	0.011 U	22.4
10/06	0.002 U	0.003	0.701	0.002 U	0.004 U	100	0.008 U	0.006 U	0.003 U	83.9	0.002 U	26.7	0.778	0.0002 U	0.011 U	27.7
04/07	0.002 U	0.006	0.712	0.0005 U	0.004 U	106	0.01	0.005 U	0.005 U	88.5	0.007	25.7	0.751	0.0002 U	0.005 U	22.7
11/07	0.002 U	0.006	0.752	0.0005 U	0.004 U	111	0.016	0.005 U	0.005 U	85.1	0.008	26.9	0.802	0.0002 U	0.005 U	24.9
04/08	0.002 U	0.003	0.762	0.0005 U	0.004 U	115	0.005 U	0.005 U	0.005 U	77.9	0.002 U	32.4	0.844	0.0002 U	0.005 U	31
10/08	0.002 U	0.01	0.882	0.0005 U	0.004 U	101	0.091	0.018	0.018	112	0.051	26.6	1.26	0.0002	0.025	23.8
05/09	0.0022 U	0.009	0.699	0.0005 U	0.004 U	101	0.016	0.005 U	0.005 U	86.2	0.0036	25.7	0.779	0.0002 U	0.012	21.1
10/09	0.00077 U	0.0043	0.66	0.0003 U	0.00037 U	106	0.0021 J	0.0019 U	0.0035 J	74.2	0.00077 U	29.5	0.7	0.0000670 J	0.0044 J	29.3
04/10	0.00077 U	0.0063	0.73	0.0013 J	0.0022 J	94.6	0.057	0.0019 U	0.019	93.1	0.033	22.9	1.1	0.0000300 U	0.018	24.7
10/10	0.0015 U	0.0068	0.63	0.00079 J	0.00074 U	88.6	0.01	0.0038 U	0.006 J	62.1	0.0054	22.1	0.61	0.0000300 U	0.0099 J	24.8
03/11	0.00074 U	0.0046	0.6	0.0003 U	0.0004 J	85.5	0.0091 J	0.0019 U	0.004 J	55	0.007	22.3	0.73	0.00017 U	0.0048 J	25.5
09/11	0.00074 U	0.0059	0.63	0.0003 U	0.00037 U	85.9	0.0068 J	0.0019 U	0.003 J	57.8	0.0032	20.2	0.6	0.00017 U	0.003 J	24.4

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)	Nickel, Total (mg/L)	Potassium, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002		
03/12	0.00074 U	0.0059	0.69	0.0003 U	0.00037 U	88.6	0.0022 J	0.0019 U	0.002 J	55.5	0.0019 J	22.3	0.53	0.00017 U	0.0019 U	26.1
09/12	0.00074 U	0.0053	0.66	0.0003 U	0.00037 U	94.4	0.0036 J	0.0019 U	0.0022 J	59.2	0.0013 J	23.3	0.54	0.00017 U	0.0021 J	28
04/13	0.00074 U	0.0088	0.68	0.0003 U	0.00037 U	90	0.0034 J	0.0019 U	0.0029 J	69.9	0.0022 J	20.9	0.66	0.00017 U	0.0019 U	27.2
10/13	0.00074 U	0.013	0.6	0.00045 J	0.00045 J	82.1	0.014	0.0019 U	0.0076 J	57.1	0.01	19.5	0.54	0.00017 U	0.0077 J	28.4
04/14	0.00074 U	0.0052	0.57	0.0003 U	0.00037 U	80.6	0.0064 J	0.0019 U	0.0019 U	60.7	0.0015 J	20.3	0.53	0.00017 U	0.0041 J	27.5
08/14	0.00074 U	0.0049	0.54	0.0003 U	0.00037 U	70.7	0.012	0.0019 U	0.0019 U	48	0.00074 U	18.2	0.54	0.00017 U	0.0019 U	24.9
04/15	0.002 U	0.006	0.55	0.002 U	0.004 U	79	0.0056 J	0.01 U	0.0021 J	56.3	0.0022	20	0.49	0.0002 U	0.0027 J	27.9
08/15	0.002 U	0.0041	0.589	0.0005 U	0.004 U	73.2	0.0022 J	0.00062 J	0.0028 J	46.3	0.000396 J	19.9	0.486	0.0002 U	0.0015 J	27
02/16	0.001 U	0.0051	0.636	0.00012 J	0.0005 U	74.3	0.0056	0.0024	0.0016 J	34	0.0016	18.8	0.468	0.0002 U	0.002 J	27.3
09/16	0.002 U	0.0061	0.543	0.001 U	0.001 U	68.2	0.005	0.00064 J	0.0014 J	46.8	0.0026	18.1	0.488	0.0002 U	0.0027 J	26.7

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Total Metals

	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL	0.05			0.002		
06/02	0.005 U	0.005 U	14	0.002 U	0.037	0.19
10/02	0.005	0.005 U	6.8	0.002 U	0.03	0.13
01/03	0.005 U	0.005 U	11	0.002 U	0.018	0.071
05/03	0.005 U	0.005 U	7.8	0.002 U	0.034	0.1
09/03	2 U	1 U	10.4	2 U	0.018	0.052
03/04	0.002 U	0.001 U	11.1	0.002 U	0.01	0.006
11/04	0.002 U	0.001 U	9.45	0.002 U	0.007	0.022
07/05	0.002 U	0.001 U	8.71	0.002 U	0.01	0.011
03/06	0.002	0.001 U	8.32	0.002 U	0.018	0.029
10/06	0.002	0.001 U	9.96	0.002 U	0.005 U	0.003 U
04/07	0.003	0.001 U	12.4	0.002 U	0.014	0.021
11/07	0.004	0.001 U	15.3	0.002 U	0.018	0.023
04/08	0.003	0.001 U	18.9	0.002 U	0.012	0.005 U
10/08	0.007	0.001 U	14.4	0.002 U	0.11	0.205
05/09	0.05 U	0.001 U	17	0.002 U	0.015	0.066
10/09	0.01 J	0.00077 U	21.4	0.00047 J	0.005 J	0.021
04/10	0.0059 J	0.00077 U	19.3	0.0003 U	0.062	0.11
10/10	0.0064 J	0.0015 U	19.4	0.0006 U	0.011	0.019
03/11	0.0026 J	0.00094 J	19.3	0.0003 U	0.014	0.021
09/11	0.0059 J	0.00074 U	17.9	0.0003 U	0.017	0.015

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Total Metals

	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL	0.05			0.002		
03/12	0.0019 U	0.00074 U	19.4	0.0003 U	0.0065 J	0.0086 J
09/12	0.0019 U	0.00074 U	20.2	0.0003 U	0.0064 J	0.0091 J
04/13	0.0027 J	0.00074 U	20.4	0.0003 U	0.013	0.013
10/13	0.0019 U	0.00074 U	20.8	0.0003 U	0.029	0.042
04/14	0.0019 U	0.00074 U	21	0.0003 U	0.0074 J	0.0065 J
08/14	0.0019 U	0.00074 U	19.4	0.0003 U	0.0088 J	0.0089 J
04/15	0.35 U	0.01 U	20	0.002 U	0.0085 J	0.009 J
08/15	0.001 J	0.001 U	19	0.002 U	0.0052	0.0118
02/16	0.002 U	0.0005 U	19.7	0.0005 U	0.0101	0.0078 J
09/16	0.004 U	0.001 U	17.3	0.001 U	0.0082	0.0108 J

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5
06/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	2
10/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1
01/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	2
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	2
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	2.7 J	5 U	1.5
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1.3
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1.3
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	2.2
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1.7
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1.3
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	0.7 J
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	0.8 J
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5
10/09	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.36 J	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.59 J
04/10	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U
10/10	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.34 J	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.26 J
03/11	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.31 J	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.24 J
09/11	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.35 J	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.27 J
03/12	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.38 J	1.8 U	1.3 U	1.5 U	3.1 J	1.2 U	0.31 J
09/12	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.44 J	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.37 J
04/13	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.3 J
10/13	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.28 J
04/14	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.26 J
08/14	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U
04/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U	1 U	1 U	1 U	1 U	0.46 J	5 U	5 U	5 U	3.8 J	5 U	0.26 J
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	1.5 JB	5 U	0.22 J
02/16	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U	1 U	1 U	5 U	10 U	10 U	10 U	20 U	20 U	1 U
09/16	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.1 J	1 U	1 U	0.4 J	5 U	5 U	5 U	5 U	5 U	0.2 J

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Volatile Organic Compounds

	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)
MCL		80	80			5	100		80		70		80	700	10000				5
06/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	--	1 U	--	1 U	1 U
10/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U
01/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.7 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	0.5 J	0.7 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
04/07	1 U	1 U	1 U	1 U	1 U	1 U	3.7	1.1	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	0.9 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	3.5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	4.2	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	3.3	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Volatile Organic Compounds

	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)
MCL		80	80			5	100		80		70		80	700	10000				5
10/09	0.33 U	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	4	1.8	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	4.1	0.22 U	0.32 U
04/10	0.33 U	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	3.5	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	2.1	0.22 U	0.32 U
10/10	0.33 U	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	3.1	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	2.2	0.22 U	0.32 U
03/11	0.32 U	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	3.1	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	2.6	0.31 U	0.45 U
09/11	0.32 U	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	3.2	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	2.4	0.31 U	0.64 J
03/12	0.32 U	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 J	0.21 U	0.34 J	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	2.8	0.31 U	0.45 U
09/12	0.32 U	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	5	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	2.6	0.31 U	0.45 U
04/13	0.32 U	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	2.1	0.31 U	0.45 U
10/13	0.32 U	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	1.7 J	0.31 U	0.45 U
04/14	0.32 U	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	1.5 J	0.31 U	0.45 U
08/14	0.32 U	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	3.4	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.27 U	0.34 U	--	0.42 U	1.3 J	0.31 U	0.45 U
04/15	1 U	1 U	1 U	1 U	1 U	1 U	4.2	1 U	1 U	0.43 JB	1 U	1 U	1 U	1 U	--	1 U	1.5 J	1 U	1 U
08/15	1 U	1 U	1 U	1 U	1 U	1 U	4.77	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.15	1 U	1 U
02/16	5 U	1 U	4 U	1 U	5 U	1 U	5	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 U	4 U
09/16	1 U	1 U	1 U	1 U	1 U	1 U	3.7	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 J	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Volatile Organic Compounds

	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	10000	100	5	1000	100			5			2	10000
06/02	--	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	3 U
10/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
01/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/06	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Volatile Organic Compounds

	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	10000	100	5	1000	100			5			2	10000
10/09	--	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
04/10	--	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
10/10	--	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
03/11	--	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
09/11	--	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
03/12	--	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
09/12	--	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/13	--	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
10/13	--	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/14	--	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
08/14	--	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/15	--	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1.6 U	1 U	1 U
08/15	0.17 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
02/16	1 U	5 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	10 U	1 U	1 U
09/16	0.1 J	1 U	1 U	0.1 J	1 U	1 U	5 U	1 U	1 U	1 U	1 U	0.1 J

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH (SU)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity (uS/cm)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10												
06/02	3	0.5 U	16	115.5	--	150	0.05 U	--	4.70	--	--	132	--	--	82	16.3	396	400	--
10/02	4	0.5 U	15	57.1	--	75	0.05 U	--	4.80	--	--	313	--	--	66	18.1	208	80	--
01/03	4	0.5 U	5 U	35.5	--	52	0.05 U	--	4.80	--	--	261	--	--	69	14.5	176	90	--
05/03	1 U	0.5 U	43.6	13.6	--	81	0.05 U	--	4.80	--	--	291	--	--	116	14.8	255	15.2	--
09/03	1 U	0.2 U	19	279	--	96.5	3.41	--	4.70	--	--	328	--	--	971	17.5	204	77	--
03/04	2.1	0.2 U	10 U	27.1	--	97.1	1.02	--	4.80	--	--	308	--	--	84.1	12.9	190	5.7	--
11/04	2.8	0.2 U	10 U	28.3	--	81.5	2.01	--	5.00	--	--	289	--	--	71.8	16.6	2155	3.3	--
07/05	3.8	0.2 U	10 U	34.8	--	110	1.99	--	5.91	--	--	335	--	--	96.8	15.4	221	2.8	--
03/06	--	0.2 U	10	--	--	124	--	--	6.07	--	--	254	--	--	--	13.7	--	--	--
10/06	206	1.65	10 U	40	--	84.7	3.83	--	6.15	--	--	275	--	--	62.3	--	182	21	--
04/07	3.2	0.2 U	10 U	67.1	--	117	4.14	--	5.27	--	--	350	--	--	63.3	--	216	18	--
11/07	3.2	0.2 U	10 U	63.8	--	122	5.21	--	4.80	--	--	359	--	--	83.6	--	289	118	--
04/08	1.9	0.2 U	10 U	44	--	90	3.84	--	4.65	--	--	342	--	--	55.4	--	195	8.5	--
10/08	1.7	0.2 U	10 U	45.8	--	66.1	2.09	--	4.65	--	--	244	--	--	--	--	174	58	--
05/09	2.7	0.2 U	10 U	42	--	74.7	1.79	--	4.98	--	--	273	--	--	48	--	164	144	--

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH (SU)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity (uS/cm)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10												
10/09	2 U	0.72 J	4 J	38.1	--	44	0.96	--	4.80	--	--	210	--	--	32.3	--	134	50.3	--
04/10	2 U	0.02 U	1 U	169	--	156	3.2	--	6.12	--	--	604	--	--	45.6	--	390	114	--
10/10	1 U	0.05 J	2 U	192	--	161	2.4	--	--	4.12	4.52	--	658	731	42.6	18.4	375	94	--
03/11	1 U	0.04 U	2 U	296	--	233	5.2	--	--	4.84	4.54	--	953	1080	57	--	582	42.6	--
09/11	1 U	0.04 U	2 U	68.5	--	47	1.2	--	--	4.77	4.50	--	409	339	47.7	19.85	187	1.74	--
03/12	2	0.048 J	2 U	51.4	--	63	1.2	--	--	4.27	6.80	--	345	298	40.6	17.16	221	2.8	--
09/12	1 U	0.04 U	2 U	32.8	--	34	0.66	--	--	5.37	4.96	--	203	201	38.7	19.45	138	8.81	--
04/13	2	0.04 U	2 U	103	0	97	2	576.2	--	5.22	5.12	--	405	454	33.1	14.93	248	2.72	5.4
10/13	1 U	0.127 J	5 J	36.8	--	57	4.7	--	--	5.81	4.80	--	285	244	38.9	18.27	163	2.29	6.1
04/14	1 U	0.039 J	10	72.4	6.84	91	3.5	175.8	--	4.96	4.91	--	422	335	32.1	13.02	183	1.73	-1.5 J
08/14	0.8 U	0.03 U	2 U	37.9	0	63	1.2	178.9	--	4.78	5.24	--	211	198	34.6	18.19	119	12.2	2.4
04/15	6	1 U	10 U	59.4	5.76	58	1.6	328.6	5.31	4.28	--	268	262	--	33.4	--	162	5.08	10.8
08/15	1 J	0.2 U	10 U	26.8	1.76	31.7	1.05	-41.5	--	6.48	4.80	--	908	194	28.9	17.2	115	2.13	7.7
03/16	1.64 J	0.2 U	10 U	36.7	4.92	27.6	1.09	269.8	--	4.42	5.08	--	203	248	28.3	14.7	95	2.19	42
09/16	3.68	0.2 U	10 U	21.7	5.38	21.5	0.779	289.2	--	4.50	5.23	--	16.17	161	22.7	19	70	2.55	57.5

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002
06/02	0.002 U	0.005 U	0.077	0.002 U	0.004 U	6.1	0.005 U	0.013	0.015	49	0.005	24	1.6	0.001 U
10/02	0.002 U	0.005 U	0.08	0.002 U	0.004 U	4	0.005 U	0.006	0.005 U	25	0.005 U	16	0.79	0.001 U
01/03	0.0052	0.005 U	0.063	0.002 U	0.004 U	3.9	0.005 U	0.005 U	0.005 U	16	0.0055	10	0.58	0.001 U
05/03	0.002 U	0.005 U	0.055	0.002 U	0.004 U	5.5	0.005 U	0.0066	0.005 U	15	0.005 U	16	0.82	0.001 U
09/03	2 U	0.003	0.065	2 U	4 U	6.78	8 U	0.008	0.004	19.5	0.006	19.3	1.02	0.0002 U
03/04	0.002 U	0.002 U	0.05	0.002 U	0.004 U	6.8	0.008 U	0.007	0.006	3.12	0.003	19.5	0.879	0.0002 U
11/04	0.002 U	0.002 U	0.068	0.003	0.004 U	6.76	0.008 U	0.006 U	0.003 U	0.392	0.002 U	15.7	0.334	--
07/05	0.002 U	0.002 U	0.07	0.002 U	0.004 U	8.76	0.008 U	0.007	0.003 U	1.22	0.002 U	21.4	0.536	0.0002
03/06	0.002 U	0.002 U	0.054	0.001	0.004 U	8.68	0.008 U	0.006 U	0.003 U	1.04	0.003	24.8	0.882	0.0002 U
10/06	0.002 U	0.002 U	0.058	0.001	0.004 U	6.73	0.008 U	0.006 U	0.003 U	1.42	0.004	16.5	0.387	0.0002 U
04/07	0.002 U	0.002	0.115	0.0011	0.004 U	10.1	0.009	0.007	0.008	7.39	0.007	22.3	0.227	0.0006
11/07	0.002 U	0.003	0.079	0.002	0.004 U	9.93	0.01	0.005 U	0.008	3.5	0.015	23.5	0.219	0.0005
04/08	0.002 U	0.002	0.05	0.0005 U	0.004 U	7.68	0.005 U	0.005 U	0.005 U	0.257	0.009	17.2	0.163	0.0004
10/08	0.002 U	0.002 U	0.062	0.0005 U	0.004 U	6.16	0.005 U	0.006	0.005 U	4.06	0.007	12.3	0.147	0.0002
05/09	0.0022 U	0.0037	0.054	0.0014	0.004 U	6.34	0.005 U	0.005 U	0.005 U	3.37	0.0071	14.3	0.129	0.0003
10/09	0.00077 U	0.0029	0.065	0.001 J	0.00037 U	4.2	0.0026 J	0.0019 U	0.0019 J	3.2	0.0064	9.2	0.086	0.00012 J
04/10	0.00077 U	0.001 U	0.2	0.0027	0.00037 U	17.6	0.0069 J	0.0064 J	0.0019 U	3.2	0.0065	28.5	0.23	0.0000300 U
10/10	0.00074 U	0.0014 J	0.15	0.0032	0.00093 J	17.3	0.015	0.006 J	0.014	3.7	0.011	27.2	0.28	0.0000870 J
03/11	0.00074 U	0.001 U	0.11	0.0029	0.00048 J	28.2	0.0026 J	0.0064 J	0.0036 J	0.51	0.011	39.3	0.53	0.00023 J
09/11	0.00074 U	0.001 U	0.041	0.00072 J	0.00037 U	8.2	0.001 J	0.0019 U	0.0019 U	0.096	0.0031	8.7	0.13	0.00017 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002
03/12	0.00074 U	0.001 U	0.044	0.00071 J	0.00037 U	8.5	0.00094 J	0.0019 U	0.0031 J	0.31	0.0028	10.6	0.1	0.00017 U
09/12	0.00074 U	0.001 U	0.041	0.00055 J	0.00037 U	4.7	0.0013 J	0.0019 U	0.0047 J	0.65	0.002	5.4	0.048	0.00017 U
04/13	0.00074 U	0.001 U	0.1	0.0021	0.00068 J	9.2	0.0012 J	0.0043 J	0.0038 J	0.2	0.0035	17.6	0.11	0.00017 U
10/13	0.00074 U	0.001 U	0.057	0.00087 J	0.00037 U	7.8	0.00074 U	0.0019 U	0.0023 J	0.13	0.0028	9.8	0.079	0.00017 U
04/14	0.00074 U	0.001 U	0.075	0.001 J	0.00037 U	8.7	0.0036 J	0.0029 J	0.0019 U	0.46	0.0022	13.4	0.082	0.00017 U
08/14	0.00074 U	0.001 U	0.058	0.0003 U	0.00037 U	6.3	0.0026 J	0.0019 U	0.0019 U	0.24	0.0024	7.3	0.055	0.00017 U
04/15	0.002 U	0.002 U	0.065	0.00081 J	0.004 U	6.9	0.0014 J	0.0023 J	0.0063 J	0.39	0.0027	11	0.063	0.0002 U
08/15	0.002 U	0.002 U	0.0567	0.000454 J	0.004 U	4.4	0.000569 J	0.000695 J	0.0061	0.0699	0.0016 J	5.02	0.0301	0.0002 U
03/16	0.001 U	0.002 U	0.0619	0.00061	0.0005 U	3.02	0.0015 J	0.0027	0.00042 J	0.175	0.0014	4.88	0.0361	0.0000540 J
09/16	0.002 U	0.004 U	0.0559	0.00041 J	0.001 U	2.45	0.0016 J	0.00088 J	0.0014 J	0.0657 J	0.001 J	3.74	0.0253	0.0002 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Total Metals

	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL			0.05			0.002		
06/02	0.005 U	0.15	0.005 U	0.005 U	16	0.002 U	0.005 U	0.069
10/02	0.005 U	1.5	0.005 U	0.005 U	18	0.002 U	0.005 U	0.05 U
01/03	0.005 U	1.4	0.005 U	0.005 U	24	0.002 U	0.005 U	0.05 U
05/03	0.005 U	1.4	0.005 U	0.005 U	16	0.002 U	0.005 U	0.061
09/03	11 U	1.59	2 U	1 U	14.4	2 U	0.008	0.044
03/04	0.011 U	2.21	0.002 U	0.001 U	13.9	0.002 U	0.005 U	0.031
11/04	0.011 U	1.89	0.002 U	0.001 U	15	0.002 U	0.005 U	0.02
07/05	0.011 U	2.09	0.002 U	0.001 U	15.9	0.002 U	0.005 U	0.036
03/06	0.011 U	1.36	0.002 U	0.001 U	15	0.002 U	0.005 U	0.003 U
10/06	0.011 U	1.95	0.002 U	0.001 U	15.9	0.002 U	0.005 U	0.018
04/07	0.005 U	2.7	0.002 U	0.001 U	20.3	0.002 U	0.01 U	0.03
11/07	0.008	2.61	0.002 U	0.001 U	18.1	0.002 U	0.01 U	0.024
04/08	0.005 U	2.06	0.002 U	0.001 U	14.3	0.002 U	0.01 U	0.012
10/08	0.007	1.76	0.002 U	0.001 U	13.6	0.002 U	0.01 U	0.018
05/09	0.005 U	1.5	0.05 U	0.001 U	13.9	0.002 U	0.01 U	0.038
10/09	0.0019 U	1.9	0.0083 J	0.00077 U	16.6	0.00075 J	0.0025 J	0.013
04/10	0.0056 J	3.9	0.0019 U	0.00077 U	52.5	0.0003 U	0.0029 J	0.035
10/10	0.016	4.3	0.0041 J	0.00074 U	65.4	0.0003 U	0.0016 J	0.036
03/11	0.0044 J	5.4	0.0019 U	0.00074 U	112	0.0003 U	0.00074 U	0.038
09/11	0.0019 U	2.6	0.0027 J	0.00074 U	33.9	0.0003 U	0.00074 U	0.013

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Total Metals

	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL			0.05			0.002		
03/12	0.0019 U	2.3	0.0019 U	0.00074 U	25.4	0.0003 U	0.00074 U	0.013
09/12	0.0019 U	2.3	0.0029 J	0.00074 U	23.3	0.0003 U	0.00074 U	0.011
04/13	0.003 J	3.4	0.0019 U	0.00074 U	42.9	0.0003 U	0.00074 U	0.028
10/13	0.0019 U	2.5	0.0019 U	0.00074 U	22	0.0003 U	0.00074 U	0.011
04/14	0.0026 J	2.7	0.0019 U	0.00074 U	31.5	0.0003 U	0.00074 U	0.019
08/14	0.0019 U	1.8	0.0019 U	0.00074 U	16.6	0.0003 U	0.00074 U	0.0098 J
04/15	0.011 U	2.8	0.35 U	0.01 U	32.6	0.002 U	0.01 U	0.018
08/15	0.000678 J	1.79	0.000579 J	0.001 U	17.2	0.0000860 J	0.005 U	0.0287
03/16	0.0014 J	1.87	0.002 U	0.0005 U	25.1	0.0005 U	0.00025 J	0.01 J
09/16	0.0015 J	1.55	0.004 U	0.001 U	16.2	0.001 U	0.001 U	0.0081 J

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5	
06/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
10/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
01/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5	
10/09	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U
04/10	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U
10/10	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U
03/11	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
09/11	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
03/12	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
09/12	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
04/13	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
10/13	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
04/14	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
08/14	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
04/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
03/16	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U	1 U	1 U	5 U	10 U	10 U	10 U	20 U	20 U	1 U	5 U
09/16	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Volatile Organic Compounds

	Bromodichloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)
MCL	80	80			5	100		80		70		80	700	10000				5	10000
06/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	--	1 U	--	1 U	1 U	--
10/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
01/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.8 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Volatile Organic Compounds

	Bromodichloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)
MCL	80	80			5	100		80		70		80	700	10000				5	10000
10/09	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	0.16 U	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--
04/10	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	0.16 U	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--
10/10	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	0.16 U	0.19 U	1	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--
03/11	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.96 J	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
09/11	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.27 J	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.62 J	--
03/12	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
09/12	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/13	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
10/13	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.23 J	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/14	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
08/14	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.27 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.62 J	0.45 JB	1 U	1 U	1 U	1 U	--	1 U	2 U	1 U	1 U	--
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/16	1 U	4 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U
09/16	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.1 J	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Volatile Organic Compounds

	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100	5	1000	100			5			2	10000
06/02	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	3 U
10/02	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
01/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Volatile Organic Compounds

	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100	5	1000	100			5			2	10000
10/09	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
04/10	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
10/10	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
03/11	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
09/11	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
03/12	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
09/12	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/13	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
10/13	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/14	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
08/14	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/15	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1.6 U	1 U	1 U
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/16	5 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	10 U	1 U	1 U
09/16	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH (SU)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity (uS/cm)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10												
05/03	1 U	0.5 U	5 U	9.1	--	9.9	0.5	--	4.70	--	--	86	--	--	8.4	13.6	38	95.5	--
09/03	2.3	0.2 U	10 U	7.27	--	10.3	0.474	--	5.15	--	--	57	--	--	5.74	16.1	30	89	--
03/04	1 U	0.2 U	10 U	13.9	--	13.2	0.191	--	4.48	--	--	96	--	--	10.5	12.9	69	70	--
11/04	1.3	0.2 U	10 U	6.82	--	7.9	0.36	--	5.05	--	--	60	--	--	8.91	14.7	23	17	--
07/05	1.5	0.2 U	10 U	14.4	--	11.7	0.3	--	5.11	--	--	90	--	--	16.4	15.9	55	27	--
03/06	3	0.2 U	10 U	5.89	--	6.57	0.42	--	5.25	--	--	51	--	--	8.29	13.2	50	206	--
10/06	3.3	17.2	10 U	6	--	6.06	0.49	--	5.31	--	--	47	--	--	6.39	--	76	70	--
04/07	2.6	0.2 U	10 U	13.4	--	11.1	0.29	--	5.44	--	--	80	--	--	10.3	--	86	55	--
11/07	3.2	0.2 U	10 U	10.8	--	7.73	1.13	--	4.94	--	--	50	--	--	12.8	--	39	157	--
04/08	3.4	0.2 U	10 U	6.23	--	7.9	0.52	--	5.03	--	--	56	--	--	6.01	--	41	77	--
10/08	3.6	0.2 U	10 U	6.02	--	6.3	0.61	--	5.01	--	--	44	--	--	--	--	37	240	--
05/09	3.2	0.2 U	10 U	21.9	--	18.4	0.2	--	5.00	--	--	129	--	--	16.8	--	93	429	--
10/09	2 U	0.04 U	4 J	9.4	--	12	0.36	--	5.13	--	--	63	--	--	8.1	--	58	19.7	--
04/10	2 U	0.02 U	1 U	44	--	28	0.018 U	--	4.21	--	--	187.7	--	--	20.8	--	122	5.94	--
10/10	1 U	0.12 J	2 U	15.4	--	20	0.28	--	--	4.38	4.53	--	84.7	81	8.2	15	62	33.2	--

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-6 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH (SU)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity (uS/cm)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10												
03/11	1	0.06 J	2 U	14.5	--	1 U	0.18	--	--	5.31	5.17	--	56	71	5	--	67	11	--
09/11	3	0.04 U	2 U	16	--	16	0.2	--	--	2.70	5.64	--	90	85	8.6	15.09	20	8.19	--
03/12	1	0.042 J	2 U	12.3	--	12	0.22	--	--	3.68	5.42	--	82	62	5.9	19.34	55	8.77	--
09/12	1 U	0.04 U	2 U	11.7	--	10.1	0.14	--	--	4.86	5.14	--	101	66	6.3	18.72	74	10.5	--
04/13	1 U	0.04 U	2 U	55.1	0	54	0.057 U	162.5	--	--	4.63	--	231	223	21.6	14.57	143	55.6	64.3
10/13	16	0.134 J	4 J	10.3	--	18	0.08	--	--	5.62	6.11	--	100	84	7.5	14.63	59	6.87	34.4
04/14	3	0.04 J	7 J	29.8	4	24	0.24	206.4	--	4.88	5.22	--	248	121	9.7	14.44	118	5.02	1
08/14	0.8 U	0.03 U	8 J	11.8	0	9	0.4	219.8	--	4.63	5.52	--	69	63	6	17.42	50	7.17	8.4
04/15	5	1 U	10 U	30.9	2.83	21	0.12	335.3	5.48	3.85	--	121	117	--	14.5	--	84	5.71	13.3
08/15	2.68	0.2 U	10 U	8.29	4.29	10.1	0.535	252.1	--	4.86	5.12	--	53	61	6.04	16.76	25 U	8.57	6.8
03/16	0.64 J	0.2 U	10 U	27.3	1.61	22.1	0.167	258.5	--	4.04	4.87	--	242	184	18.3	13.86	92	4.26	39.9
09/16	2.2	0.2 U	10 U	8.26	1.95	9.6	0.493	275.9	--	4.45	5.11	--	58.4	62	5.53	17.6	23 J	8.27	66.7

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002
05/03	0.002 U	0.005 U	0.052	0.002 U	0.004 U	0.76	0.0075	0.005 U	0.0053	2.6	0.005 U	2	0.068	0.001 U
09/03	2 U	2 U	0.047	2 U	4 U	1.03	8 U	6 U	0.011	4.24	0.005	1.87	0.04	0.0002 U
03/04	0.002 U	0.002 U	0.04	0.002 U	0.004 U	0.822	0.008 U	0.006 U	0.006	3.29	0.004	2.72	0.028	0.0002 U
11/04	0.002 U	0.002 U	0.037	0.002 U	0.004 U	0.45	0.008 U	0.006 U	0.003 U	3.03	0.002 U	1.64	0.019	--
07/05	0.002 U	0.002 U	0.033	0.002 U	0.004 U	0.57	0.008	0.006 U	0.005	10	0.002 U	2.49	0.016	0.0002 U
03/06	0.002 U	0.002	0.038	0.002 U	0.004 U	0.08 U	0.008 U	0.006 U	0.047	28.2	0.006	1.59	0.005 U	0.0002 U
10/06	0.002 U	0.002 U	0.042	0.002 U	0.004 U	0.167	0.008 U	0.006 U	0.003 U	2.62	0.003	1.37	0.01	0.0002 U
04/07	0.002 U	0.002 U	0.038	0.0005 U	0.004 U	0.5 U	0.005 U	0.005 U	0.005 U	0.879	0.002 U	2.551	0.016	0.0002 U
11/07	0.002 U	0.002 U	0.037	0.0005 U	0.004 U	0.225	0.005	0.005 U	0.005 U	15.2	0.004	1.74	0.01 U	0.0002 U
04/08	0.002 U	0.002 U	0.036	0.0005 U	0.004 U	0.5 U	0.006	0.005 U	0.005 U	5.63	0.003	1.71	0.01 U	0.0002 U
10/08	0.002 U	0.003	0.05	0.0005 U	0.004 U	0.5 U	0.005 U	0.005 U	0.005 U	21.6	0.006	1.52	0.008	0.0002 U
05/09	0.0022 U	0.002 U	0.053	0.0005 U	0.004 U	0.551	0.04	0.005 U	0.005 U	19.3	0.002 U	4.13	0.013	0.0002 U
10/09	0.00077 U	0.0025	0.027	0.0003 U	0.00037 U	0.14	0.0013 J	0.0019 U	0.0019 U	3.4	0.0017 J	2.3	0.0036 J	0.0000730 J
04/10	0.00077 U	0.001 U	0.046	0.0003 U	0.00037 U	0.58	0.0031 J	0.0019 U	0.0019 U	6.2	0.00077 U	5.4	0.019	0.0000300 U
10/10	0.00074 U	0.001 J	0.03	0.00057 J	0.00051 J	0.29	0.0019 J	0.0019 U	0.0085 J	5.6	0.002	3	0.01	0.0000300 U
03/11	0.00074 U	0.001 U	0.031	0.0003 U	0.00037 U	0.21	0.0026 J	0.0019 U	0.0019 U	0.89	0.00074 U	2.7	0.0073 J	0.00017 U
09/11	0.00074 U	0.001 U	0.033	0.0003 U	0.00037 U	0.28	0.0014 J	0.0019 U	0.0019 U	0.93	0.00074 U	2.9	0.0093 J	0.00017 U
03/12	0.00074 U	0.001 U	0.03	0.0003 U	0.00037 U	0.16	0.001 J	0.0019 U	0.0032 J	1.3	0.00074 U	2.5	0.0036 J	0.00017 U
09/12	0.00074 U	0.001 U	0.032	0.0003 U	0.00037 U	0.12	0.0024 J	0.0019 U	0.0047 J	1.5	0.00092 J	2.4	0.0039 J	0.00017 U
04/13	0.00074 U	0.001 U	0.058	0.0003 U	0.00037 U	1.4	0.0017 J	0.0019 U	0.0053 J	4.1	0.0022 J	8.3	0.0083 J	0.00017 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002
10/13	0.00074 U	0.001 U	0.026	0.0003 U	0.00037 U	0.18	0.0014 J	0.0019 U	0.0019 U	13.9	0.0013 J	2	0.014	0.00017 U
04/14	0.00074 U	0.001 U	0.041	0.0003 U	0.00037 U	0.15	0.0018 J	0.0019 U	0.0019 U	1.6	0.0012 J	5.2	0.0077 J	0.00017 U
08/14	0.00074 U	0.001 U	0.028	0.0003 U	0.00037 U	0.17	0.003 J	0.0019 U	0.0019 U	1.3	0.00074 U	2.3	0.0076 J	0.00017 U
04/15	0.002 U	0.002 U	0.038	0.002 U	0.004 U	0.18	0.0016 J	0.01 U	0.0049 J	2.2	0.0011 J	5.5	0.004 J	0.0002 U
08/15	0.002 U	0.002 U	0.0419	0.0005 U	0.004 U	0.319 J	0.000989 J	0.000498 J	0.0051	0.84	0.000772 J	2.25	0.0028 J	0.0002 U
03/16	0.001 U	0.002 U	0.0372	0.00019 J	0.0005 U	0.265	0.0016 J	0.0017	0.00055 J	0.955	0.00063 J	5.21	0.0018 J	0.0002 U
09/16	0.002 U	0.00088 J	0.0465	0.001 U	0.001 U	0.299 J	0.0019 J	0.00044 J	0.0015 J	2.38	0.001 J	2.16	0.0036 J	0.0002 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Total Metals

	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL			0.05			0.002		
05/03	0.005 U	1.7	0.005 U	0.005 U	5.7	0.002 U	0.0075	0.05 U
09/03	11 U	1.1	2 U	1 U	5.83	2 U	0.008	0.028
03/04	0.011 U	1.28	0.002 U	0.001 U	10.4	0.002 U	0.005 U	0.018
11/04	0.011 U	1.75	0.002 U	0.001 U	5.68	0.002 U	0.005 U	0.01
07/05	0.012	1.29	0.002 U	0.001 U	9.14	0.002 U	0.005 U	0.008
03/06	0.011 U	0.977	0.002 U	0.001 U	4.69	0.002 U	0.01	0.003 U
10/06	0.011 U	1.37	0.002 U	0.001 U	4.48	0.002 U	0.005 U	0.005
04/07	0.005 U	1.4	0.002 U	0.001 U	8.35	0.002 U	0.01 U	0.005 U
11/07	0.005 U	1.39	0.002 U	0.001 U	5.07	0.002 U	0.01 U	0.005 U
04/08	0.005 U	1.35	0.002 U	0.001 U	4.48	0.002 U	0.01 U	0.006
10/08	0.009	1.54	0.002 U	0.001 U	4.05	0.002 U	0.013	0.011
05/09	0.043	1.08	0.05 U	0.001 U	10.8	0.002 U	0.008	0.037
10/09	0.0019 U	1.1	0.011 J	0.00077 U	6.2	0.00062 J	0.005 J	0.0019 U
04/10	0.0019 U	1.6	0.0019 U	0.00077 U	19.5	0.0003 U	0.00077 U	0.0019 U
10/10	0.0026 J	1.3	0.0033 J	0.0011 J	6.8	0.00049 J	0.0012 J	0.011
03/11	0.0019 U	1.3	0.0019 U	0.00074 U	5.2	0.0003 U	0.00074 U	0.0074 J
09/11	0.0019 U	1.4	0.0019 U	0.00074 U	7.3	0.0003 U	0.00074 U	0.0027 J
03/12	0.0019 U	1.3	0.0019 U	0.00074 U	5.4	0.0003 U	0.00074 U	0.0071 J
09/12	0.002 J	1.2	0.0019 U	0.00074 U	6.2	0.0003 U	0.00079 J	0.0077 J
04/13	0.0019 U	2	0.0019 J	0.00074 U	25.8	0.0003 U	0.0033 J	0.02

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Total Metals

	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL			0.05			0.002		
10/13	0.0019 U	1.4	0.0019 U	0.00074 U	6.9	0.0003 U	0.0016 J	0.0065 J
04/14	0.0019 U	1.5	0.0019 U	0.00074 U	15.2	0.0003 U	0.0024 J	0.0039 J
08/14	0.0019 U	1.5	0.0019 U	0.00074 U	6.6	0.0003 U	0.0027 J	0.0019 U
04/15	0.011 U	1.3	0.35 U	0.01 U	15.6	0.002 U	0.0046 J	0.0082 J
08/15	0.0011 J	1.62	0.000563 J	0.001 U	5.51	0.002 U	0.003 J	0.0242
03/16	0.0013 J	1.04	0.002 U	0.0005 U	15.3	0.0005 U	0.0023	0.015 U
09/16	0.0011 J	1.69	0.00053 J	0.001 U	5.77	0.001 U	0.0084	0.0061 J

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5	
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	25 U	5 U	5 U	5 U	10 U	1 U	1 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
10/09	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U
04/10	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U
10/10	0.33 U	0.29 U	0.22 U	0.29 U	0.15 U	0.17 U	0.5 U	0.96 U	0.3 U	0.25 U	0.33 U	0.23 U	0.15 U	2.1 U	0.78 U	0.41 U	3.1 U	1.1 U	0.16 U	0.33 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5	
03/11	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
09/11	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
03/12	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
09/12	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
04/13	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
10/13	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
04/14	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
08/14	0.35 U	0.22 U	0.34 U	0.33 U	0.28 U	0.29 U	0.6 U	1.5 U	0.28 U	0.38 U	0.32 U	0.24 U	0.27 U	1.8 U	1.3 U	1.5 U	3.1 U	1.2 U	0.23 U	0.32 U
04/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.5 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	3.3 J	5 U	1 U	1 U
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U
03/16	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	1 U	5 U	1 U	1 U	5 U	10 U	10 U	10 U	20 U	20 U	1 U	5 U
09/16	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Volatile Organic Compounds

	Bromodichloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)
MCL	80	80			5	100		80		70		80	700	10000				5	10000
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	--
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	--	1 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U
10/09	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	0.16 U	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--
04/10	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	0.16 U	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--
10/10	0.23 U	0.28 U	0.24 U	0.12 U	0.25 U	0.16 U	0.19 U	0.23 U	0.16 U	0.17 U	0.18 U	0.26 U	0.23 U	--	0.24 U	0.18 U	0.22 U	0.32 U	--

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Volatile Organic Compounds

	Bromodichloromethane (ug/L)	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)
MCL	80	80			5	100		80		70		80	700	10000				5	10000
03/11	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
09/11	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
03/12	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
09/12	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/13	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
10/13	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/14	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.45 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
08/14	0.27 U	0.4 U	0.39 U	0.23 U	0.31 U	0.19 U	0.33 U	0.21 U	0.31 U	0.32 U	0.31 U	0.27 U	0.34 U	--	0.42 U	0.33 U	0.31 U	0.45 U	--
04/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.45 J	0.39 JB	1 U	1 U	1 U	1 U	--	1 U	2 U	1 U	1 U	--
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/16	1 U	4 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	4 U	1 U
09/16	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Volatile Organic Compounds

	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100	5	1000	100			5			2	10000
05/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	3 U
09/03	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
03/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
11/04	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/05	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
03/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/06	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U
04/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
11/07	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
04/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/08	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
05/09	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
10/09	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
04/10	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U
10/10	0.1 U	0.28 U	0.19 U	0.2 U	0.14 U	0.6 U	0.33 U	0.24 U	0.64 U	0.16 U	0.61 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Volatile Organic Compounds

	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100	5	1000	100			5			2	10000
03/11	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
09/11	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
03/12	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
09/12	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/13	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
10/13	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/14	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
08/14	0.24 U	0.35 U	0.23 U	0.26 U	0.29 U	0.86 U	0.33 U	0.24 U	1.6 U	0.3 U	0.66 U
04/15	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1.6 U	1 U	1 U
08/15	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/16	5 U	1 U	1 U	1 U	1 U	50 U	1 U	1 U	10 U	1 U	1 U
09/16	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U

Shaded concentrations represent MCL/GWPS exceedances

Historical Groundwater Analytical Results
2017 – 2025

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Snow Hill Landfill

Monitoring Location SH-EA-1 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10											
03/17	20.4	0.2 U	10 U	5.91	2.24	14.3	0.676	162.6	5.13	5.80	82.5	82	4.7	14	56	--	2.53	0.7
09/17	7.32	0.2 U	10 U	5.98	1.23	1.9	0.609	272.1	4.56	5.93	50.8	56	4.92	15.8	50	--	4.63	0.3
04/18	15	0.1 U	10 U	7.11	0.77	--	0.5	284.5	5.13	5.32	58.6	100	5.54	13	74	--	0.8	6.5
09/18	10	0.1 U	10 U	8.58	0.35	--	0.41	220.6	5.05	5.38	65	67	5.24	19.5	58	--	0.98	1.1
03/19	7	0.13 JB	10 U	8.51	0.84	--	0.58	262.2	5.04	4.88	65.4	82	5.05	13.2	10 U	--	0.46 B	0
08/19	1 J	1 U	19	11.6	0.27	1.93 J	1.39 B	247	5.21	5.12	59.3	54	1.3 B	17	54	--	2.2	--
03/20	9.3 B	0.1 U	3 U	8.1	0.56	1.6	0.62	251	5.34	5.74	55.8	62	4.35	13.9	47	--	2.3	4
08/20	4.7	0.12 JB	4 JB	7.2	0.38	2.31	0.13 J	169.4	5.17	5.42	53.7 B	55.8 B	4.73	18.4	40.5	--	0.76	3.08
03/21	6.1	0.1 U	3 U	7.56	3.13	1.03	0.135	268.2	5.27	5.51	47.7	54	4.5	13.5	47.5	--	1.28	11.9
07/21	6.3	0.05 U	7.6 JB	7.49	1.68	1.21	0.356 J	275	5.00	5.48	51.6	57.6	4.4	16.8	51 B	--	1.03	31.22
03/22	30.1	0.13 J	3 U	0.5 U	1.88	11	0.011 U	155.6	5.57	6.09	68.9	92.14	0.3 U	14.8	65.5	--	2.5	2.26
08/22	7.5	0.02 U	6.0 JB	7.15	0.83	1.3	0.657 J	262.8	5.17	5.43	54	64.97	3.2 J	19.7	49.5	--	1.17	3.61
04/23	15.9	0.169 JB	3.0 U	7.86 B	0.86	6.51	0.461 J	198.2	6.11	5.99	62.5	78.1 B	2.8 J	13.8	55.0	--	1.97 B	4.05
09/23	8.4	0.015 U	7.64 J	6.71	2.12	0.812	0.686 J	240.1	5.30	5.55	50	58.9	2.9 J	16.3	48.5	--	2.33	3.4
03/24	6.6	0.015 U	3 U	6.51	3.07	0.5 U	0.814	229	5.29	5.92	47	569.9	2.9	13.4	45.3	--	0.854	2.3

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10											
08/24	7.0	0.027	3 U	6.63	2.9	1.1	0.623	129.6	5.33	5.80	52.4	55.3	3.26	18.4	49.3	16.5	7.42	13
03/25	125	0.948	3 U	6.63	-0.61	72	0.101	14.2	6.08	6.38	176.9	220	1.76	14.6	119	14.2 U	17.7	7.34

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015		
03/17	0.002 U	0.004 U	0.0319	0.0003 J	0.001 U	4.56	0.001 J	0.0019	0.0015 J	0.874	0.0049	0.705	0.104
09/17	0.002 U	0.004 U	0.0177	0.00031 J	0.001 U	0.581	0.004 U	0.00084 J	0.00093 J	0.444	0.0062	0.109 J	0.0146
04/18	0.001 U	0.001 U	0.0221	0.001 U	0.00025 U	1.1	0.0007 J	0.001 J	0.0024 B	0.8	0.0089	0.19	0.0331
09/18	0.001 U	0.001 JB	0.018	0.0004 J	0.00016 JB	--	0.0013 J	0.0011 JB	0.0007 J	0.25	0.0041	--	0.0125
03/19	0.001 U	0.0013 J	0.0225	0.0003 J	0.000128 JB	0.37	0.002 JB	0.001 J	0.0011 J	0.16 B	0.003	0.099 J	0.0126
08/19	0.002 U	0.002 U	0.0233	0.00038 J	0.001 U	0.652 J	0.004 U	0.001 J	0.04 U	0.138 B	0.0054	0.0723 J	0.0142
03/20	0.001 U	0.001 U	0.0232	0.001 U	0.001 U	0.443	0.001 U	0.0011	0.001 U	0.235	0.0046	0.121	0.0164
08/20	0.001 U	0.001 U	0.0264	0.001 U	0.001 U	0.624	0.001 U	0.00179 JB	0.0028 J	0.239	0.00219	0.183	0.021
03/21	0.001 U	0.001 U	0.0217	0.001 U	0.001 U	0.263	0.00211 J	0.00104 J	0.00196 JB	0.591	0.00675	0.1 U	0.014
07/21	0.001 U	0.001 U	0.0203	0.001 U	0.001 U	0.337 B	0.00107 J	0.001 U	0.00174 JB	0.4	0.00522	0.1 U	0.012
03/22	0.001 U	0.001 U	0.0256	0.001 U	0.001 U	3.55	0.001 U	0.00122 J	0.001 U	2.2	0.00312	0.512	0.0984
08/22	0.00100 U	0.00100 U	0.0194	0.00100 U	0.00100 U	0.382	0.00121 J	0.00100 U	0.00130 J	0.158	0.00177	0.1 U	0.0108
04/23	0.00100 U	0.00100 U	0.0303	0.00100 U	0.00100 U	2.12	0.00100 U	0.00100 U	0.00100 U	0.493	0.00100 U	0.293	0.0525
09/23	0.00100 U	0.00100 U	0.0179	0.00100 U	0.00100 U	0.212	0.00111	0.00100 U	0.00100 U	0.192	0.00170 J	0.1 U	0.00893 J
03/24	0.00100 U	0.00100 U	0.0163	0.00100 U	0.00100 U	0.0800 U	0.00342 J	0.00100 U	0.00100 U	0.0397 J	0.00100 U	0.1 U	0.00766 J
08/24	0.00100 U	0.00100 U	0.0169	0.00100 U	0.00100 U	0.336	0.00298 J	0.00100 U	0.00100 U	1.19	0.00749	0.1 U	0.0123
03/25	0.00100 U	0.00100 U	0.105	0.00100 U	0.00100 U	20.2	0.00197 J	0.00724 J	0.00116 J	13.7	0.00100 U	3.29	0.6

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Total Metals

	Mercury, Total (mg/L)	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL	0.002			0.05			0.002		
03/17	0.0002 U	0.004 U	1.91	0.00048 J	0.001 U	9.35	0.001 U	0.00098 J	0.0117 J
09/17	0.0002 U	0.004 U	1.63	0.00062 J	0.001 U	9.84	0.001 U	0.0025	0.0062 J
04/18	0.0002 U	0.0006 J	1.9	0.0008 JB	0.001 U	11	0.001 U	0.0032 J	0.016
09/18	0.0002 U	0.0005 J	2.1	0.0006 J	0.001 U	11	0.001 U	0.005 U	0.0072 JB
03/19	0.0002 U	0.0007 J	2	0.005 U	0.001 U	11	0.001 U	0.0008 J	0.0092 J
08/19	0.0002 U	0.004 U	1.96	0.00076 J	0.0005 U	10.2	0.0005 U	0.0014 J	0.0132 JB
03/20	0.0001 U	0.001 U	2.02	0.00114	0.001 U	10.2	0.001 U	0.00118	0.00796
08/20	0.0001 U	0.001 U	2.04	0.00103 J	0.001 U	9.75	0.001 U	0.001 U	0.00978 JB
03/21	0.0001 U	0.00119 J	1.91	0.001 U	0.001 U	9.11	0.001 U	0.00281 J	0.0108 B
07/21	0.0001 U	0.001 U	1.8	0.001 U	0.001 U	9.07	0.001 U	0.00196 J	0.00674 JB
03/22	0.0001 U	0.001 U	2.46 B	0.001 U	0.001 U	9.51	0.001 U	0.00156 J	0.0116 B
08/22	0.000100 U	0.00100 U	1.97	0.00100 U	0.00100 U	9.57	0.00100 U	0.00100 U	0.0155 B
04/23	0.000100 U	0.00100 U	2.28 B	0.00100 U	0.00100 U	10.5 B	0.00100 U	0.00100 U	0.00400 U
09/23	0.000100 U	0.00100 U	1.88	0.00100 U	0.00100 U	9.41	0.00100 U	0.00100 U	0.00509 JB
03/24	0.000100 U	0.00100 U	1.89	0.00100 U	0.00100 U	9.95	0.00100 U	0.00100 U	0.00876 J
08/24	0.000100 U	0.00100 U	1.91	0.00100 U	0.00100 U	10.1	0.00100 U	0.00474 J	0.00496 J
03/25	0.000100 U	0.00255 J	3.12	0.00100 U	0.00100 U	7.66	0.00100 U	0.00100 U	0.0147 B

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - PFAS Compounds

	Perfluoro(2-propoxypropanoic) acid (HFPODA) (ng/L)	Perfluorobutanesulfonic acid (PFBS) (ng/L)	Perfluorohexanesulfonic acid (PFHxS) (ng/L)	Perfluorononanoic acid (PFNA) (ng/L)	Perfluorooctanesulfonic acid (PFOS) (ng/L)	Perfluorooctanoic acid (PFOA) (ng/L)
MCL	10		10	10	4	4
08/24	3.80 U	0.85 U	0.87 U	0.95 U	0.95 U	0.95 U
03/25	3.74 U	0.83 U	0.85 U	0.94 U	120	11.6

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-1 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5		80
03/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
09/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
04/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
09/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	--	5 U	--	1 U	1 U	1 U
03/19	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	--	5 U	5 U	5 U
08/19	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.047 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.046 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.047 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.047 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.048 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5		80
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.019 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.020 U	0.020 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-1 - Volatile Organic Compounds

	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)
MCL	80			5	100		80			70		80	700	10000				5	10000	100	5
03/17	1 U	1 U	1 U	1 U	1 U	1 U	0.1 J	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
09/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
04/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
09/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.545 JB	--	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
03/19	5 U	10 U	5 U	5 U	5 U	10 U	5 U	10 U	--	5 U	5 U	5 U	5 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U
08/19	0.898 JB	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	0.709 JB	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.1 B	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Volatile Organic Compounds

	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)
MCL	80			5	100		80			70		80	700	10000				5	10000	100	5
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Volatile Organic Compounds

	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	1000	100			5			2	10000
03/17	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U
09/17	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U
04/18	1 U	1 U	1 U	5 U	1 U	--	5 U	1 U	1 U
09/18	1 U	1 U	1 U	5 U	1 U	1 U	5 U	1 U	2 U
03/19	5 U	5 U	5 U	--	5 U	10 U	10 U	10 U	5 U
08/19	1 U	1 U	1 U	5 U	1 U	1 U	5 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-1 - Volatile Organic Compounds

	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	1000	100			5			2	10000
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-2 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10											
03/17	63.4	2.89	10 J	15.1	0.65	40.1	0.908	47.7	5.75	5.60	212.2	209	3.02	14.8	109	--	8.8	4
09/17	53.8	2.55	7 J	15.2	0.53	41.1	0.77	92.1	5.37	6.38	134.2	167	1.91	15.5	94	--	25.9	30.8
04/18	15	0.1 U	10 U	11.5	2.42	--	1.1	286.3	5.65	5.58	78.8	140	1.11	12.9	76	--	1.2	11.6
09/18	35	2.7	10 U	11.9	1.35	--	0.77	98.7	5.56	6.25	113.7	120	2.51	18.2	86	--	1.7	10.7
03/19	140	8.4	5.7 J	22.1	0.3	--	0.74	107.6	5.68	6.03	320.1	350	3.6	13.6	110	--	11	0
08/19	14	1 U	20	11.8	0.82	13.58	2.59	159.3	5.65	5.59	78.6	78	5.8	16.4	70	--	6.2	0.1
03/20	218	14.1	21.2 B	18.2	0.29	115	0.66	-24.2	6.37	6.42	665	545	3.61	14.5	221	--	29.4	7.8
08/20	80.2	4.55	16.5 B	20.4	0.42	49.9	0.32	83.1	6.16	6.16	270.2 B	242 B	5.43	18.7	132	--	5.13	29.2
03/21	19.2	1.51	6.1 J	17.3	2.85	15.1	1.26	246.9	5.91	6.44	79.5	232	1.5	12.9	109	--	2.92	26.6
07/21	47.2	2.2	10.4 B	12.5	1.26	20.2	0.645 J	107.2	5.82	6.14	122.7	132	3.7 J	19	79 B	--	15.1	34.48
03/22	84.3	5.15	3.5 JB	20	0.27	61.4	0.979 J	47	6.19	6.41	223	274.5	3.2 J	14.6	125	--	7.77	3.52
08/22	17.1	0.02 U	8.6 JB	10.6	3.21	12	0.976 J	234.4	5.72	5.91	78.1	89.02	1.0 J	19.2	61.5	--	0.705	5.94
04/23	42.5	2.54	3.0 U	12.4 B	1.75	23.7	0.901	88.5	6.91	6.38	123.5	141.3	2.9 J	14.8	77.5	--	2.30	5.58
09/23	31.7	2.25	7.48 J	11.1	1.37	17.7	0.691 J	100	5.97	6.24	107.1	128.8	3.2 J	15.2	71.0	--	3.84	1.9
03/24	60.5	3.43	3 U	15.1	0.62	32.5	1.00	35.1	6.03	6.47	157.9	212.4	3.0	14.1	101	--	3.66	3.8

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10											
08/24	37.6	3.49	3 U	10.0	2.47	19.1	0.766	-32.5	6.06	6.50	109.4	126.6	2.66	16.4	65.3	13.7 U	5.90	7.3
03/25	73.5	4.405	3 U	14.5	-0.79	35.2	1.24	40.8	6.15	6.45	167.6	177	3.04	14.7	96.2	13.6 U	1.24	1.53

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002
03/17	0.002 U	0.004 U	0.137	0.001 U	0.001 U	10	0.0014 J	0.00073 J	0.0032 J	2.79	0.00032 J	3.64	0.116	0.0002 U
09/17	0.002 U	0.004 U	0.135	0.00013 J	0.001 U	10.2	0.0025 J	0.0014	0.0088	4.69	0.0018 J	3.8	0.135	0.0002 U
04/18	0.001 U	0.001 U	0.0579	0.001 U	0.000135 J	3.9	0.002 U	0.001 U	0.0081 B	1.2	0.0009 J	1.3	0.0086	0.0002 U
09/18	0.001 U	0.0012 JB	0.0802	0.001 U	0.000148 JB	--	0.0012 J	0.001 JB	0.0031 J	2.4	0.0005 J	--	0.0398	0.0002 U
03/19	0.0002 J	0.0019 J	0.193	0.001 U	0.000135 JB	16	0.0026 JB	0.0011 J	0.007 J	6.6	0.0012 J	5.7	0.19	0.0002 U
08/19	0.002 U	0.002 U	0.0714	0.00011 J	0.001 U	3.67	0.00084 J	0.0026 J	0.04 U	1.68	0.003 U	1.07	0.0262	0.0002 U
03/20	0.001 U	0.001 U	0.489	0.001 U	0.001 U	25.3	0.001 U	0.001 U	0.00217	11.8	0.001 U	12.5	0.417	0.0001 U
08/20	0.001 U	0.001 U	0.27	0.001 U	0.001 U	11	0.001 U	0.001 U	0.00776 J	2.82	0.001 U	5.43	0.189	0.0001 U
03/21	0.001 U	0.001 U	0.0621	0.001 U	0.001 U	3.79	0.00334 J	0.001 U	0.0239 B	3.68	0.00226	1.36	0.0204	0.0001 U
07/21	0.001 U	0.001 U	0.125	0.001 U	0.001 U	4.49 B	0.00361 J	0.00243 J	0.0115 B	6.49	0.00248	2.18	0.0619	0.0001 U
03/22	0.001 U	0.001 U	0.219	0.001 U	0.001 U	14.1	0.00107 JB	0.002 J	0.003 J	4.41	0.001 U	6.36	0.206	0.0001 U
08/22	0.00100 U	0.00100 U	0.0498	0.00100 U	0.00100 U	3.36	0.00195 J	0.00100 U	0.00296 J	0.0638 J	0.00100 U	0.869	0.00280	0.000100 U
04/23	0.00100 U	0.00100 U	0.102	0.00100 U	0.00100 U	5.67	0.00100 U	0.00100 U	0.00100 U	1.58	0.00100 U	2.31	0.0596	0.000100 U
09/23	0.00100 U	0.00100 U	0.107	0.00100 U	0.00100 U	4.26	0.00100 U	0.00100 U	0.00391 J	1.73	0.00100 U	1.71	0.0404	0.000100 U
03/24	0.00100 U	0.00100 U	0.127	0.00100 U	0.00100 U	7.6	0.00100 U	0.00100 U	0.00146 J	2.14	0.00100 U	3.29	0.102	0.000100 U
08/24	0.00100 U	0.00100 U	0.107	0.00100 U	0.00100 U	4.66	0.00100 U	0.00100 U	0.00148 J	1.66	0.00100 U	1.82	0.0456	0.000100 U
03/25	0.00100 U	0.00100 U	0.168	0.00100 U	0.00100 U	7.27	0.00100 U	0.00100 U	0.00322 J	1.34	0.00100 U	3.41	0.116	0.000100 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Total Metals

	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL			0.05			0.002		
03/17	0.004 U	3.51	0.004 U	0.001 U	12.1	0.001 U	0.0013	0.0522
09/17	0.002 J	3.76	0.004 U	0.001 U	12.7	0.001 U	0.0048	0.0629
04/18	0.0008 J	2.9	0.0006 JB	0.001 U	9.7	0.001 U	0.0026 J	0.105
09/18	0.001 J	3.2	0.005 U	0.001 U	10	0.001 U	0.0013 J	0.0328
03/19	0.0012 J	6.1	0.0009 J	0.001 U	17	0.0002 J	0.0023 J	0.0545
08/19	0.0011 J	2.37	0.002 U	0.0005 U	9.75	0.0005 U	0.0013 J	0.0371 B
03/20	0.001 U	12.2	0.001 U	0.001 U	27.2	0.001 U	0.001 U	0.0296
08/20	0.001 U	5.32	0.001 U	0.001 U	18.8	0.001 U	0.001 U	0.0548 B
03/21	0.00219 J	2.8	0.001 U	0.001 U	10.8	0.001 U	0.00181 J	0.294
07/21	0.0024 J	3.09	0.001 U	0.001 U	12.1	0.001 U	0.00373 J	0.0926
03/22	0.00155 J	5.65	0.001 U	0.001 U	17.7	0.001 U	0.001 U	0.0565 B
08/22	0.00100 U	2.45	0.00100 U	0.00100 U	10.2	0.00100 U	0.00100 U	0.11 B
04/23	0.00100 U	3.35	0.00100 U	0.00100 U	11.7 B	0.00100 U	0.00100 U	0.0435
09/23	0.00100 U	3.1	0.00100 U	0.00100 U	10.9	0.00100 U	0.00128 J	0.0577 JB
03/24	0.00100 U	4.2	0.00100 U	0.00100 U	13.6	0.00100 U	0.00100 U	0.0564
08/24	0.00100 U	3.63	0.00100 U	0.00100 U	10.6	0.00100 U	0.00100 U	0.0420
03/25	0.00100 U	4.26	0.00100 U	0.00100 U	12.5	0.00100 U	0.00100 U	0.0695

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - PFAS Compounds

	Perfluoro(2-propoxypropanoic) acid (HFPODA) (ng/L)	Perfluorobutanesulfonic acid (PFBS) (ng/L)	Perfluorohexanesulfonic acid (PFHxS) (ng/L)	Perfluorononanoic acid (PFNA) (ng/L)	Perfluorooctanesulfonic acid (PFOS) (ng/L)	Perfluorooctanoic acid (PFOA) (ng/L)
MCL	10		10	10	4	4
08/24	3.65 U	0.81 U	0.83 U	0.91 U	3.59	2.43
03/25	3.90 U	0.87 U	0.89 U	0.98 U	8.75	8.23

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5		80
03/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 J	5 U	5 U	5 U	5 U	5 U	0.3 J	1 U	1 U
09/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.2 J	5 U	5 U	5 U	5 U	5 U	0.3 J	1 U	1 U
04/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
09/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	--	5 U	--	1 U	1 U	1 U
03/19	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.263 J	5 U	5 U	0.493 J	10 U	10 U	10 U	10 U	--	0.62 J	5 U	5 U
08/19	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1.1	5 U	5 U	5 U	5 U	5 U	1.4	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.046 U	0.018 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.048 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.047 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.048 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.048 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5		80
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.019 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.020 U	0.020 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-2 - Volatile Organic Compounds

	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)
MCL	80			5	100		80			70		80	700	10000				5	10000	100	5	1000
03/17	1 U	1 U	1 U	1 U	0.8 J	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U
09/17	1 U	1 U	1 U	1 U	0.7 J	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U
04/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
09/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/19	5 U	10 U	5 U	5 U	2.08	10 U	5 U	10 U	--	5 U	5 U	5 U	5 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U
08/19	1.49 B	1 U	1 U	1 U	0.177 J	1 U	1 U	1 U	--	1 U	1 U	1.05 B	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	4.3	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1.1	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1.8	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Volatile Organic Compounds

	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)
MCL	80			5	100		80			70		80	700	10000				5	10000	100	5	1000
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Volatile Organic Compounds

	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100			5			2	10000
03/17	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U
09/17	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U
04/18	1 U	1 U	5 U	1 U	--	5 U	1 U	1 U
09/18	1 U	1 U	5 U	1 U	1 U	5 U	1 U	2 U
03/19	5 U	5 U	--	5 U	10 U	10 U	10 U	5 U
08/19	1 U	1 U	5 U	1 U	1 U	5 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-2 - Volatile Organic Compounds

	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100			5			2	10000
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-3 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10											
03/17	5.36	0.2 U	10 U	3.83	5.01	15.5	0.471	294.5	4.56	5.29	58.8	58	10.7	13.4	36	--	21.4	12.4
09/17	4.64	0.2 U	10 U	3.9	4.64	13.8	0.537	328.4	4.18	5.47	50.8	54	9.95	16.3	35	--	35.2	39.1
04/18	4	0.1 U	10 U	3.37	5	--	0.33	294.8	4.96	5.18	45.8	70	10.4	11.6	35	--	1.8	13.8
09/18	8	0.081 J	10 U	3.81	4.97	--	0.4	257	4.63	5.34	52.2	67	8.91	19.8	35	--	0.26	9.3
03/19	10	0.097 JB	10 U	4.6	5.08	--	0.42	259.2	5.04	5.02	49.6 B	63	7.96	10.8	10 J	--	2.9 B	0
08/19	1 U	1 U	13	7.62	5.79	12.93	0.902 B	348.9	5.00	4.85	44	39	8.4	15.1	56	--	19	1.26
03/20	5.4 B	0.1 U	5.9 JB	5.1	5.65	13.8	0.69	280	5.17	5.53	48	54.4	8.01	12.7	18	--	20.9	35.9
08/20	2.3	0.1 U	9.6 JB	6	2.24	14.1	0.59	298.8	5.04	5.17	57.2 B	56.3 B	8.53	18.6	37	--	5.67	13.3
03/21	1 U	0.1 U	3.5 J	3.54	7.23	11.4	0.425	239.2	5.39	5.40	48.9	45.1	8.2	10.6	36	--	6.31	19.8
07/21	5 U	0.05 U	8.8 JB	3.54 J	5.84	10.1	0.493 J	341.7	4.85	5.32	40.8	43.9	8.3	15.4	46.5 B	--	26.9	72.41
03/22	6.4 B	0.02 U	3 U	3.43 J	8.72	12.3	0.666 J	252.6	5.16	5.41	43.5	51.03	6.7	12	31	--	24.4	19.16
08/22	5.0 U	0.02	10.5 B	3.90 B	5.97	11	0.650 J	312.9	4.98	5.26	42.6	51.44 B	6.8	17.1	38.5	--	3.43	11.45
04/23	5.2	0.015 U	3.0 U	4.24 B	5.01	15	1.07	283.3	6.07	5.49	48.8	55.91 B	7.2	12.6	35.5	--	1.75 B	5.50
09/23	5.0 U	0.015 U	3 U	4.18	4.71	13.8	0.973 J	332.3	5.00	5.74	49	85.79	6.9	15.8	40.0	--	15.9	21.4
03/24	5.0 U	0.015 U	3 U	4.18	7.71	13	0.702	292.9	5.15	5.64	41.5	72.57	7.2	10.7	32.7	--	1.48	2.7

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10											
08/24	3.6	0.015 U	3 U	4.20	7.14	12.8	0.730	208.8	5.17	5.67	43.8	50.8	7.14	15.3	35.3	13.6 U	0.690	8.39
03/25	4.6	0.015 U	3 U	4.48	6.69	13.3	0.612	288.7	5.09	5.48	44.7	50.9	7.22	12.5	38.4	14.9 U	0.975	0.42

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002
03/17	0.002 U	0.00071 J	0.0245	0.00016 J	0.001 U	2.15	0.00096 JB	0.00079 J	0.00076 J	2.41	0.00052 J	2.47	0.134	0.0002 U
09/17	0.002 U	0.0031 J	0.0267	0.00014 J	0.001 U	2.03	0.0024 J	0.00085 J	0.00081 J	7.6	0.0011 J	2.12	0.163	0.0002 U
04/18	0.001 U	0.0015	0.0224	0.001 U	0.0000680 J	1.7	0.002 U	0.0008 J	0.0031 B	2.1	0.0007 J	2.4	0.161	0.0002 U
09/18	0.001 U	0.0011 JB	0.0223	0.001 U	0.000126 JB	--	0.001 J	0.0006 JB	0.001 U	0.93	0.0002 J	--	0.0943	0.0002 U
03/19	0.001 U	0.0024	0.0218	0.001 U	0.000104 JB	2	0.0022 JB	0.0006 J	0.0008 J	1.8	0.0007 J	2.2	0.154	0.0002 U
08/19	0.002 U	0.0022	0.0219	0.00015 J	0.001 U	1.76	0.0009 J	0.00024 J	0.04 U	3.83	0.003 U	2.07	0.0623	0.0000720 J
03/20	0.001 U	0.00233	0.0221	0.001 U	0.001 U	1.71	0.00228	0.001 U	0.001 U	4.91	0.001 U	2.3	0.104	0.0001 U
08/20	0.001 U	0.00113 J	0.025	0.001 U	0.001 U	1.94	0.00184 JB	0.00129 JB	0.00395 J	1.25	0.001 U	2.24	0.129	0.0001 U
03/21	0.001 U	0.00108 J	0.018	0.001 U	0.001 U	1.45	0.00109 J	0.001 U	0.00181 JB	1.58	0.001 U	1.89	0.0911	0.0001 U
07/21	0.001 U	0.0043	0.0171	0.001 U	0.001 U	1.24 B	0.00192 J	0.001 U	0.0023 JB	9.47	0.00131 J	1.69	0.139	0.0001 U
03/22	0.001 U	0.003	0.0168	0.001 U	0.001 U	2 B	0.00326 JB	0.00268 J	0.00249 J	4.18	0.001 U	1.78	0.182	0.0001 U
08/22	0.00100 U	0.00100 U	0.0179	0.00100 U	0.00100 U	1.43	0.00488 J	0.00100 U	0.00168 J	0.737	0.00100 U	1.8	0.0953	0.000100 U
04/23	0.00100 U	0.00100 U	0.0219	0.00100 U	0.00100 U	2.43	0.00146	0.00100 U	0.00100 U	0.471	0.00100 U	2.18	0.0612	0.000100 U
09/23	0.00100 U	0.00221	0.0233	0.00100 U	0.00100 U	1.9	0.00114 J	0.00100 U	0.00100 U	3.02	0.00100 U	2.21	0.176	0.000100 U
03/24	0.00100 U	0.00100 U	0.0188	0.00100 U	0.00100 U	2	0.00171 J	0.00100 U	0.00207 J	0.219	0.00100 U	1.95	0.0414	0.000100 U
08/24	0.00100 U	0.00100 U	0.0221	0.00100 U	0.00100 U	1.84	0.00100 U	0.00100 U	0.00100 U	0.0643 J	0.00100 U	1.99	0.0222	0.000100 U
03/25	0.00100 U	0.00100 U	0.0189	0.00100 U	0.00100 U	1.84	0.00100 U	0.00100 U	0.00100 U	0.236	0.00100 U	1.88	0.0413	0.000100 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Total Metals

	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL			0.05			0.002		
03/17	0.004 U	1.98	0.004 U	0.001 U	2.56	0.001 U	0.00033 J	0.0052 J
09/17	0.0017 J	2.48	0.004 U	0.001 U	2.73	0.001 U	0.0012	0.03 U
04/18	0.0004 J	1.8	0.005 U	0.001 U	2.5	0.001 U	0.0012 J	0.0086
09/18	0.0005 J	2	0.005 U	0.001 U	2.5	0.001 U	0.005 U	0.003 JB
03/19	0.0009 J	1.8	0.005 U	0.001 U	2.4	0.001 U	0.005 U	0.0029 J
08/19	0.004 U	1.55	0.002 U	0.0005 U	2.35 B	0.0005 U	0.0013 J	0.015 U
03/20	0.00123	1.83	0.001 U	0.001 U	2.73	0.001 U	0.00116	0.004 U
08/20	0.00105 J	2.49	0.001 U	0.001 U	3.07	0.001 U	0.001 U	0.00475 JB
03/21	0.001 U	1.57	0.001 U	0.001 U	2.44	0.001 U	0.001 U	0.004 U
07/21	0.001 U	1.53	0.001 U	0.001 U	2.31	0.001 U	0.00228 J	0.004 U
03/22	0.00203 J	1.68 B	0.001 U	0.001 U	2.9	0.001 U	0.00135 J	0.00981 JB
08/22	0.00100 U	1.63	0.00100 U	0.00100 U	2.47	0.00100 U	0.00100 U	0.0170 B
04/23	0.00100 U	1.75	0.00100 U	0.00100 U	2.86	0.00100 U	0.00100 U	0.00400 U
09/23	0.00100 U	1.8	0.00100 U	0.00100 U	3.09	0.00100 U	0.00130 J	0.00400 U
03/24	0.00100 U	1.72	0.00100 U	0.00100 U	2.82	0.00100 U	0.00100 U	0.00400 U
08/24	0.00100 U	1.8	0.00100 U	0.00100 U	3.14	0.00100 U	0.00100 U	0.00413 J
03/25	0.00100 U	1.52	0.00100 U	0.00100 U	2.7	0.00100 U	0.00100 U	0.00400 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - PFAS Compounds

	Perfluoro(2-propoxypropanoic) acid (HFPODA) (ng/L)	Perfluorobutanesulfonic acid (PFBS) (ng/L)	Perfluorohexanesulfonic acid (PFHxS) (ng/L)	Perfluorononanoic acid (PFNA) (ng/L)	Perfluorooctanesulfonic acid (PFOS) (ng/L)	Perfluorooctanoic acid (PFOA) (ng/L)
MCL	10		10	10	4	4
08/24	3.73 U	0.83 U	0.85 U	0.93 U	3.83	4.49
03/25	3.78 U	0.84 U	0.86 U	0.95 U	3.55 J	4.36

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-3 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5		80
03/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
09/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
04/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
09/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	--	5 U	--	1 U	1 U	1 U
03/19	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	--	5 U	5 U	5 U
08/19	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.046 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.047 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.047 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.048 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	29.5 B	5.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.048 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5		80
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.019 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.019 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-3 - Volatile Organic Compounds

	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)
MCL	80			5	100		80			70		80	700	10000				5	10000	100	5
03/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
09/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U
04/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
09/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U
03/19	5 U	10 U	5 U	5 U	5 U	10 U	5 U	10 U	--	5 U	5 U	5 U	5 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U
08/19	5.07 B	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1.79 B	1 U	1 U	1 U	1 U	1 U	0.279 JB	1 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-3 - Volatile Organic Compounds

	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)
MCL	80			5	100		80			70		80	700	10000				5	10000	100	5
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Volatile Organic Compounds

	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	1000	100			5			2	10000
03/17	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U
09/17	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U
04/18	1 U	1 U	1 U	5 U	1 U	--	5 U	1 U	1 U
09/18	1 U	1 U	1 U	5 U	1 U	1 U	5 U	1 U	2 U
03/19	5 U	5 U	5 U	--	5 U	10 U	10 U	10 U	5 U
08/19	1 U	1 U	1 U	5 U	1 U	1 U	5 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-3 - Volatile Organic Compounds

	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	1000	100			5			2	10000
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-4 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10											
03/17	342	37.4	60	24.2	0.05	203	1.34	-91.8	6.21	6.49	955	814	27	16.1	304	--	122	19.2
09/17	343	34.5	51	20.2	0.07	206	0.05 U	-61.9	5.98	6.68	761	814	1 U	15.7	277	--	208	18.9
04/18	370	49	40	19.4	0.26	--	0.074	-98	6.24	6.34	868	1000	1 U	16	350	--	32	15.3
09/18	380	31	32	19.4	0.38	--	0.12 B	-57.4	6.20	6.36	907	740	1 U	19.3	380	--	21	8.8
03/19	390	50	46	18.6	0.28	--	0.16	9.7	6.02	6.43	959	860	1 U	14.4	240	--	140	7.5
08/19	380	34	56	19.1	0.23	215.08	0.591 B	-56.1	6.35	6.08	820	630	0.73 B	17.3	310	--	1200	121.1
03/20	100	34.5	49.8	18.4	0.26	190	0.2 U	-74.1	6.47	6.49	831	818	1 U	15.9	303	--	351	117
08/20	372	35.3	45.3	18.5	0.31	194	0.2 U	-54.6	6.42	6.43	987	821	1 U	17.2	378	--	304	15.2
03/21	396	35.1	48.5	19.3	2.4	204	0.4 U	-7	6.34	6.52	793	879	0.3 U	17.2	361	--	305	46.8
07/21	400	37.9	54.1 B	18.7	0.69	181	0.011 U	-61.5	6.14	6.44	860	821	0.3 U	18.6	336	--	321	24.61
03/22	359	31.9	38.2 B	17.3	0.22	208	0.025 J	-33.7	6.32	6.51	836	790.4	0.3 U	17.1	282	--	233	50.79
08/22	408	32.5	46.0 B	16.8	0.38	208	0.012 JB	-78.2	6.26	6.52	797	772.3	0.3 U	18	329	--	198	11.02
04/23	374	32.3	39.2	16.3 B	0.15	209	0.011 U	-64.8	6.20	6.68	832	779.3	0.3 U	16.6	300	--	260	30.88
10/23	388	36.85	41.9	137	0.7	206	0.011 U	72.7	6.28	6.49	853	823.9	0.9	17.6	315	--	231	12.3
03/24	366	33.32	41.5	16.6	0.19	221	0.011 U	-74.9	6.32	6.49	838	818.5	0.3 U	15.7	315	--	290	13

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10											
08/24	372	28.2	41.7	16.2	0.28	225	0.938	-152.7	6.33	6.58	840	798	0.250 U	19.6	295	81.4	431	31.83
03/25	444	6.5	33.8	16.5	-0.7	198	0.011 U	-69.9	6.39	6.48	794	777	0.250 U	17.3	305	25.3	199	21.75

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)	Mercury, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015			0.002
03/17	0.002 U	0.0048	0.516	0.001 U	0.001 U	54.7	0.0026 J	0.00069 J	0.004 U	39	0.00045 J	16.1	0.342	0.0002 U
09/17	0.002 U	0.0054	0.481	0.001 U	0.001 U	56.9	0.0019 J	0.0005 J	0.0011 J	41	0.00055 J	15.6	0.371	0.0002 U
04/18	0.001 U	0.0055	0.487	0.001 U	0.00025 U	60	0.0019 J	0.0005 J	0.0024 B	43	0.0007 J	16	0.375	0.0002 U
09/18	0.001 U	0.0059 B	0.461	0.001 U	0.000151 JB	--	0.0012 J	0.0007 JB	0.0006 J	42	0.0001 J	--	0.383	0.0002 U
03/19	0.001 U	0.0058	0.487	0.001 U	0.0000950 JB	62	0.0032 JB	0.0006 J	0.001 J	40	0.0006 J	15	0.352	0.0002 U
08/19	0.002 U	0.0052	0.467	0.0005 U	0.001 U	59.5	0.0038 J	0.00059 J	0.04 U	43.2	0.0017 J	16.1	0.388	0.0002 U
03/20	0.001 U	0.00469	0.466	0.001 U	0.001 U	48.6	0.00487	0.001 U	0.00112	42.4	0.001 U	16.6	0.364	0.0001 U
08/20	0.001 U	0.00481	0.488	0.001 U	0.001 U	50	0.00189 JB	0.00129 B	0.001 U	44	0.001 U	16.8	0.37	0.0001 U
03/21	0.001 U	0.0055	0.48	0.001 U	0.001 U	53.7	0.00303 J	0.001 U	0.00592 JB	44.4	0.001 U	16.9	0.364	0.0001 U
07/21	0.001 U	0.0046	0.425	0.001 U	0.001 U	46 B	0.00518 J	0.001 U	0.00163 JB	41	0.00149 J	16.1	0.35	0.0001 U
03/22	0.001 U	0.00426	0.418	0.001 U	0.001 U	55.6	0.00352 JB	0.00247 J	0.00119 J	34.3	0.001 U	16.7	0.318	0.0001 U
08/22	0.00100 U	0.00512	0.426	0.00100 U	0.00100 U	56.6	0.00397 J	0.00100 U	0.00124 J	40.9	0.00106	16.2	0.345	0.000100 U
04/23	0.00100 U	0.00619	0.436	0.00100 U	0.00100 U	56.1	0.00190 J	0.00100 U	0.00100 U	44.9	0.00100 U	16.7	0.35	0.000100 U
10/23	0.00100 U	0.00538	0.434	0.00100 U	0.00100 U	56.2	0.00158 J	0.00100 U	0.00100 U	41.6	0.00100 U	16	0.33	0.000100 U
03/24	0.00100 U	0.00530	0.469	0.00100 U	0.00100 U	60.1	0.00100 U	0.00100 U	0.00100 U	46.7	0.00100 U	17.2	0.349	0.000100 U
08/24	0.00100 U	0.00799 J	0.489	0.00100 U	0.00100 U	60.4	0.00103 J	0.00100 U	0.00100 U	53.7	0.00100 U	18	0.355	0.000100 U
03/25	0.00100 U	0.00306	0.413	0.00100 U	0.00100 U	48	0.00106 J	0.00100 U	0.00100 U	36.1	0.00100 U	15.8	0.319	0.000100 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Total Metals

	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL			0.05			0.002		
03/17	0.004 U	24.1	0.004 U	0.001 U	15	0.001 U	0.0047	0.0042 J
09/17	0.001 J	25.1	0.004 U	0.001 U	15.4	0.001 U	0.0055	0.03 U
04/18	0.0019	24	0.0014 JB	0.001 U	15	0.001 U	0.0055	0.0218
09/18	0.0038 J	25	0.0005 J	0.001 U	15	0.001 U	0.0056 J	0.0146 B
03/19	0.0032 J	24	0.005 U	0.001 U	15	0.001 U	0.0043 J	0.0175
08/19	0.0016 J	25.4	0.002 U	0.0005 U	15.5	0.0005 U	0.0078 J	0.0093 JB
03/20	0.00251	26.4	0.00108	0.001 U	15.6	0.001 U	0.00489	0.00508
08/20	0.00102 J	26.1	0.001 U	0.001 U	15.8	0.001 U	0.00409 J	0.004 U
03/21	0.00134 J	25.4	0.001 U	0.001 U	16.1	0.001 U	0.0057 J	0.004 U
07/21	0.00219 J	23.5	0.001 U	0.001 U	15	0.001 U	0.00816 J	0.005 JB
03/22	0.0022 J	25.5	0.001 U	0.001 U	15.8	0.001 U	0.00439 J	0.0047 JB
08/22	0.00281 J	25.8	0.00100 U	0.00100 U	15	0.00100 U	0.00581 J	0.00513 JB
04/23	0.00321 J	25.8	0.00100 U	0.00100 U	15.1 B	0.00100 U	0.00482 J	0.00400 U
10/23	0.00105 J	25.3	0.00123 J	0.00100 U	15.2	0.00100 U	0.00333 J	0.00400 U
03/24	0.00100 U	25.9	0.00100 U	0.00100 U	15.9	0.00100 U	0.00320 J	0.00400 U
08/24	0.00100 U	28.3	0.00233 J	0.00100 U	16.8	0.00100 U	0.00931 J	0.00700 J
03/25	0.00100 U	25.3	0.00108 J	0.00100 U	14.5	0.00100 U	0.00199 J	0.00400 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - PFAS Compounds

	Perfluoro(2-propoxypropanoic) acid (HFPODA) (ng/L)	Perfluorobutanesulfonic acid (PFBS) (ng/L)	Perfluorohexanesulfonic acid (PFHxS) (ng/L)	Perfluorononanoic acid (PFNA) (ng/L)	Perfluorooctanesulfonic acid (PFOS) (ng/L)	Perfluorooctanoic acid (PFOA) (ng/L)
MCL	10		10	10	4	4
08/24	3.73 U	1.91	12.9	4.22	284	243
03/25	4.41 U	2.23 J	15.1	4.06	293	239

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-4 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5		80
03/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 J	5 U	5 U	5 U	5 U	5 U	0.1 J	1 U	1 U
09/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.3 J	5 U	5 U	5 U	4.4 J	5 U	0.1 J	1 U	1 U
04/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.355 J	5 U	5 U	5 U	5 U	5 U	0.154 J	1 U	1 U
09/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	--	2.87 JB	--	1 U	1 U	1 U
03/19	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	0.363 J	10 U	10 U	10 U	10 U	--	0.161 J	5 U	5 U
08/19	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	0.379 J	5 U	5 U	5 U	5 U	5 U	0.147 J	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.046 U	0.018 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.047 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.047 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.048 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.048 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	9.0 B	5.0 U	1.0 U	1.0 U	1.0 U
10/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	7.5 B	5.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.048 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5		80
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.019 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.019 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-4 - Volatile Organic Compounds

	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)
MCL	80			5	100		80			70		80	700	10000				5	10000	100	5	1000
03/17	1 U	1 U	1 U	1 U	2.9	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	0.7 J	1 U	1 U	1 U	1 U	1 U	1 U
09/17	1 U	1 U	1 U	1 U	2.9	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	0.6 J	1 U	1 U	1 U	1 U	1 U	1 U
04/18	1 U	1 U	1 U	1 U	3.54	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	0.803 J	1 U	1 U	1 U	1 U	1 U	1 U
09/18	1 U	1 U	1 U	1 U	3.62	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	5 U	0.714 J	1 U	1 U	1 U	1 U	1 U	1 U
03/19	5 U	10 U	5 U	5 U	3.89	10 U	5 U	10 U	--	5 U	5 U	5 U	5 U	5 U	1 U	0.673 J	5 U	5 U	5 U	5 U	5 U	5 U
08/19	1 U	1 U	1 U	1 U	3.79	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	0.521 J	1 U	0.353 JB	1 U	1 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	3.7	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	4.5	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	4.3	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	4.3	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	3.6	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	3.8	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
10/23	1.0 U	1.0 U	1.0 U	1.0 U	3.9	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	3.9	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Volatile Organic Compounds

	Bromoform (ug/L)	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)
MCL	80			5	100		80			70		80	700	10000				5	10000	100	5	1000
08/24	1.0 U	1.0 U	1.0 U	1.0 U	3.3	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	2.7	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Volatile Organic Compounds

	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100			5			2	10000
03/17	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U
09/17	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U
04/18	1 U	1 U	5 U	1 U	--	5 U	1 U	1 U
09/18	1 U	1 U	5 U	1 U	1 U	5 U	1 U	2 U
03/19	5 U	5 U	--	5 U	10 U	10 U	10 U	5 U
08/19	1 U	1 U	5 U	1 U	1 U	5 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
10/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-4 - Volatile Organic Compounds

	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100			5			2	10000
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-5 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10											
03/17	3.52	0.2 U	10 U	33.7	5.5	32.5	0.05 U	334	4.35	5.48	182.9	180	1 U	14.7	110	--	1.52	0.1
09/17	3.72	0.2 U	10 U	15	3.11	22.5	0.962	352.7	3.76	5.40	110.1	119	20.1	17.3	82	--	4.48	0.4
04/18	8	0.1 U	10 U	19.7	3.96	--	0.8	236.7	4.76	5.14	147	330	25.8	14.9	230	--	0.64	3.3
09/18	12	0.1 U	10 U	14.2 B	4.36	--	0.53	275.5	4.63	5.45	135.8	120	21.1 B	25.3	110	--	1.1	9.6
03/19	4	0.15 JB	10 U	27.8	4.3	--	1.3	292.9	4.78	4.79	195.9	210	28.1	13.8	37	--	2.8 B	0
08/19	4.5	1 U	10 U	12.2	4.06	23.21	1.77 B	319.1	5.12	4.99	105.1	86	15	19.5	71	--	0.8	--
03/20	13.2 B	0.1 U	6.5 JB	12.8	5.3	27.4	0.57	250	5.50	5.80	108	118	18.5	14.7	46	--	3.06	5.6
08/20	19.3	0.1 U	6.7 JB	8.1	6.28	38.1	0.3	294.2	5.68	5.75	14.6 B	110 B	15.5	20.5	62.5	--	0.916	3.7
03/21	5.3	0.1 U	3 U	14.3	6.3	23.2	0.561	325	5.12	5.37	113.9	127	27.2	14.3	89	--	1.31	9.4
07/21	12.8	0.05 U	10.6 B	7.83	5.01	27.2	0.457 J	262.6	5.22	5.66	97.8	101	18.1	17.9	71.3 B	--	1.36	8.54
03/22	24.8	0.02 U	3 U	7.67	5.13	33.4	0.396 J	210.6	5.47	5.71	106.1	111.4	15.3	15.6	62.5	--	5.15	4.12
08/22	13.5	0.02 U	10.8 B	8.31	4.83	30.2	0.528 J	269.8	5.20	5.56	98	105.8	16.8	18.5	71.5	--	1.13	4.11
04/23	14.4	0.015 U	4.2 J	13.5 B	5.44	40.4	0.763 J	246.7	5.99	5.93	116.4	128.1	16.7	15.7	71.5	--	0.500 U	3.34
09/23	12.8	0.015 U	3 U	11.1	5.20	33.4	0.674 J	283.1	5.32	5.91	111.3	182.5	17.2	19	72.5	--	0.897	2.5
03/24	5.2	0.015 U	3 U	12.8	4.68	23.4	0.651	311.9	4.98	5.48	104.7	140.2	21.9	14.1	76.7	--	0.500 U	1.5

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10											
08/24	22.9	0.015 U	3 U	6.67	5.13	34.2	0.794	149.6	5.62	6.17	102.2	105.2	12.7	20.8	60.0	13.7 U	0.178	4.67
03/25	28.0	0.015 U	3 U	5.80	2.94	34.5	0.516	146.1	5.72	6.10	98.2	101.9	11.3	15.6	64.2	14.1 U	0.373	1.03

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015		
03/17	0.002 U	0.004 U	0.0522	0.00056 J	0.001 U	3.45	0.00064 JB	0.0015	0.0027 J	0.0715 J	0.0015 J	5.79	0.0365
09/17	0.002 U	0.004 U	0.05	0.00038 J	0.001 U	2.76	0.0024 J	0.00079 J	0.00066 J	0.0875 J	0.0019 J	3.79	0.0238
04/18	0.001 U	0.001 U	0.0523	0.0004 J	0.000136 J	3.7	0.0009 J	0.001 J	0.0056	0.17	0.0014	5.6	0.0301
09/18	0.0004 JB	0.001 U	0.0435	0.001 U	0.00025 U	--	0.002 U	0.0006 JB	0.0006 J	0.076 B	0.0008 J	--	0.0178
03/19	0.001 U	0.0007 J	0.0562	0.0006 J	0.000152 JB	3.6	0.0035 JB	0.0015 J	0.0017 J	0.33	0.0017 J	5.9	0.0385
08/19	0.002 U	0.002 U	0.0396	0.00028 J	0.001 U	3.55	0.004 U	0.00055 J	0.04 U	0.0879 JB	0.003 U	3.48	0.018
03/20	0.001 U	0.001 U	0.0481	0.001 U	0.001 U	3.78	0.00257	0.001 U	0.001 U	0.206	0.001 U	4.35	0.019
08/20	0.001 U	0.001 U	0.0226	0.001 U	0.001 U	7.06	0.001 U	0.001 U	0.00172 J	0.0776 JB	0.001 U	4.97	0.0102
03/21	0.001 U	0.001 U	0.0561	0.001 U	0.001 U	2.2	0.00128 J	0.001 U	0.00274 JB	0.151 B	0.001 U	4.3	0.0261
07/21	0.001 U	0.001 U	0.034	0.001 U	0.001 U	4.38 B	0.001 U	0.001 U	0.001 U	0.0765 J	0.001 U	3.95	0.0142
03/22	0.001 U	0.001 U	0.0327	0.001 U	0.001 U	6.54	0.0014 JB	0.0014 J	0.0012 J	0.333 B	0.001 U	4.16	0.0108
08/22	0.00100 U	0.00100 U	0.0406	0.00100 U	0.00100 U	5.7	0.00100 U	0.00100 U	0.00100 U	0.0477 J	0.00100 U	3.87	0.0127
04/23	0.00100 U	0.00100 U	0.0383	0.00100 U	0.00100 U	8.48	0.00111 J	0.00100 U	0.00100 U	0.00500 U	0.00100 U	4.67	0.00971 J
09/23	0.00100 U	0.00100 U	0.0469	0.00100 U	0.00100 U	6.48	0.00100 U	0.00100 U	0.00100 U	0.0411 JB	0.00100 U	4.19	0.0125
03/24	0.00100 U	0.00100 U	0.0673	0.00100 U	0.00100 U	2.27	0.00128 J	0.00100 U	0.00100 U	0.0259 J	0.00118 J	4.3	0.0240
08/24	0.00100 U	0.00100 U	0.0351	0.00100 U	0.00100 U	7.1	0.00100 U	0.00100 U	0.00100 U	0.0299 J	0.00100 U	3.99	0.00951 J
03/25	0.00100 U	0.00100 U	0.0304	0.00100 U	0.00100 U	6.58	0.00100 U	0.00100 U	0.00100 U	0.00904 J	0.00100 U	3.64	0.00529 J

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Total Metals

	Mercury, Total (mg/L)	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL	0.002			0.05			0.002		
03/17	0.0002 U	0.0011 J	1.61	0.004 U	0.001 U	16.7	0.001 U	0.001 U	0.0096 J
09/17	0.0002 U	0.0017 J	1.34	0.004 U	0.001 U	11.9	0.001 U	0.001 U	0.0043 J
04/18	0.0002 U	0.0013	1.6	0.0011 JB	0.001 U	14	0.001 U	0.005 U	0.0199
09/18	0.0002 U	0.0008 JB	1.3	0.005 U	0.001 U	9.2	0.001 U	0.005 U	0.0063 JB
03/19	0.0002 U	0.0021 J	2.1	0.005 U	0.001 U	19	0.001 U	0.005 U	0.0115
08/19	0.0002 U	0.004 U	1.07	0.002 U	0.0005 U	7.94	0.0005 U	0.001 U	0.0081 JB
03/20	0.0001 U	0.0018	1.1	0.001 U	0.001 U	10.3	0.001 U	0.001 U	0.0071
08/20	0.0001 U	0.001 U	0.713	0.001 U	0.001 U	4.99	0.001 U	0.001 U	0.00641 JB
03/21	0.0001 U	0.00108 J	1.47	0.001 U	0.001 U	13.5	0.001 U	0.001 U	0.00563 JB
07/21	0.0001 U	0.001 U	1.05	0.001 U	0.001 U	7.03	0.001 U	0.001 U	0.004 U
03/22	0.0001 U	0.001 U	1.3 B	0.001 U	0.001 U	6.77	0.001 U	0.001 U	0.00425 JB
08/22	0.000100 U	0.00100 U	1.41	0.00100 U	0.00100 U	6.89	0.00100 U	0.00100 U	0.00400 U
04/23	0.000100 U	0.00100 U	1.54 B	0.00100 U	0.00100 U	5.7 B	0.00100 U	0.00100 U	0.00400 U
09/23	0.000100 U	0.00100 U	1.75	0.00100 U	0.00100 U	6.42	0.00100 U	0.00100 U	0.00400 U
03/24	0.000100 U	0.00100 U	1.55	0.00100 U	0.00100 U	12	0.00100 U	0.00100 U	0.00518 J
08/24	0.000100 U	0.00100 U	1.64	0.00100 U	0.00100 U	6.2	0.00100 U	0.00100 U	0.00400 U
03/25	0.000100 U	0.00100 U	1.57	0.00100 U	0.00100 U	5.46	0.00100 U	0.00100 U	0.00400 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - PFAS Compounds

	Perfluoro(2-propoxypropanoic) acid (HFPODA) (ng/L)	Perfluorobutanesulfonic acid (PFBS) (ng/L)	Perfluorohexanesulfonic acid (PFHxS) (ng/L)	Perfluorononanoic acid (PFNA) (ng/L)	Perfluorooctanesulfonic acid (PFOS) (ng/L)	Perfluorooctanoic acid (PFOA) (ng/L)
MCL	10		10	10	4	4
08/24	3.60 U	3.61	2.70	1.03 J	16.1	8.95
03/25	3.86 U	3.52	9.16	1.28 J	17.5	14.3

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-5 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)	Bromoform (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5		80	80
03/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
09/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
04/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
09/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	--	5 U	--	1 U	1 U	1 U	1 U
03/19	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	--	5 U	5 U	5 U	5 U
08/19	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	5.07 B
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.046 U	0.018 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.047 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.047 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.047 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.048 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)	Bromoform (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5		80	80
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.019 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.019 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-5 - Volatile Organic Compounds

	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)
MCL			5	100		80			70		80	700	10000				5	10000	100	5	1000
03/17	1 U	1 U	1 U	1 U	1 U	0.4 J	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U
09/17	1 U	1 U	1 U	1 U	1 U	0.2 J	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U
04/18	1 U	1 U	1 U	1 U	1 U	0.556 J	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
09/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/19	10 U	5 U	5 U	5 U	10 U	0.956 JB	10 U	--	5 U	5 U	5 U	5 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U
08/19	1 U	1 U	1 U	1 U	1 U	0.329 J	1 U	--	1 U	1 U	1.95 B	1 U	1 U	1 U	1 U	1 U	0.276 JB	1 U	1 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1.5 B	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Volatile Organic Compounds

	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)
MCL			5	100		80			70		80	700	10000				5	10000	100	5	1000
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Volatile Organic Compounds

	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100			5			2	10000
03/17	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U
09/17	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U
04/18	1 U	1 U	5 U	1 U	--	5 U	1 U	1 U
09/18	1 U	1 U	5 U	1 U	1 U	5 U	1 U	2 U
03/19	5 U	5 U	--	5 U	10 U	10 U	10 U	5 U
08/19	1 U	1 U	5 U	1 U	1 U	5 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-5 - Volatile Organic Compounds

	trans-1,2-Dichloroethene (ug/L)	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL	100			5			2	10000
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-6 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10											
03/17	2 U	0.2 U	13	18.2	0.25	14.4	0.05 U	50.7	4.50	4.31	108.4	108	5.09	14.3	84	--	14.3	8.6
09/17	2 U	0.2 U	8 J	77.2	0.13	46	0.138	389.7	2.77	4.08	287.3	344	27.6	14	156	--	11.3	8.8
04/18	1 U	0.1 U	6.9 J	45.4	0.67	--	0.089	311.1	3.93	3.96	174.5	220	11.1	11.2	130	--	3.3	6.7
09/18	10	0.1 U	10 U	13.9	0.4	--	0.19 B	192.6	4.15	5.05	89.6	89	7.81	22.2	59	--	2	18.2
03/19	1 U	0.12 JB	10 U	46.9	5.09	--	0.1 U	239.1	4.40	4.38	226.7	260	28.5	10.9	63	--	41	45.7
08/19	1 U	1 U	45	20.4	1.15	12.14 J	1.1 B	374.7	4.28	4.03	86.7	71	12	17.8	54	--	4.3	--
03/20	1 U	0.1 U	5 JB	17	1.76	13.7	0.3	339	4.66	5.00	87.5	89.4	8.82	14.6	44	--	6.93	6.9
08/20	1 U	0.1 U	11.3 B	11.2	1.61	10.9	0.64	350.8	4.57	4.66	70.9 B	67.5 B	7.89	19.7	47	--	6.45	33.2
03/21	1 U	0.1 U	5.8 J	61.5	3.12	26.6	0.073	329.8	4.11	4.11	235.2	293	25.6	12.4	153	--	2.96	36.8
07/21	5 U	0.05 U	5.2 JB	20.5	2.37	14.4	0.587 J	338.2	4.21	4.55	105.7	102	10.7	17.5	71 B	--	1.72	16.29
03/22	3.8 B	0.02 J	14.4 B	11.4	2.2	12.9	0.614 J	305.5	4.63	4.84	73.6	78.82	7.8	14	51.5	--	47.2	33.74
08/22	5.0 U	0.02	10.1 B	9.79	1.93	10.2	1.08	345.9	4.55	4.77	64.1	72.05	4.4	18	48.5	--	9.07	8.85
04/23	5.0 U	0.022 JB	3.0 U	10.3 B	2.81	11.8	0.709 J	352.8	4.76	5.00	67.5	71.27 B	6.4	15.3	44.0	--	17.3	21.78
09/23	5.0 U	0.015 J	3 U	10.7	1.67	11.8	0.582 J	342.0	4.57	5.29	67	147	5.4	16.4	52.0	--	17.3	20.2
03/24	5.0 U	0.015 U	4.85	51.4	1.98	30.8	0.118	258.3	4.25	4.59	220.5	265	25.6	12.5	133	--	10.1	10.5

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - General Parameters

	Alkalinity (mg/L)	Ammonia Nitrogen (mg/L)	Chemical Oxygen Demand (mg/L)	Chloride (mg/L)	Dissolved Oxygen, Field (mg/L)	Hardness (mg/L)	Nitrate (mg/L)	ORP, Field (mV)	pH, Field (SU)	pH, Lab (SU)	Specific Conductivity, Field (uS/cm)	Specific Conductivity, Lab (umhos/cm)	Sulfate, total (mg/L)	Temperature, field (°C)	Total Dissolved Solids (mg/L)	Total Suspended Solids (mg/L)	Turbidity (NTU)	Turbidity, Field (NTU)
MCL							10											
08/24	1.8	0.019	3 U	10.8	1.97	13.1	0.810	158	4.61	5.12	71.9	72.1	6.61	18.2	46.7	14.3 U	0.869	4.51
03/25	2.1	0.015 U	3 U	12.9	3.48	12.8	0.578	3254	4.61	4.97	76.1	75.5	6.45	16.5	44.2	50.8	4.26	2.58

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Total Metals

	Antimony, Total (mg/L)	Arsenic, Total (mg/L)	Barium, Total (mg/L)	Beryllium, Total (mg/L)	Cadmium, Total (mg/L)	Calcium, Total (mg/L)	Chromium, Total (mg/L)	Cobalt, Total (mg/L)	Copper, Total (mg/L)	Iron, Total (mg/L)	Lead, Total (mg/L)	Magnesium, Total (mg/L)	Manganese, Total (mg/L)
MCL	0.006	0.01	2	0.004	0.005		0.1				0.015		
03/17	0.002 U	0.0022 J	0.0368	0.00012 J	0.001 U	0.167 J	0.00095 JB	0.0012	0.0016 J	6.21	0.0034	3.41	0.008
09/17	0.002 U	0.0028 J	0.0724	0.00066 J	0.001 U	0.99	0.0021 J	0.0032	0.0045	2.79	0.0064	10.6	0.0125
04/18	0.001 U	0.001 U	0.0805	0.001 U	0.0000630 J	0.31	0.0009 J	0.0038	0.0293 B	1.4	0.0017	8.8	0.0131
09/18	0.001 U	0.0014 JB	0.0362	0.001 U	0.000123 JB	--	0.001 J	0.0009 JB	0.0006 J	3	0.0007 J	--	0.0033 J
03/19	0.001 U	0.0017 J	0.0492	0.001 U	0.0000930 JB	1.3	0.005 JB	0.0014 J	0.0028 J	1.9	0.0017 J	5.8	0.0098 J
08/19	0.002 U	0.002 U	0.0483	0.00012 J	0.0002 J	0.274 J	0.0018 J	0.00073 J	0.04 U	0.526 B	0.003 U	2.78	0.01 U
03/20	0.001 U	0.001 U	0.0442	0.001 U	0.001 U	0.172	0.00161	0.001 U	0.001 U	0.508	0.001 U	3.23	0.00383
08/20	0.001 U	0.001 U	0.0489	0.001 U	0.001 U	0.231	0.00211 JB	0.00191 JB	0.00509 J	2.64	0.001 U	2.52	0.00316 J
03/21	0.001 U	0.001 U	0.0516	0.001 U	0.001 U	0.719	0.00155 J	0.00159 J	0.00379 JB	1.93	0.00113 J	6.01	0.0123
07/21	0.001 U	0.001 U	0.0497	0.001 U	0.001 U	0.235 B	0.00182 J	0.00273 J	0.00599 JB	0.514	0.001 U	3.36	0.0035 J
03/22	0.001 U	0.00176 J	0.0463	0.001 U	0.001 U	0.26 B	0.00736 JB	0.00376 J	0.0059 J	10.6	0.00237	2.97	0.01
08/22	0.00100 U	0.00100 U	0.0511	0.00100 U	0.00100 U	0.277	0.00499 J	0.00100 U	0.00243 J	0.955	0.00100 U	2.32	0.00344
04/23	0.00100 U	0.00100 U	0.0448	0.00100 U	0.00100 U	0.0800 U	0.00183 J	0.00100 U	0.00100 U	1.32	0.00100 U	2.87	0.00198 J
09/23	0.00100 U	0.00100 U	0.0541	0.00100 U	0.00100 U	0.226	0.00194 J	0.00100 U	0.00100 U	1.47	0.00100 U	2.72	0.00307 J
03/24	0.00100 U	0.00100 U	0.0352	0.00100 U	0.00100 U	0.13	0.00731 J	0.00189 J	0.00100 U	2.03	0.00100 U	7.4	0.00407 J
08/24	0.00100 U	0.00100 U	0.0527	0.00100 U	0.00100 U	0.317	0.00144 J	0.00100 U	0.00100 U	0.445	0.00100 U	2.99	0.00189 J
03/25	0.00100 U	0.00100 U	0.0443	0.00100 U	0.00100 U	0.169	0.00754 J	0.00627 J	0.00195 J	2.56	0.00115 J	3.01	0.00268 J

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Total Metals

	Mercury, Total (mg/L)	Nickel, Total (mg/L)	Potassium, Total (mg/L)	Selenium, Total (mg/L)	Silver, Total (mg/L)	Sodium, Total (mg/L)	Thallium, Total (mg/L)	Vanadium, Total (mg/L)	Zinc, Total (mg/L)
MCL	0.002			0.05			0.002		
03/17	0.0002 U	0.004 U	0.98	0.004 U	0.001 U	7.73	0.001 U	0.013	0.0069 J
09/17	0.0002 U	0.0028 J	1.84	0.004 U	0.001 U	31.4	0.001 U	0.0163	0.0065 J
04/18	0.0002 U	0.0019	1.6	0.0008 JB	0.001 U	15	0.001 U	0.0029 J	0.0348
09/18	0.0002 U	0.0007 J	1.7	0.005 U	0.001 U	6.7	0.001 U	0.0029 J	0.0043 JB
03/19	0.0002 U	0.0027 J	2.6	0.005 U	0.001 U	27	0.001 U	0.0024 J	0.0108
08/19	0.0002 U	0.0015 J	1.75	0.002 U	0.0005 U	6.68	0.0005 U	0.001 J	0.0073 JB
03/20	0.0001 U	0.00144	1.53	0.001 U	0.001 U	8.77	0.001 U	0.00169	0.004 U
08/20	0.0001 U	0.00137 J	1.71	0.001 U	0.001 U	6.88	0.001 U	0.00518 J	0.0115 B
03/21	0.0001 U	0.00156 J	1.07	0.001 U	0.001 U	35	0.001 U	0.00183 J	0.004 U
07/21	0.0001 U	0.00159 J	1.74	0.001 U	0.001 U	9.36	0.001 U	0.001 U	0.005 JB
03/22	0.0001 U	0.00429 J	1.66 B	0.001 U	0.001 U	7.11	0.001 U	0.0191	0.0127 B
08/22	0.000100 U	0.00187 J	1.73	0.00100 U	0.00100 U	6.06	0.00100 U	0.00180 J	0.0106 B
04/23	0.000100 U	0.00117 J	1.56 B	0.00100 U	0.00100 U	6.13 B	0.00100 U	0.00310 J	0.00400 U
09/23	0.000100 U	0.00140 J	1.9	0.00100 U	0.00100 U	6.85	0.00100 U	0.00399 J	0.00400 U
03/24	0.000100 U	0.00366 J	0.858	0.00100 U	0.00100 U	34	0.00100 U	0.00428 J	0.00400 U
08/24	0.000100 U	0.00115 J	1.9	0.00100 U	0.00100 U	7.31	0.00100 U	0.00139 J	0.00849 J
03/25	0.000100 U	0.00585 J	1.45	0.00100 U	0.00100 U	7.45	0.00100 U	0.00776 J	0.00764 JB

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - PFAS Compounds

	Perfluoro(2-propoxypropanoic) acid (HFPODA) (ng/L)	Perfluorobutanesulfonic acid (PFBS) (ng/L)	Perfluorohexanesulfonic acid (PFHxS) (ng/L)	Perfluorononanoic acid (PFNA) (ng/L)	Perfluorooctanesulfonic acid (PFOS) (ng/L)	Perfluorooctanoic acid (PFOA) (ng/L)
MCL	10		10	10	4	4
08/24	3.90 U	0.87 U	0.89 U	0.98 U	0.98 U	0.98 U
03/25	3.54 U	0.79 U	0.81 U	0.89 U	0.89 U	0.89 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-6 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)	Bromoform (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5		80	80
03/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	6	5 U	1 U	1 U	1 U	1 U
09/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
04/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
09/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	--	5 U	--	1 U	1 U	1 U	1 U
03/19	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U	10 U	10 U	10 U	10 U	--	5 U	5 U	5 U	5 U
08/19	1 U	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	4.65 B
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.046 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.047 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.046 U	0.018 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	0.048 U	0.019 U	1 U	1 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.047 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.048 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.049 U	0.020 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Volatile Organic Compounds

	1,1,1,2-Tetrachloroethane (ug/L)	1,1,1-Trichloroethane (ug/L)	1,1,2,2-Tetrachloroethane (ug/L)	1,1,2-Trichloroethane (ug/L)	1,1-Dichloroethane (ug/L)	1,1-Dichloroethene (ug/L)	1,2,3-Trichloropropane (ug/L)	1,2-Dibromo-3-chloropropane (ug/L)	1,2-Dibromoethane (ug/L)	1,2-Dichlorobenzene (ug/L)	1,2-Dichloroethane (ug/L)	1,2-Dichloropropane (ug/L)	1,4-Dichlorobenzene (ug/L)	2-Butanone (ug/L)	2-Hexanone (ug/L)	4-Methyl-2-Pentanone (ug/L)	Acetone (ug/L)	Acrylonitrile (ug/L)	Benzene (ug/L)	Bromochloromethane (ug/L)	Bromodichloromethane (ug/L)	Bromoform (ug/L)
MCL		200		5		7		0.2	0.05	600	5	5	75						5		80	80
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.019 U	0.019 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	0.020 U	0.020 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0 U	5.0 U	5.0 U	5.0 U	5.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-6 - Volatile Organic Compounds

	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)
MCL			5	100		80			70		80	700	10000				5	10000	100	5	1000	100
03/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
09/17	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	2 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
04/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
09/18	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	5 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/19	10 U	5 U	5 U	5 U	10 U	5 U	10 U	--	5 U	5 U	5 U	5 U	5 U	1 U	1 U	5 U	5 U	5 U	5 U	5 U	5 U	5 U
08/19	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1.37 B	1 U	1 U	1 U	1 U	1 U	0.279 JB	1 U	1 U	1 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U	--	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 B	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	5.0	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill

Monitoring Location SH-EA-6 - Volatile Organic Compounds

	Bromomethane (ug/L)	Carbon Disulfide (ug/L)	Carbon Tetrachloride (ug/L)	Chlorobenzene (ug/L)	Chloroethane (ug/L)	Chloroform (ug/L)	Chloromethane (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,2-Dichloroethene (ug/L)	cis-1,3-Dichloropropene (ug/L)	Dibromochloromethane (ug/L)	Ethylbenzene (ug/L)	m&p-Xylene (ug/L)	Methyl Iodide (ug/L)	Methyl Tertiary Butyl Ether (ug/L)	Methylene Bromide (ug/L)	Methylene Chloride (ug/L)	o-Xylene (ug/L)	Styrene (ug/L)	Tetrachloroethene (ug/L)	Toluene (ug/L)	trans-1,2-Dichloroethene (ug/L)
MCL			5	100		80			70		80	700	10000				5	10000	100	5	1000	100
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	--	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Volatile Organic Compounds

	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL			5			2	10000
03/17	1 U	5 U	1 U	1 U	1 U	1 U	1 U
09/17	1 U	5 U	1 U	1 U	1 U	1 U	1 U
04/18	1 U	5 U	1 U	--	5 U	1 U	1 U
09/18	1 U	5 U	1 U	1 U	5 U	1 U	2 U
03/19	5 U	--	5 U	10 U	10 U	10 U	5 U
08/19	1 U	5 U	1 U	1 U	5 U	1 U	1 U
03/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/20	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U
07/21	1 U	1 U	1 U	1 U	1 U	1 U	1 U
03/22	1 U	1 U	1 U	1 U	1 U	1 U	1 U
08/22	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
04/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
09/23	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Snow Hill Landfill
Monitoring Location SH-EA-6 - Volatile Organic Compounds

	trans-1,3-Dichloropropene (ug/L)	trans-1,4-Dichloro-2-butene (ug/L)	Trichloroethene (ug/L)	Trichlorofluoromethane (ug/L)	Vinyl Acetate (ug/L)	Vinyl Chloride (ug/L)	Xylene (ug/L)
MCL			5			2	10000
08/24	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U
03/25	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U	1.0 U

Shaded concentrations represent MCL/GWPS exceedances

Appendix B

Groundwater Well Construction Documentation

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Maryland
Department of the Environment

Wes Moore, Governor
Aruna Miller, Lt. Governor

Serena McIlwain, Secretary
Suzanne E. Dorsey, Deputy Secretary

1800 Washington Boulevard | Suite 620 | Baltimore, MD 21230 | 1-800-633-6101 | 410-537-3000 | TTY Users 1-800-735-2258

www.mde.maryland.gov

November 13, 2024

Sharmin Sultana
EA Engineering
225 Schilling Cir
Hunt Valley, MD 21031

RE: Tracking Number: 2024-02892
Request Received November 4, 2024
Worcester County Berlin, Snow Hill, Pocomoke Landfills

Dear Sharmin Sultana:

The Maryland Department of the Environment (MDE) received your recent request for information under the Public Information Act (PIA).

After conducting a thorough search of our files, MDE has no records responsive to your request. There were no charges incurred as a result of this search.

When requesting information regarding this request, please cite the tracking number referenced above. If you have any questions, please email zachary.lansing@maryland.gov.

Sincerely,

Zachary Lansing

Zachary Lansing
PIA Liaison
Water & Science Administration

WELL CHECK LIST

Owner Name: WOA Co

Well Permit Issued: ✓

Supplemental Form: —

Paid: NA

Completion Report: ✓

Drill Date: 3/26/03

Abandonment Report: NA

Sampled:

Times Sampled:

Last Sample:

Rechlorinated: ✓

Tagged:

Casing:

Distance:

COP Issued: NA

Folder ✓

EMERGENCY/TEMP. NO. IF ANY

B 1 | 3970 | SEQUENCE NO. (MDE USE ONLY)

STATE OF MARYLAND
PERMIT TO DRILL WELL
please print or type

STATE PERMIT NUMBER: WO-94-2833

fill in this form completely

Date Received (APA): 3703 (MM DD YY)

OWNER INFORMATION

Worcester County Commissioners
EA ENG. SCI AND TECH
Last Name / Owner / First Name

~~15 Lovelow Circle~~ One W. Main St Rm 103
Street or RFD

Snow Hill ~~Shores~~ MD ~~21863~~
Town / State / Zip

DRILLER INFORMATION

ALFRED E. MYERS MGD032
Driller's Name / License No.

EARTH ENGINEERING & SCIENCES INC.
Firm Name

3401 CARLINS PARK DR. BALTO. MD 21215
Address

Alfred E. Myers 3/6/03
Signature / Date

B 2 WELL INFORMATION

APPROX. PUMPING RATE (GAL. PER MIN.): N/A

AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY):

USE FOR WATER (CIRCLE APPROPRIATE BOX)

- D DOMESTIC POTABLE SUPPLY & RESIDENTIAL IRRIGATION
- F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION
- I INDUSTRIAL, COMMERICIAL, DEWATERING
- P PUBLIC WATER SUPPLY WELL
- T TEST, OBSERVATION, MONITORING
- G GEO-THERMAL

ENTERED 3/24/03

APPROXIMATE DEPTH OF WELL: 35 FEET

APPROXIMATE DIAMETER OF WELL: 2 NEAREST INCH

METHOD OF DRILLING (circle one)

BORED (or Augered)	JETTED	Jetted & DRIVEN
AIR-ROTary	AIR-PERcussion	ROTARY (Hydraulic Rotary)
CABLE	REVerse-ROTary	DRive-POINT

other

REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)

- N THIS WELL WILL NOT REPLACE AN EXISTING WELL
- Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY-CONTACT LOCAL APPROVING AUTHORITY FOR POLICY ON STANDBY WELLS
- D THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENED (IF AVAILABLE)

Not to be filled in by driller (MDE OR COUNTY USE ONLY)

APPROP. PERMIT NUMBER: GAP

PERMIT No. WO-94-2833

B 3 LOCATION OF WELL

WORCESTER (COUNTY) — W

SUBDIVISION

SECTION / LOT

SNOW HILL (NEAREST TOWN)

MILES FROM TOWN (enter 0 if in town): 0.5 M

B 4

DIRECTION OF WELL FROM TOWN (CIRCLE BOX): NW 8-9 | N 8 | NE 8-9 | W 8 | TOWN | E 8 | SW 8-9 | S 8 | SE 8-9

Holly Roads Rd
NEAR WHAT ROAD

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX): NORTH | WEST | EAST | SOUTH

300 DISTANCE FROM ROAD — ENTER FT OR MI: F

TAX MAP: 65 BLK: ____ PARCEL 95

NOT TO BE FILLED IN BY DRILLER HEALTH DEPARTMENT APPROVAL

Worcester — 03-95-03
COUNTY NAME / COUNTY NO.

STATE SIGNATURE — INSERT S

DATE ISSUED: 3 7 03 — CO SIGNATURE: Susan Hughes — EXP. DATE: 3/7/04

NORTH GRID: 131 000 — EAST GRID: 1265 000

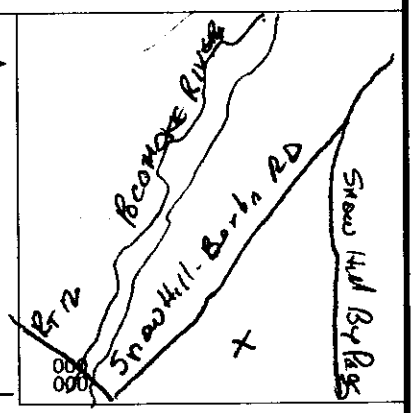
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER
1.
2.
3.

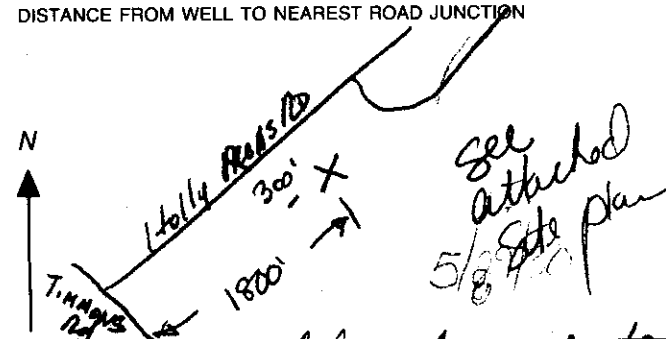
WRITE THE BOX NUMBER FROM THE MAP HERE

E 1,260

N 130



DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

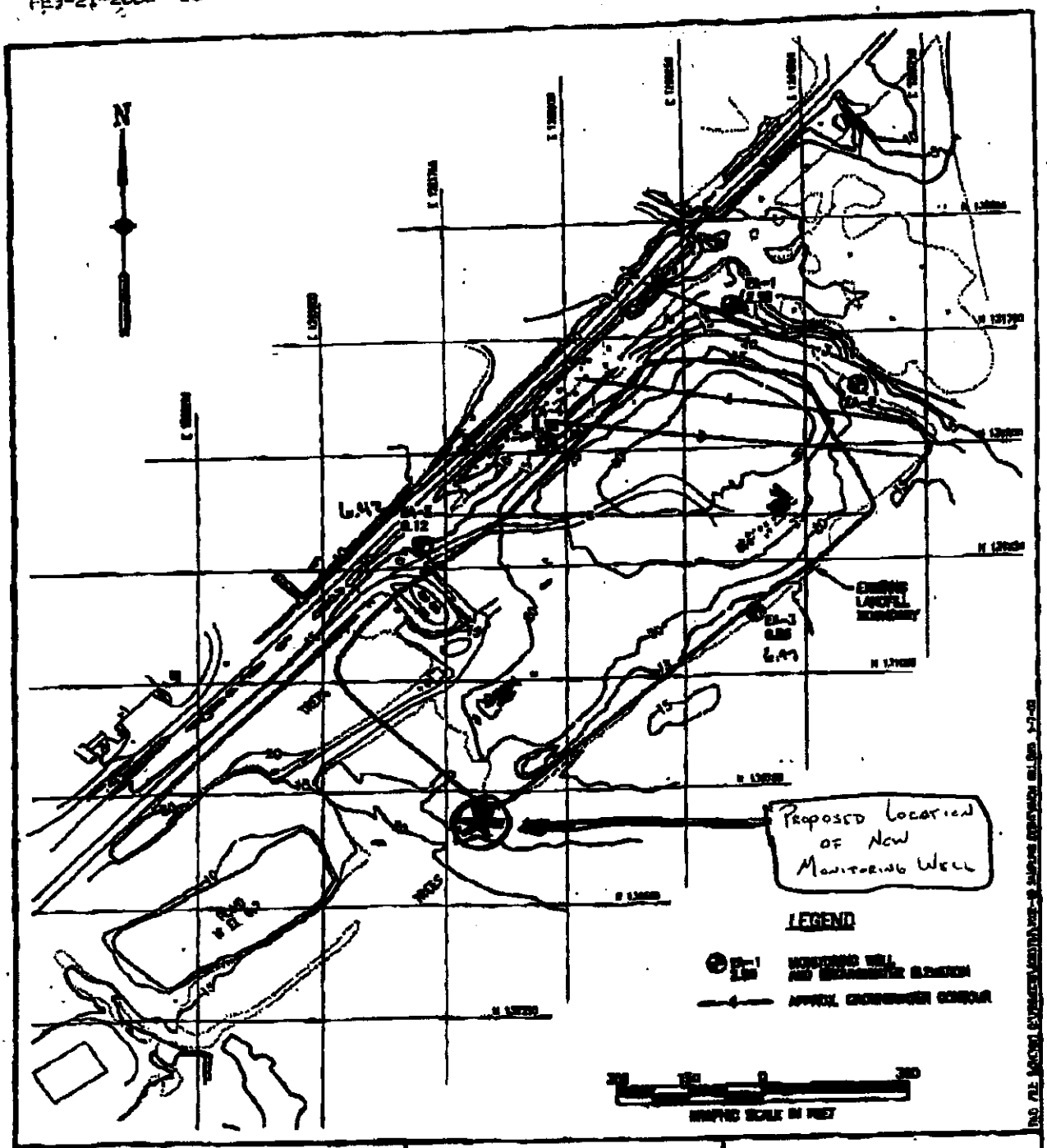


SPECIAL CONDITIONS
NOTE - APPROVING AUTHORITIES SHOULD USE SEPARATE SHEET IF NEEDED

Test well to be abandoned & sealed when monitoring complete

DENV-Permit 97

② COUNTY



EA ENGINEERING, SCIENCE, AND TECHNOLOGY, INC.	SNOW HILL LANDFILL WORCESTER COUNTY, MARYLAND	GROUNDWATER CONTOUR MAP					
PROJECT MGR: GAT	DESIGNED BY: GBL	DRAWN BY: CC	CHECKED BY: GBL	SCALE: AS SHOWN	DATE: 1-7-03	PROJECT NO: 60837.07	FIGURE: 1

DEPARTMENT OF
DEVELOPMENT REVIEW AND PERMITTING

Worcester County

GOVERNMENT CENTER
ONE WEST MARKET STREET, ROOM 1201
SNOW HILL, MARYLAND 21863
TEL: 410-632-1200 / FAX: 410-632-3008

BOARD OF APPEALS
PLANNING COMMISSION
AGRICULTURAL PRESERVATION
ENVIRONMENTAL PROGRAMS

ELECTRICAL BOARD
SHORELINE COMMISSION
LICENSE COMMISSIONERS

WELL CONSTRUCTION PERMIT

PERMIT NO: 63-95-03

STATE NO: WO-94-2833

PROPERTY OWNER: Worcester County Commissioners

MAILING ADDRESS: Worcester County Government Center, Rm 1201
One West Market St
Snow Hill, MD 21863

PROPERTY LOCATION: Snow Hill Landfill

SUBDIVISION:

WELL DRILLER: Earth Engineering Sciences, Inc.

PROPOSED WELL DEPTH: 35 ft.

SPECIAL CONDITIONS: Test well to be abandoned and sealed when monitoring complete..

In accordance with the regulations of the State of Maryland COMAR 26.04.04, a permit has been issued for the construction of a well to serve the above referenced property.

Any owner, current or future, shall connect to the central water system when it becomes available. At such time, this permit becomes null and void and the well installed must be properly abandoned according to Worcester County Standards.

Approving Sanitarian Stan Hughes, R.S

Date 3/12/03

SH:sh

C 1 | 1391 | SEQUENCE NO. (MDE USE ONLY)

1 2 3 6 (THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 63-95-03

ST/CO USE ONLY
DATE Received MM DD YY
8 13

DATE WELL COMPLETED MM 03 DD 26 YY 03
15 20

Depth of Well 22 [illegible] FT 26
(TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL"
WO-96-2833
28 29 30 31 32 33 34 35 36 37

OWNER Worcester County Commissioners (last name / first name)
STREET OR RFD One W. Market St Rm 1103 TOWN Snow Hill, MD 21863
SUBDIVISION SECTION LOT

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	check if water bearing
BROWN CLAYEY SILT/LOAM SAND	0.0'	5.0'	
GREY SILTY CLAY w/ CLAY SAND	5.0'	13.0'	
GREY SILTY CLAY	15.0'	22.0'	✓
GREY FINE SILTY SAND	22.0'	27.5'	✓

NUMBER OF UNSUCCESSFUL WELLS:

WELL HYDROFRACTURED yes Y no N

CIRCLE APPROPRIATE LETTER
- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E ELECTRIC LOG OBTAINED
- P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS LIC. NO.: MGD098

DRILLERS SIGNATURE
(MUST MATCH SIGNATURE ON APPLICATION)

LIC. NO.: MGD098

Anthony W. Higgs Sr.

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y 44 no N 44

TYPE OF GROUTING MATERIAL (Circle one)
CEMENT CM 45 46 BENTONITE CLAY BC 45 46

NO. OF BAGS 2 NO. OF POUNDS 188
GALLONS OF WATER 42 GAL
DEPTH OF GROUT SEAL (to nearest foot)
from 0 48 TOP 52 ft. to 54 BOTTOM 58 ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below:
ST STEEL, CO CONCRETE, PL PLASTIC, OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)!	Total depth of main casing (nearest foot)
PL	4"	27.5
60 61	63 64	66 70

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole insert appropriate code below:
ST STEEL, BR BRASS BRONZE, HO OPEN HOLE, PL PLASTIC, OT OTHER

C 2 | DEPTH (nearest ft.)

EACH SCREEN		from	to
1	PL	7.5 FT	27.5'
2			
3			

SLOT SIZE 1 2 3
DIAMETER OF SCREEN 4" (NEAREST INCH)
56 60

GRAVEL PACK IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68: from 5.0' to 27.5' 68

MDE USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T 70 (E.R.O.S.) 72 W Q 74 75 76
TELESCOPE CASING | LOG INDICATOR | OTHER DATA

C 3 | PUMPING TEST

HOURS PUMPED (nearest hour) 8 9
PUMPING RATE (gal. per min.) 11 15
METHOD USED TO MEASURE PUMPING RATE
WATER LEVEL (distance from land surface)
BEFORE PUMPING 17 20 ft.
WHEN PUMPING 22 25 ft.

TYPE OF PUMP USED (for test)
A air, P piston, T turbine, C centrifugal, R rotary, O other (describe below), J jet, S submersible (27)

PUMP INSTALLED
DRILLER INSTALLED PUMP (CIRCLE) (YES or NO) YES NO
IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS.
TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX 29. 29
CAPACITY: GALLONS PER MINUTE (to nearest gallon) 31 35
PUMP HORSE POWER 37 41
PUMP COLUMN LENGTH (nearest ft.) 43 47
CASING HEIGHT (circle appropriate box and enter casing height)
+ 49 above / – 49 below LAND SURFACE (nearest) foot 50 51

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND /OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)
N

ENTERED 5/29/30

DENV-CR00

COUNTY

C 1 2945 SEQUENCE NO. (DENV USE ONLY)
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 63-95

ST/GO USE ONLY
DATE Received

DATE WELL COMPLETED 06/7/91

Depth of Well 25 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" WO-88-0733

OWNER Worcester County
STREET OR RFD Court House Drive (last name / first name) TOWN Snow Hill Md. 21863
SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	Check if water bearing
Thin Fine Sand	0	3	
Gray Fine Sand	3	9	
Dark Gray Fine To Med Sand	9	15	
Light Gray Fine To Med Sand	15	21	✓
Light Thin Fine To Course Sand	21	27	✓

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes (Y) no (N)
TYPE OF GROUTING MATERIAL
CEMENT (CM) BENTONITE CLAY (BC)
NO. OF BAGS 5 NO. OF POUNDS 470
GALLONS OF WATER 30
DEPTH OF GROUT SEAL (to nearest foot)
from 0 ft. to 13 ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
(ST) STEEL (CO) CONCRETE (PL) PLASTIC (OT) OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	4	15

OTHER CASING (if used) — EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below
(ST) STEEL (BR) BRASS BRONZE (HO) OPEN HOLE (PL) PLASTIC (OT) OTHER

EACH SCREEN

	TYPE	DEPTH (nearest ft.) from	to
1	PL	15	25
2			
3			

SLOT SIZE 20 2 _____ 3 _____
DIAMETER OF SCREEN 4 (NEAREST INCH)

GRAVEL PACK from 13 to _____
IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

C 3

PUMPING TEST
HOURS PUMPED (nearest hour) 2
PUMPING RATE (gal. per min. to nearest gal.) 2
METHOD USED TO MEASURE PUMPING RATE 5 gal bucket
WATER LEVEL (distance from land surface)
BEFORE PUMPING 12
WHEN PUMPING 20

TYPE OF PUMP USED (for test)
(A) air (P) piston (T) turbine
(C) centrifugal (R) rotary (O) other (describe below)
(J) jet (S) submersible

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO) YES (NO)
IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE
TYPE OF PUMP INSTALLED
PLACE (A,C,J,P,R,S,T,O) IN BOX - SEE ABOVE:
CAPACITY: GALLONS PER MINUTE (to nearest gallon)
PUMP HORSE POWER
PUMP COLUMN LENGTH (nearest ft.)
CASING HEIGHT (circle appropriate box and enter casing height)
(+) above (−) below LAND SURFACE 2 (nearest foot)

CIRCLE APPROPRIATE LETTER
A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
E ELECTRIC LOG OBTAINED
P TEST WELL CONVERTED TO PRODUCTION WELL

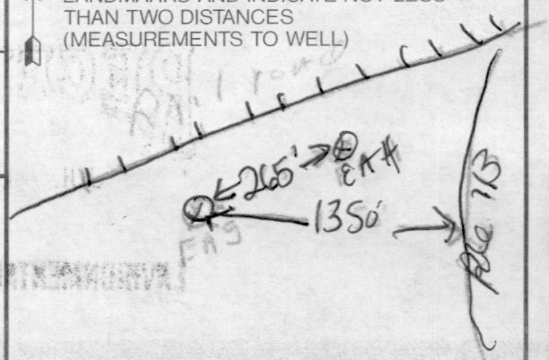
I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS IDENT. NO. 449
DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION) James Hallum

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

OEP USE ONLY (NOT TO BE FILLED IN BY DRILLER)
T (E.R.O.S.) W Q
TELESCOPE CASING LOG INDICATOR OTHER DATA

LOCATION OF WELL ON LOT FA-5
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



COUNTY

EMERGENCY/TEMP NO. IF ANY

B 1 | 3941 | SEQUENCE NO. (DP USE ONLY)
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please print or type

STATE PERMIT NUMBER: WO-85-0733
fill in this form completely

Date Received (APA): 05/15/91

OWNER INFORMATION
Worcester County
Last Name / Owner / First Name
Court House Rm 113
Street or RFD
Snow Hill MD 21863
Town / State / Zip

DRILLER INFORMATION
Thomas F Sullivan
Driller's Name — 77 License No. 80: 499
Firm Name: Earth Data Inc
Address: 605 Talbot St, St Michaels, Md 21663
Signature: Thomas F Sullivan — Date: 5.14.91

LOCATION OF WELL
B 3
8 COUNTY: Worcester
23 SUBDIVISION
SECTION / LOT
52 NEAREST TOWN: Snow Hill
MILES FROM TOWN (enter 0 if in town): 1 M

B 4
DIRECTION OF WELL FROM TOWN (CIRCLE BOX): NW 8-9, N 8, NE 8-9, W 8, TOWN, E 8, SW 8-9, S 8, SE 8-9
NEAR WHAT ROAD: Rte 113
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX): NORTH, WEST, EAST, SOUTH
DISTANCE FROM ROAD: 450
ENTER FT or MI: FT

WELL INFORMATION
B 2
APPROX. PUMPING RATE (GAL. PER MIN.)
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY)

USE FOR WATER (CIRCLE APPROPRIATE BOX)
- D — HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
- F — FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
- I — INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT)
- P — PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL)
- T — TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

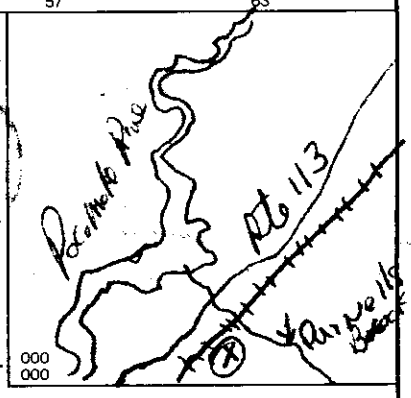
NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL
COUNTY NAME: Worcester — COUNTY NO.: 6395-91
STATE SIGNATURE — INSERT S
DATE ISSUED: 05/15/91 — CO SIGNATURE: Susan Phillips, RS — EXP. DATE: 11/15/91
NORTH GRID: 13100 — EAST GRID: 14650

APPROXIMATE DEPTH OF WELL: 35 FEET

APPROXIMATE DIAMETER OF WELL: 4 NEAREST INCH

METHOD OF DRILLING (circle one)
BORED (or Augered) — JETTED — Jetted & DRIVEN
AIR-ROTary — AIR-PERcussion — ROTARY (Hydraulic Rotary)
CABLE — REVerse-ROTary — DRive-POINT
other

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X
SOURCES OF DRILLING WATER
1.
2.
3.
WRITE THE BOX NUMBER FROM THE MAP HERE



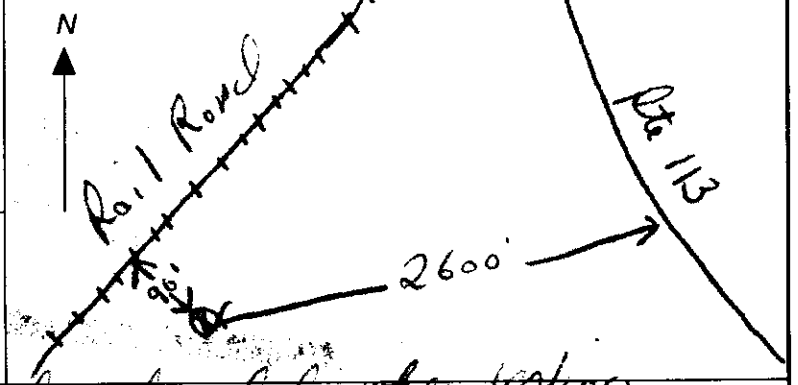
E 130
N 1260

REPLACEMENT OR DEEPENED WELLS
(CIRCLE APPROPRIATE BOX)
- N — THIS WELL WILL NOT REPLACE AN EXISTING WELL
- Y — THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- S — THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY
- D — THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENDED (IF AVAILABLE)

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

EA-S



Not to be filled in by driller (OEP USE ONLY)
APPROP. PERMIT NUMBER: GAP
FORCE — WRITE INITIALS IN BOX — PERMIT No. WO-85-0733

SPECIAL CONDITIONS: Test well to be abandoned and sealed when testing complete

COUNTY

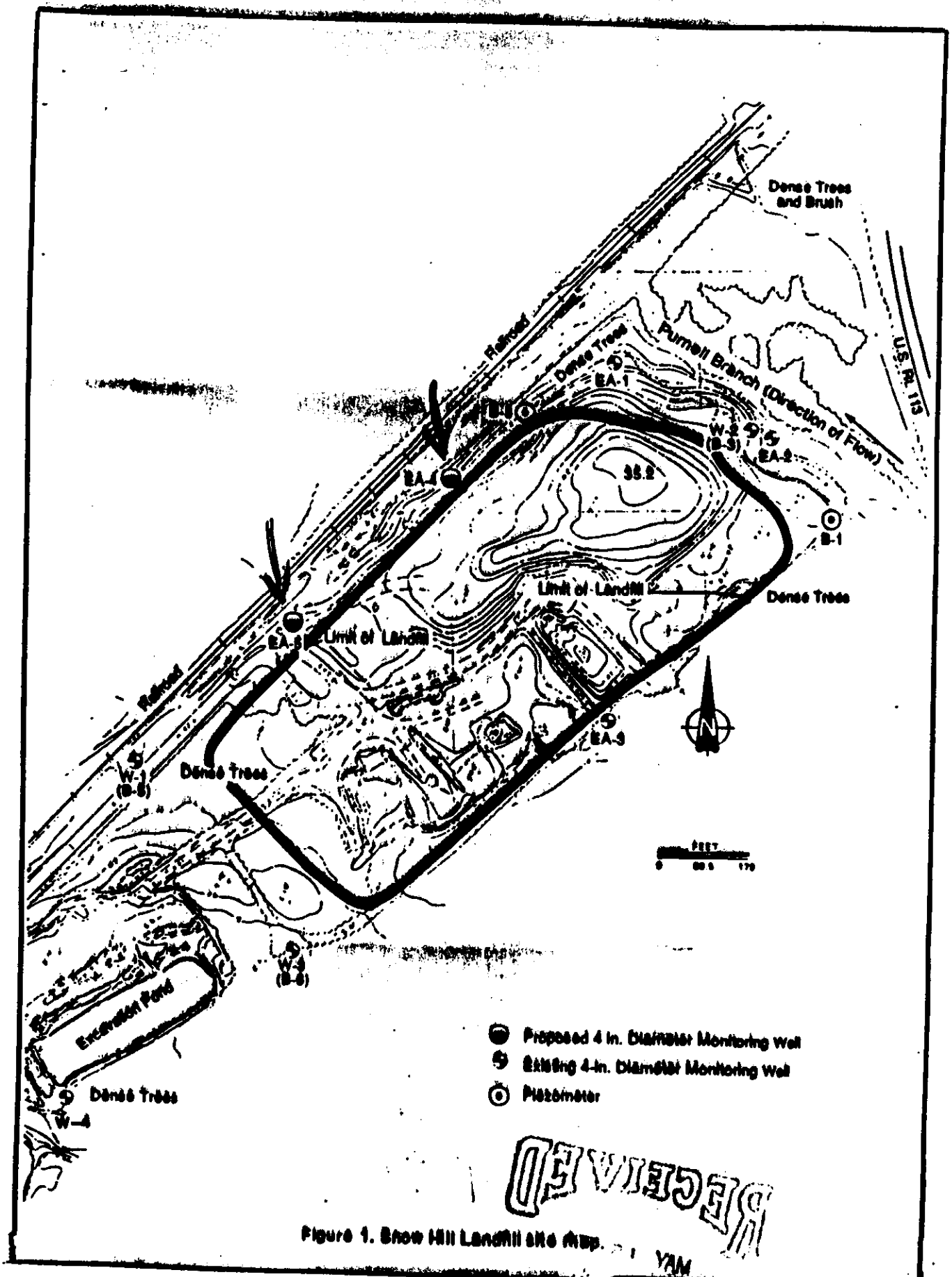


Figure 1. Snow Hill Landfill site map.

PLANNING, PERMITS AND INSPECTIONS

Worcester County

ROOM 116 COURT HOUSE

SNOW HILL, MARYLAND 21863

301 · 632 · 1200

PLANNING COMMISSION
BOARD OF APPEALS
ENVIRONMENTAL PROGRAMS

LICENSE COMMISSIONERS
ELECTRICAL BOARD
SHORELINE COMMISSION

WELL CONSTRUCTION PERMIT

PERMIT NO. 63- 95

STATE NO. WO-88-0733

PROPERTY OWNER WORCESTER COUNTY COMMISSIONERS

MAILING ADDRESS Room 112, Court House
Snow Hill, MD 21863

SUBDIVISION NO ENTRY

LOT BLOCK SECTION

WELL DRILLER EARTH DATA, INC.

SPECIAL CONDITIONS: TEST WELL TO BE ABANDONED AND SEALED WHEN TESTING IS COMPLETED.

26.04.04.09

B(d)i.

IN ACCORDANCE WITH THE REGULATIONS OF THE STATE OF MARYLAND COMAR 26.04.04, A PERMIT HAS BEEN ISSUED FOR THE CONSTRUCTION OF A WELL TO SERVE THE ABOVE PROPERTY.

APPROVING SANITARIAN Richard L Wells, RS

DATE 5/16/91

C 1 | 2944 | SEQUENCE NO. (DENV USE ONLY)

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 63-95

ST/GO USE ONLY
DATE Received

DATE WELL COMPLETED 06/19/91

Depth of Well 25 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" 40-88-0732

OWNER Worcester County (last name) (first name)

STREET OR RFD Court House Rm 113 TOWN Snow Hill 21863

SUBDIVISION SECTION LOT

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	Check if water bearing
Tan fine to med Sand	0	3	
Light Brown Fine to med Sand	3	7	
Light Tan fine Sand	7	12	
White Fine to Coarse Sand	12	27	

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 26.04.04 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS IDENT. NO. 444

Thomas Fullerton
DRILLERS SIGNATURE
(MUST MATCH SIGNATURE ON APPLICATION)

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y (44) no N (44)

TYPE OF GROUTING MATERIAL

CEMENT CM (45 46) BENTONITE CLAY BC (45 46)

NO. OF BAGS 5 NO. OF POUNDS 470

GALLONS OF WATER 30

DEPTH OF GROUT SEAL (to nearest foot)

from 0 (48 TOP 52) ft. to 13 (54 BOTTOM 58) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

ST STEEL CO CONCRETE PL PLASTIC OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL (60 61)	4 (63 64)	15 (66 70)

EACH CASING

	OTHER CASING (if used) diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below

ST STEEL BR BRASS BRONZE HO OPEN HOLE PL PLASTIC OT OTHER

C 2

EACH SCREEN

		DEPTH (nearest ft.)	
1	PL (8 9)	15 (11 15)	25 (17 21)
2	(23 24)	(26 30)	(32 36)
3	(38 39)	(41 45)	(47 51)

SLOT SIZE 1 .20 2 3

DIAMETER OF SCREEN 4 (56 60) (NEAREST INCH)

GRAVEL PACK from 13 to 26 (GOOD)

IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 (68)

OEP USE ONLY
(NOT TO BE FILLED IN BY DRILLER)

T (70) TELESCOPE CASING (E.R.O.S.) (72) LOG INDICATOR W Q (74 75 76) OTHER DATA

C 3

PUMPING TEST
HOURS PUMPED (nearest hour) 2 (8 9)

PUMPING RATE (gal. per min. to nearest gal.) 2 (11 15)

METHOD USED TO MEASURE PUMPING RATE Sqd bail

WATER LEVEL (distance from land surface)

BEFORE PUMPING 11 (17 20)

WHEN PUMPING 20 (22 25)

TYPE OF PUMP USED (for test)

A air (27) P piston (27) T turbine (27)

C centrifugal (27) R rotary (27) O other (describe below) (27)

J jet (27) S submersible (27)

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX - SEE ABOVE: (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31 35)

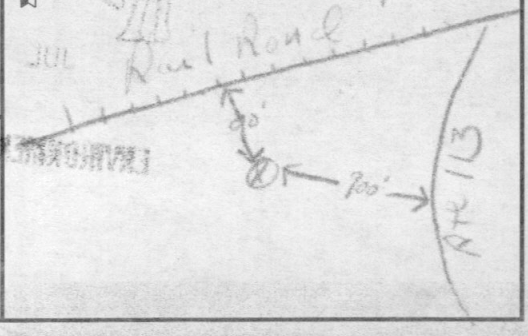
PUMP HORSE POWER (37 41)

PUMP COLUMN LENGTH (nearest ft.) (43 47)

CASING HEIGHT (circle appropriate box and enter casing height)

+ above (49) / – below (49) LAND SURFACE 2 (50 51) (nearest foot)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



COUNTY

EMERGENCY/TEMP NO. IF ANY

B 1 | 3940 | SEQUENCE NO. (DP USE ONLY)
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
APPLICATION FOR PERMIT TO DRILL WELL
please print or type

STATE PERMIT NUMBER: WO-88-0732
fill in this form completely

Date Received (APA): 05/15/91

OWNER INFORMATION
Last Name / Owner: WORCESTER COUNTY
Street or RFD: COURT HOUSE RM 113
Town: SNOW HILL
State: MD
Zip: 21863

DRILLER INFORMATION
Driller's Name: Thomas F Sullivan
License No.: 449
Firm Name: Earth Data Inc.
Address: 605 So. Talbot St. St Michaels Md 21663
Signature: Thomas F Sullivan
Date: 5-14-91

LOCATION OF WELL
B 3
COUNTY: WORCESTER
SUBDIVISION:
SECTION:
LOT:
NEAREST TOWN: SNOW HILL
MILES FROM TOWN (enter 0 if in town):

B 4
DIRECTION OF WELL FROM TOWN (CIRCLE BOX)
NW 8-9 | N 8 | NE 8-9 | W 8 | TOWN | E 8 | SW 8-9 | S 8 | SE 8-9

NEAR WHAT ROAD: Rte 113
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX): NORTH N | WEST W | 32 | E EAST | S SOUTH
DISTANCE FROM ROAD: 450
ENTER FT or MI: FT

WELL INFORMATION
B 2
APPROX. PUMPING RATE (GAL. PER MIN.):
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY):

USE FOR WATER (CIRCLE APPROPRIATE BOX)
- D HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
- F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
- I INDUSTRIAL, COMMERCIAL, STATE AND FEDERAL GOV. OTHER (REQUIRES APPROPRIATION PERMIT)
- P PUBLIC OR PRIVATE WATER COMPANY (REQUIRES APPROPRIATION PERMIT AND STATE HEALTH DEPARTMENT APPROVAL)
- T TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL
COUNTY NAME: Worcester
COUNTY NO.: 63-95-91
STATE SIGNATURE:
INSERT S:
DATE ISSUED: 05/15/91
CO SIGNATURE:
EXP. DATE: 11/15/91
NORTH GRID: 13000
EAST GRID: 26500

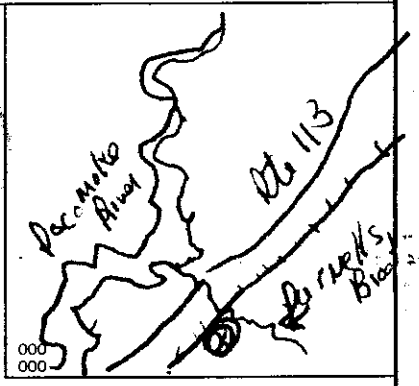
APPROXIMATE DEPTH OF WELL: 35 FEET
APPROXIMATE DIAMETER OF WELL: 4 NEAREST INCH

METHOD OF DRILLING (circle one)
BORED (or Augered) | JETTED | Jetted & DRIVEN
AIR-ROTary | AIR-PERcussion | ROTARY (Hydraulic Rotary)
CABLE | REVerse-ROTary | DRive-POINT
other

REPLACEMENT OR DEEPENED WELLS
(CIRCLE APPROPRIATE BOX)
- N THIS WELL WILL NOT REPLACE AN EXISTING WELL
- Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY
- D THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENDED (IF AVAILABLE):

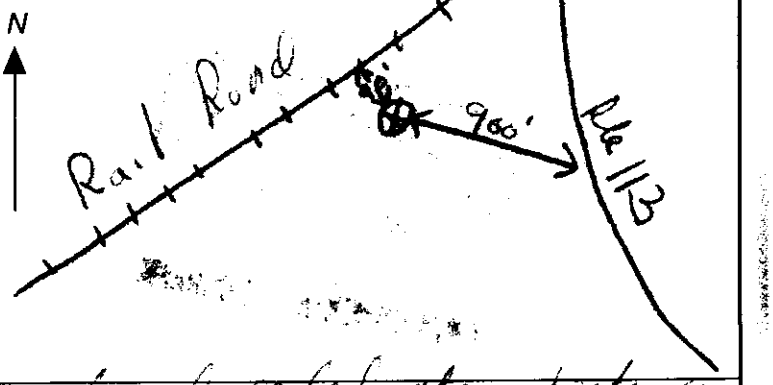
SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X
SOURCES OF DRILLING WATER
1.
2.
3.
WRITE THE BOX NUMBER FROM THE MAP HERE



E 1260
N 1300
000 000

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION

FA-4



Not to be filled in by driller (OEP USE ONLY)
APPROP. PERMIT NUMBER: GAP
FORCE: WRITE INITIALS IN BOX
PERMIT No.: WO-88-0732

SPECIAL CONDITIONS: Complete Test well to be abandoned and sealed after testing

COUNTY

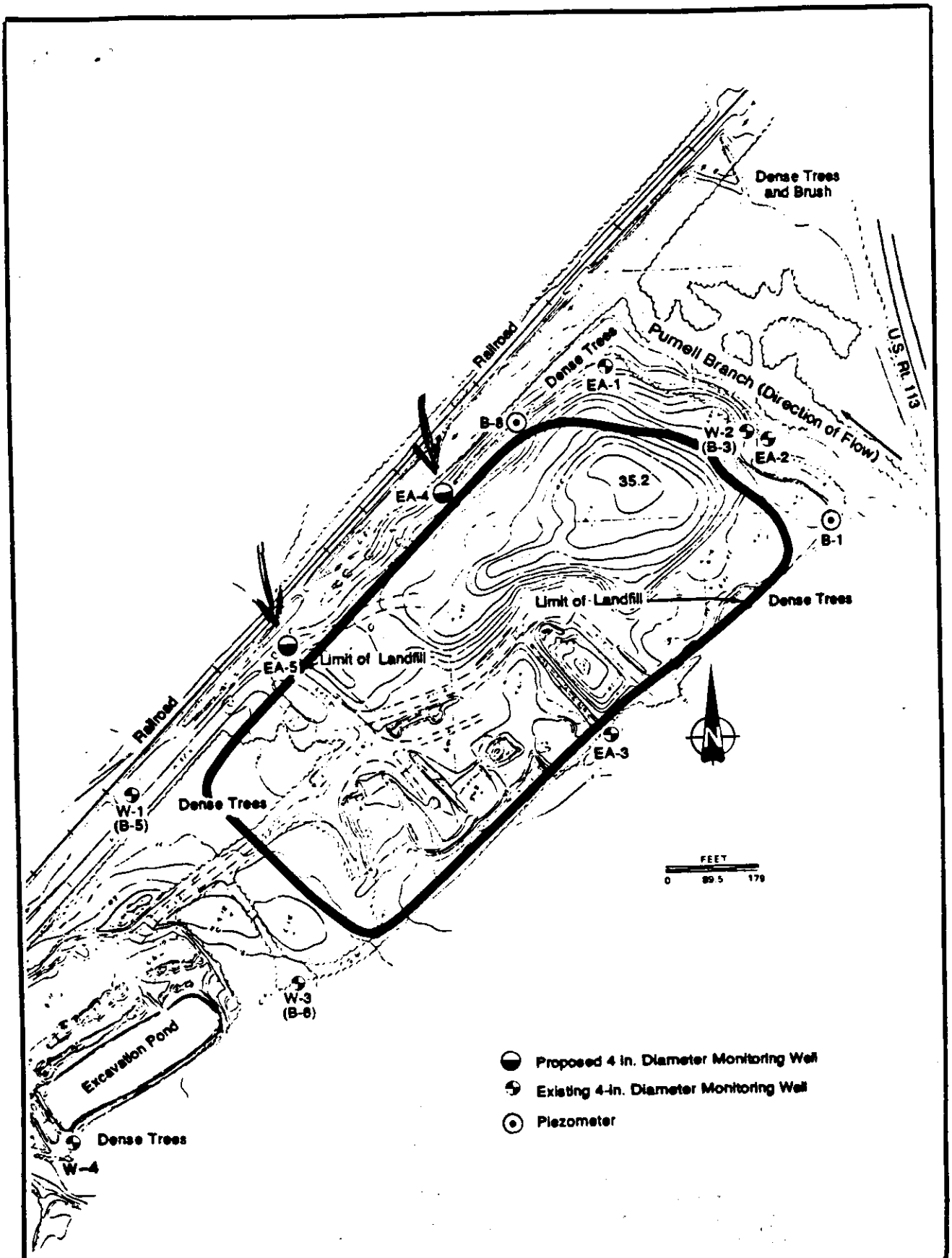


Figure 1. Snow Hill Landfill site map.

PLANNING, PERMITS AND INSPECTIONS

Worcester County

ROOM 116 COURT HOUSE

SNOW HILL, MARYLAND 21863

301-632-1200

PLANNING COMMISSION
BOARD OF APPEALS
ENVIRONMENTAL PROGRAMS

LICENSE COMMISSIONERS
ELECTRICAL BOARD
SHORELINE COMMISSION

WELL CONSTRUCTION PERMIT

PERMIT NO. 63- 95

STATE NO. WO-88-0732

PROPERTY OWNER WORCESTER COUNTY COMMISSIONERS

MAILING ADDRESS Room 112, Court House
Snow Hill, MD 21863

SUBDIVISION NO ENTRY

LOT BLOCK SECTION

WELL DRILLER EARTH DATA, INC.

SPECIAL CONDITIONS: TEST WELL TO BE ABANDONED AND SEALED WHEN TESTING IS COMPLETED.

IN ACCORDANCE WITH THE REGULATIONS OF THE STATE OF MARYLAND COMAR 26.04.04, A PERMIT HAS BEEN ISSUED FOR THE CONSTRUCTION OF A WELL TO SERVE THE ABOVE PROPERTY.

APPROVING SANITARIAN Richard L Wells RS

DATE 5/16/91

EMERGENCY/TEMP NO. IF ANY

B 1 2 - 4116 SEQUENCE NO. (DP USE ONLY)
1 2 3 6
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
PERMIT TO DRILL WELL
please print or type

STATE PERMIT NUMBER
70 WO-81-2175 79
fill in this form completely

Date Received (APA) 01 05 88 8 13
Worcester Co. Commissioners

OWNER INFORMATION
c/o
FA SCIENCE & TECHNOLOGY INC
15 Last Name Owner First Name 34
15 KOUFT CHU CIRCLE
36 Street or RFD 55
SPARKS MD 21152
57 Town 70 State 72 Zip 76

DRILLER INFORMATION
MICHAEL W HUBER 336
Driller's Name 77 License No. 80
HARDIN-HUBER INC
Firm Name
1230 KENSON BLVD, CRUSTON MD
Address
Signature 12/2/87 Date

B 2 1 2
WELL INFORMATION
APPROX. PUMPING RATE (GAL. PER MIN.) 0 8 12
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 0 14 20

USE FOR WATER (CIRCLE APPROPRIATE BOX)
D HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIG...)
22 I INDUS... COMME... S... FED./GOV. OTHE... USES A... RM)
P PUBL... OR PR... ATE ... (REQUIR... APPR... PERMIT ... H DEPARTMENT APPR... VAL)
T TEST, OBSER... MONITOR... (MAY REQUIRE APPROPRIATION PERMIT)

PERMIT

APPROXIMATE DEPTH OF WELL 80 24 28 FEET

APPROXIMATE DIAMETER OF WELL 4 NEAREST INCH

METHOD OF DRILLING (circle one)
BORED (or Augered) JETTED Jetted & DRIVEN
36 AIR-ROTary 37 AIR-PERcussion ROTARY (Hydraulic Rotary)
CABLE REVerse-ROTary DRive-POINT
other

REPLACEMENT OR DEEPENED WELLS
(CIRCLE APPROPRIATE BOX)
N THIS WELL WILL NOT REPLACE AN EXISTING WELL
Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
39 S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY
D THIS WELL WILL DEEPEN AN EXISTING WELL
PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENDED (IF AVAILABLE) 41 52

Not to be filled in by driller (OEP USE ONLY)
APPROP. PERMIT NUMBER 54 GAP 63
FORCE 67 68 WRITE INITIALS IN BOX PERMIT No. WO-81-2175 70 71 72 73 74 75 76 77 78 79

SPECIAL CONDITIONS Grout into Soil to 20'

B 3 1 2
LOCATION OF WELL
WORCESTER
8 COUNTY 21
23 SUBDIVISION 42
SECTION 44 46 LOT 48 50
SWAMP HILL
52 NEAREST TOWN 71
MILES FROM TOWN (enter 0 if in town) 1 73 76 MI 77 78

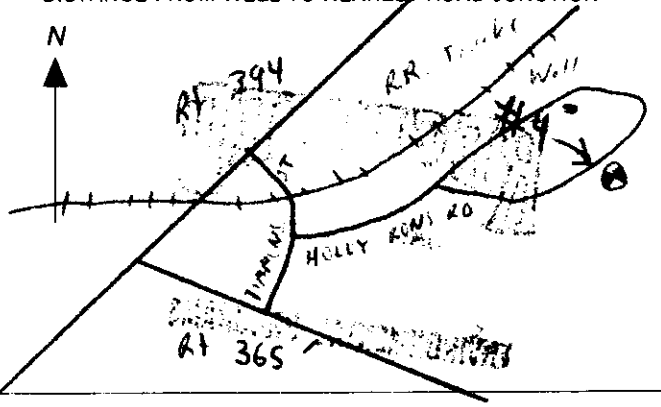
B 4 1 2
DIRECTION OF WELL FROM TOWN (CIRCLE BOX)
NW 8–9 N 8 NE 8–9 W 8 TOWN E 8 SW 8–9 S 8 SE 8–9

HOLLY RUN RD
11 NEAR WHAT ROAD 30
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH N WEST W 32 E EAST S SOUTH
34 50 37 DISTANCE FROM ROAD
ENTER FT or MI F 38 39

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL
Worcester 63-95-88
COUNTY NAME COUNTY NO.
STATE SIGNATURE INSERT S 41
DATE ISSUED 01 12 88 43 48 Cynthia A Bloxom 7/12/88
CO SIGNATURE EXP. DATE
NORTH GRID 130000 50 55 EAST GRID 126500 57 63

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X
SOURCES OF DRILLING WATER
1. MUNICIPLE
2.
3.
WRITE THE BOX NUMBER FROM THE MAP HERE
E 1.260
N 130
000 000

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



COUNTY

C 1 5132 SEQUENCE NO. (OEP USE ONLY)

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 63-95-88

DATE Received

DATE WELL COMPLETED 12 9 87

Depth of Well 25 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" WO-81-2175

OWNER EA SCIENCE & TECHNOLOGY

STREET OR RFD 15 LOUCHIN CIRCLE TOWN SPARKS

SUBDIVISION SECTION LOT

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	Check if water bearing
BROWN TO TAN MOIST SILTY MED. TO FIN SAND trace of Clay	0	10	
TAN WET FINE TO MED SAND	10	20	✓
GREY WH & WET MED. DENSE TO LOOSE MF SAND	20	25	✓

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y / no N

TYPE OF GROUTING MATERIAL

CEMENT CM BENTONITE CLAY BC

NO. OF BAGS 4 NO. OF POUNDS 400

GALLONS OF WATER 21

DEPTH OF GROUT SEAL (to nearest foot)

from 0 (TOP) ft. to 12 (BOTTOM) ft.

(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below

ST STEEL CO CONCRETE PL PLASTIC OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	4	35

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	to

SCREEN RECORD
screen type or open hole — insert appropriate code below

ST STEEL BR BRASS BRONZE HO OPEN HOLE PL PLASTIC OT OTHER

C 2

EACH SCREEN		DEPTH (nearest ft.)	
1	PL	15	25
2			
3			

SLOT SIZE 1 .010 2 3

DIAMETER OF SCREEN 4 (NEAREST INCH)

GRAVEL PACK from 12 to 25

IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

C 3

PUMPING TEST
HOURS PUMPED (nearest hour)

PUMPING RATE (gal. per min. to nearest gal.)

METHOD USED TO MEASURE PUMPING RATE N/A

WATER LEVEL (distance from land surface)

BEFORE PUMPING

WHEN PUMPING

TYPE OF PUMP USED (for test)

A air P piston T turbine

C centrifugal R rotary O other (describe below)

J jet S submersible

MONITORING

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX - SEE ABOVE: N/A

CAPACITY: GALLONS PER MINUTE (to nearest gallon)

PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)

+ above / − below LAND SURFACE 2 (nearest foot)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)

CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 10.17.13 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS IDENT. NO. 336

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

OEP USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T (E.R.O.S.) W Q

70 TELESCOPE CASING 72 LOG INDICATOR 74 75 76 OTHER DATA

HEALTH

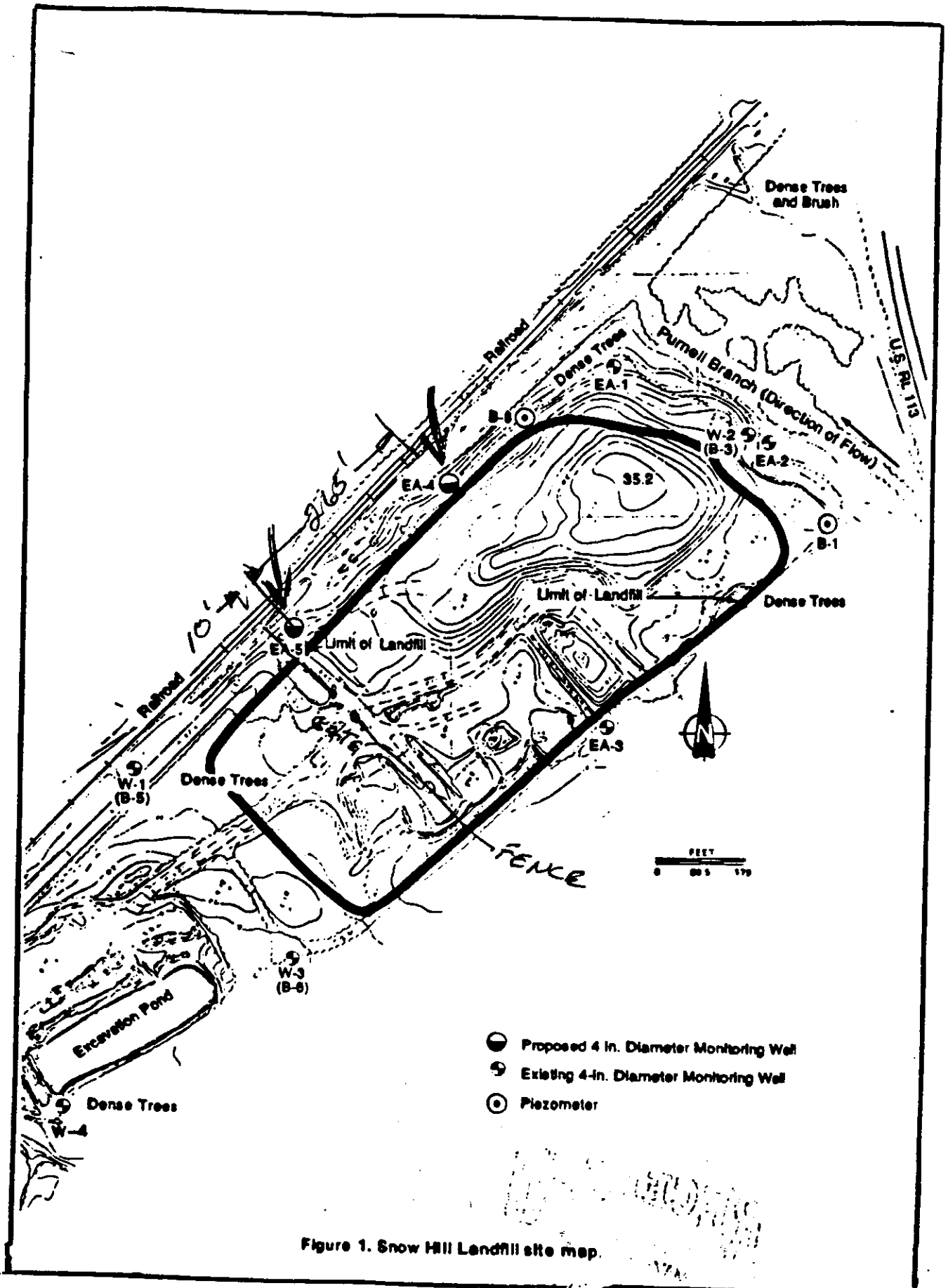


Figure 1. Snow Hill Landfill site map.

EMERGENCY/TEMP NO. IF ANY

B 1 | 4113 | SEQUENCE NO. (DP USE ONLY)
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
PERMIT TO DRILL WELL
please print or type

STATE PERMIT NUMBER: W0-81-2174
fill in this form completely

Date Received (APA) 01/05/88 — Worchester Co. Commissioners

OWNER INFORMATION
EA SCIENCE & TECHNOLOGY INC
Last Name / Owner / First Name
15 KOVETOWN CIRCLE
Street or RFD
SPARKS MD 21152
Town / State / Zip

DRILLER INFORMATION
MICHAEL W HUBER — 336 — License No. 80
Driller's Name
HARDIN-HUBER INC
Firm Name
230 LARSON BLVD LAUREL, MD
Address
Signature _____ Date 1/7/88

WELL INFORMATION
APPROX. PUMPING RATE (GAL. PER MIN.) 0
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY) 0

USE FOR WATER (CIRCLE APPROPRIATE BOX)
- D HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
- F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRRIGATION)
- I INDUSTRIAL, COMMERCIAL, INSTITUTIONAL, FEDERAL GOV. OPERATIONS (REQUIRES APPROPRIATION PERMIT)
- P PUBLIC OR PRIVATE WATER SUPPLY (REQUIRES APPROPRIATION PERMIT AND HEALTH DEPARTMENT APPROVAL)
- T TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

PERMIT

APPROXIMATE DEPTH OF WELL 25 FEET

APPROXIMATE DIAMETER OF WELL 4 NEAREST INCH

METHOD OF DRILLING (circle one)
BORED (or Augered) JETTED Jetted & DRIVEN
AIR-ROTary AIR-PERcussion ROTARY (Hydraulic Rotary)
CABLE REVerse-ROTary DRive-POINT
other _____

REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)
- N THIS WELL WILL NOT REPLACE AN EXISTING WELL
- Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY
- D THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENDED (IF AVAILABLE)

Not to be filled in by driller (OEP USE ONLY)

APPROP. PERMIT NUMBER GAP

FORCE ___ WRITE INITIALS IN BOX PERMIT No. W0-81-2174

SPECIAL CONDITIONS Grout and seal to 20'

LOCATION OF WELL
WORCESTER
8 COUNTY
23 SUBDIVISION
SECTION LOT
52 NEAREST TOWN
MILES FROM TOWN (enter 0 if in town) 1 MI

DIRECTION OF WELL FROM TOWN (CIRCLE BOX)
NW N NE W TOWN E SW S SE

HOLLY KNOLL RD
NEAR WHAT ROAD

ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX)
NORTH W WEST E EAST S SOUTH

DISTANCE FROM ROAD 50
ENTER FT or MI FT

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL

WORCESTER — 03-95-58
COUNTY NAME / COUNTY NO.

STATE SIGNATURE _____ INSERT S

DATE ISSUED 01/12/88 — CO SIGNATURE Cynthia A Jones — EXP. DATE 7/12/88

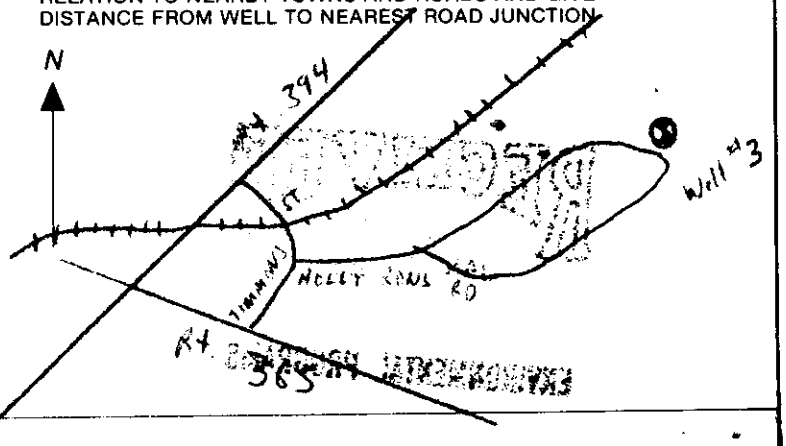
NORTH GRID 130000 EAST GRID 126500

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X

SOURCES OF DRILLING WATER
1. MUNICIPLE
2.
3.

WRITE THE BOX NUMBER FROM THE MAP HERE
E 1,260
N 130
000 000

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



COUNTY

C 1 | 5133 | SEQUENCE NO. (OEP USE ONLY)

(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT
FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 63-95-88

DATE Received

DATE WELL COMPLETED 12/6/87

Depth of Well 75 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" WO-81-2174

OWNER FA SCIENCE & TECHNOLOGY INC
STREET OR RFD 15 COMPTON CIRCLE TOWN SPARKS
SUBDIVISION SECTION LOT

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	Check if water bearing
BROWN & TAN SILTY MF SAND	0	10	✓
GRAY/white & Blue wht WET FINE SAND	10	27	✓
TAN TO BROWN WET Loose FINE & MED SAND	27	40	✓
GREY BROWN DENSE F to MED SAND	40	77	✓

CIRCLE APPROPRIATE LETTER
- A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED
- E ELECTRIC LOG OBTAINED
- P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 10.17.13 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS IDENT. NO. 336

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

GROUTING RECORD
WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y no N

TYPE OF GROUTING MATERIAL
CEMENT CM BENTONITE CLAY BC

NO. OF BAGS 15 NO. OF POUNDS 750

GALLONS OF WATER 105

DEPTH OF GROUT SEAL (to nearest foot)
from 0 ft. to 51 ft.
(enter 0 if from surface)

CASING RECORD
casing types insert appropriate code below
- ST STEEL
- CO CONCRETE
- PL PLASTIC
- OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL	4	55

OTHER CASING (if used)

EACH CASING	diameter inch	depth (feet) from	depth (feet) to
1			
2			

SCREEN RECORD
screen type or open hole insert appropriate code below
- ST STEEL
- BR BRASS BRONZE
- HO OPEN HOLE
- PL PLASTIC
- OT OTHER

C 2

EACH SCREEN	DEPTH (nearest ft.)	
1	PL	55 to 75
2		to
3		to

SLOT SIZE 1 .010 2 3

DIAMETER OF SCREEN 4 (NEAREST INCH)

GRAVEL PACK from 51 to 75

IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68

OEP USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T TELESCOPE CASING | (E.R.O.S.) LOG INDICATOR | WQ OTHER DATA

C 3

PUMPING TEST
HOURS PUMPED (nearest hour)

PUMPING RATE (gal. per min. to nearest gal.)

METHOD USED TO MEASURE PUMPING RATE N/A

WATER LEVEL (distance from land surface)
- BEFORE PUMPING
- WHEN PUMPING

TYPE OF PUMP USED (for test)
- A air
- P piston
- T turbine
- C centrifugal
- R rotary
- O other (describe below)
- J jet
- S submersible

MONITORING

PUMP INSTALLED
DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO) YES (NO)

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX - SEE ABOVE: N/A

CAPACITY: GALLONS PER MINUTE (to nearest gallon)

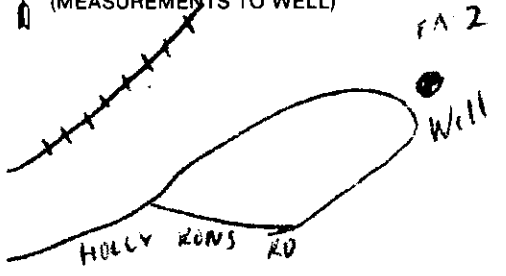
PUMP HORSE POWER

PUMP COLUMN LENGTH (nearest ft.)

CASING HEIGHT (circle appropriate box and enter casing height)
- + above
- − below

LAND SURFACE 2 (nearest foot)

LOCATION OF WELL ON LOT
SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



HEALTH

EMERGENCY/TEMP NO. IF ANY

B 1 | 4115 | SEQUENCE NO. (DP USE ONLY)
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
PERMIT TO DRILL WELL
please print or type

STATE PERMIT NUMBER: W0-81-2173
fill in this form completely

Date Received (APA) Worcester Co. Commissioners: 01058

OWNER INFORMATION
E A SAVAGE & TEAMWORK FARM
Last Name / Owner / First Name
15 KOVETOWN CIRCLE
Street or RFD
SNOW HILL MD 21852
Town / State / Zip

DRILLER INFORMATION
MICHAEL W HUBER
Driller's Name: 336 — License No. 80
MARDIN HUBER INC
Firm Name
1230 IRONSON BLVD CROFTON MD
Address
Signature: [signature] Date: 12/2/87

B 2 WELL INFORMATION
APPROX. PUMPING RATE (GAL. PER MIN.): 0
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY): 0

USE FOR WATER (CIRCLE APPROPRIATE BOX)
- D HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
- F FARM [illegible] IRRIGATION)
- I INDUSTRIAL, COMMERCIAL, [illegible] DEPT. GOV. OTHER (REQUIRES APPROPRIATION PERMIT)
- P PUBLIC OR PRIVATE WATER SUPPLY (REQUIRES APPROPRIATION PERMIT AND TEST BY HEALTH DEPARTMENT APPROVAL)
- T TEST, OBSERVATION, MONITORING (MAY REQUIRE APPROPRIATION PERMIT)

PERMIT

APPROXIMATE DEPTH OF WELL: 25 FEET

APPROXIMATE DIAMETER OF WELL: 4 NEAREST INCH

METHOD OF DRILLING (circle one)
BORED (or Augered) — JETTED — Jetted & DRIVEN
AIR-ROTary — AIR-PERcussion — ROTARY (Hydraulic Rotary)
CABLE — REVerse-ROTary — DRive-POINT
other

REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)
- N THIS WELL WILL NOT REPLACE AN EXISTING WELL
- Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY
- D THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENDED (IF AVAILABLE)

Not to be filled in by driller (OEP USE ONLY)
APPROP. PERMIT NUMBER: GAP
FORCE [ ] WRITE INITIALS IN BOX — PERMIT No. W0-81-2173

SPECIAL CONDITIONS: Grout and seal to 20'.

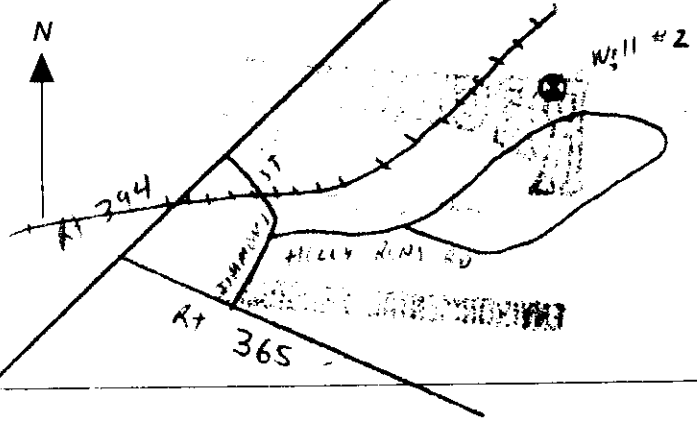
B 3 LOCATION OF WELL
WORCESTER
8 COUNTY
23 SUBDIVISION
SECTION — LOT
52 NEAREST TOWN: SNOW HILL
MILES FROM TOWN (enter 0 if in town): 1 MI

B 4
DIRECTION OF WELL FROM TOWN (CIRCLE BOX): N, NW, NE, W, TOWN, E, SW, S, SE
HOLLY NECK RD
NEAR WHAT ROAD
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX): NORTH, WEST, EAST, SOUTH
DISTANCE FROM ROAD: 50
ENTER FT or MI: FT

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL
WORCESTER — 03-95-88
COUNTY NAME — COUNTY NO.
STATE SIGNATURE — INSERT S
DATE ISSUED: 01128 — CO SIGNATURE — EXP. DATE: 7/12/88
NORTH GRID: 130000 — EAST GRID: 1265000

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X
SOURCES OF DRILLING WATER
1. MUNICIPLE
2.
3.
WRITE THE BOX NUMBER FROM THE MAP HERE
E 1,260
N 130
000
000

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



COUNTY

C 1 5134 (1 2 3 6)

SEQUENCE NO. (OEP USE ONLY)

THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
WELL COMPLETION REPORT

FILL IN THIS FORM COMPLETELY
PLEASE PRINT OR TYPE

THIS REPORT MUST BE SUBMITTED WITHIN 45 DAYS AFTER WELL IS COMPLETED.

COUNTY NUMBER 63-95-88

DATE Received (8–13)

DATE WELL COMPLETED 1 2 0 8 8 7 (15–20)

Depth of Well (22–26) 2 5 (TO NEAREST FOOT)

PERMIT NO. FROM "PERMIT TO DRILL WELL" W O - 8 1 - 2 1 7 3 (28–37)

OWNER EA SCIENCE + TECHNOLOGY (last name / first name)

STREET OR RFD 15 COVETON CIRCLE TOWN SPARKS

SUBDIVISION _____ SECTION _____ LOT _____

WELL LOG
Not required for driven wells

STATE THE KIND OF FORMATIONS PENETRATED, THEIR COLOR, DEPTH, THICKNESS AND IF WATER BEARING

DESCRIPTION (Use additional sheets if needed)	FEET FROM	FEET TO	Check if water bearing
FILL	0	10	✓
BROWN MEDIUM SAND	10	20	✓
BLUE/GREY SILTY FINE SAND	20	25	✓

GROUTING RECORD

WELL HAS BEEN GROUTED (Circle Appropriate Box) yes Y (44) no N (44)

TYPE OF GROUTING MATERIAL

CEMENT C M (45 46) BENTONITE CLAY B C (45 46)

NO. OF BAGS 3 NO. OF POUNDS 300

GALLONS OF WATER 21

DEPTH OF GROUT SEAL (to nearest foot)

from 0 (48) TOP (52) ft. to 10 (54) BOTTOM (58) ft.

(enter 0 if from surface)

CASING RECORD

casing types — insert appropriate code below

ST STEEL; CO CONCRETE; PL PLASTIC; OT OTHER

MAIN CASING TYPE	Nominal diameter top (main) casing (nearest inch)	Total depth of main casing (nearest foot)
PL (60 61)	4 (63 64)	15 (66–70)

OTHER CASING (if used) — EACH CASING

diameter inch	depth (feet) from	to

SCREEN RECORD

screen type or open hole — insert appropriate code below

ST STEEL; BR BRASS BRONZE; HO OPEN HOLE; PL PLASTIC; OT OTHER

C 2 (1 2)

DEPTH (nearest ft.)

EACH SCREEN		DEPTH (nearest ft.)	
1	PL (8 9)	15 (11–15)	25 (17–21)
2	(23 24)	(26–30)	(32–36)
3	(38 39)	(41–45)	(47–51)

SLOT SIZE 1 .010 2 _____ 3 _____

DIAMETER OF SCREEN 4 (56–60) (NEAREST INCH)

GRAVEL PACK from 10 to 25

IF WELL DRILLED WAS FLOWING WELL INSERT F IN BOX 68 (68)

C 3 (1 2)

PUMPING TEST

HOURS PUMPED (nearest hour) (8 9)

PUMPING RATE (gal. per min. to nearest gal.) (11–15)

METHOD USED TO MEASURE PUMPING RATE N/A

WATER LEVEL (distance from land surface)

BEFORE PUMPING (17–20)

WHEN PUMPING (22–25)

TYPE OF PUMP USED (for test)

A air (27); P piston (27); T turbine (27)

C centrifugal (27); R rotary (27); O other (describe below) (27)

J jet (27); S submersible (27)

MONITORING

PUMP INSTALLED

DRILLER WILL INSTALL PUMP (CIRCLE) (YES or NO) YES NO

IF DRILLER INSTALLS PUMP, THIS SECTION MUST BE COMPLETED FOR ALL WELLS EXCEPT HOME USE

TYPE OF PUMP INSTALLED PLACE (A,C,J,P,R,S,T,O) IN BOX - SEE ABOVE: N/A (29)

CAPACITY: GALLONS PER MINUTE (to nearest gallon) (31–35)

PUMP HORSE POWER (37–41)

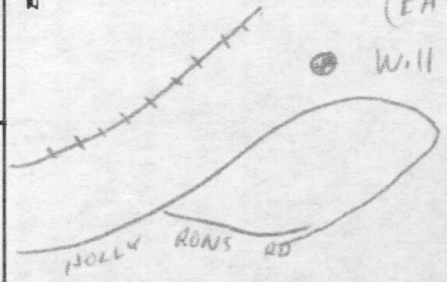
PUMP COLUMN LENGTH (nearest ft.) (43–47)

CASING HEIGHT (circle appropriate box and enter casing height)

+ above (49); – below (49) — LAND SURFACE 3 (50 51) (nearest foot)

LOCATION OF WELL ON LOT

SHOW PERMANENT STRUCTURE SUCH AS BUILDING, SEPTIC TANKS, AND/OR LANDMARKS AND INDICATE NOT LESS THAN TWO DISTANCES (MEASUREMENTS TO WELL)



CIRCLE APPROPRIATE LETTER

A A WELL WAS ABANDONED AND SEALED WHEN THIS WELL WAS COMPLETED

E ELECTRIC LOG OBTAINED

P TEST WELL CONVERTED TO PRODUCTION WELL

I HEREBY CERTIFY THAT THIS WELL HAS BEEN CONSTRUCTED IN ACCORDANCE WITH COMAR 10.17.13 "WELL CONSTRUCTION" AND IN CONFORMANCE WITH ALL CONDITIONS STATED IN THE ABOVE CAPTIONED PERMIT, AND THAT THE INFORMATION PRESENTED HEREIN IS ACCURATE AND COMPLETE TO THE BEST OF MY KNOWLEDGE.

DRILLERS IDENT. NO. 336

DRILLERS SIGNATURE (MUST MATCH SIGNATURE ON APPLICATION)

SITE SUPERVISOR (sign. of driller or journeyman responsible for sitework if different from permittee)

OEP USE ONLY (NOT TO BE FILLED IN BY DRILLER)

T	(E.R.O.S.)	W Q
(70)	(72)	(74 75 76)
TELESCOPE CASING	LOG INDICATOR	OTHER DATA

EMERGENCY/TEMP NO. IF ANY

B 1 | 4114 | SEQUENCE NO. (DP USE ONLY)
(THIS NUMBER IS TO BE PUNCHED IN COLS. 3-6 ON ALL CARDS)

STATE OF MARYLAND
PERMIT TO DRILL WELL
please print or type

STATE PERMIT NUMBER: WO-81-1172
fill in this form completely

Date Received (APA) Worcester Co. Commissioners: 01058

OWNER INFORMATION
Last Name: EA SKANTE | First Name: FRANCIS | Middle Initial: A
Street or RFD: 15 GOVERNOR CIRCLE
Town: SPARKS | State: MD | Zip: 21152

DRILLER INFORMATION
Driller's Name: MICHAEL W HUBER | 77 License No.: 336
Firm Name: HARDIN HUBER INC
Address: 1230 RONSON BLVD CROFTON MD
Signature: [signature] | Date: 2/24/87

B 2 WELL INFORMATION
APPROX. PUMPING RATE (GAL. PER MIN.): 0
AVERAGE DAILY QUANTITY NEEDED (GAL. PER DAY): 0

USE FOR WATER (CIRCLE APPROPRIATE BOX)
- D HOME (SINGLE OR DOUBLE HOUSEHOLD UNIT ONLY)
- F FARMING (LIVESTOCK WATERING & AGRICULTURAL IRR[illegible]N
- I INDU[illegible] COMM[illegible], [illegible] FED[illegible] GOV. OTH[illegible] RES[illegible] PP[illegible] E[illegible] IT)
- P PUB[illegible] OR [illegible] EQU[illegible]ES APPROPRIA[illegible] PE[illegible] AN[illegible] [illegible] H DEPARTMENT APPROVAL)
- T TES[illegible] OBSE[illegible] M[illegible] REQUIRE APPROPRIATION PERMIT)

PERMIT

APPROXIMATE DEPTH OF WELL: 25 FEET
APPROXIMATE DIAMETER OF WELL: 4 NEAREST INCH

METHOD OF DRILLING (circle one)
BORED (or Augered) | JETTED | Jetted & DRIVEN
AIR-ROTary | AIR-PERcussion | ROTARY (Hydraulic Rotary)
CABLE | REVerse-ROTary | DRive-POINT
other

REPLACEMENT OR DEEPENED WELLS (CIRCLE APPROPRIATE BOX)
- N THIS WELL WILL NOT REPLACE AN EXISTING WELL
- Y THIS WELL WILL REPLACE A WELL THAT WILL BE ABANDONED AND SEALED
- S THIS WELL WILL REPLACE A WELL THAT WILL BE USED AS A STANDBY
- D THIS WELL WILL DEEPEN AN EXISTING WELL

PERMIT NUMBER OF WELL TO BE REPLACED OR DEEPENDED (IF AVAILABLE):

Not to be filled in by driller (OEP USE ONLY)
APPROP. PERMIT NUMBER: GAP
FORCE (WRITE INITIALS IN BOX): PERMIT No. WO-81-1172

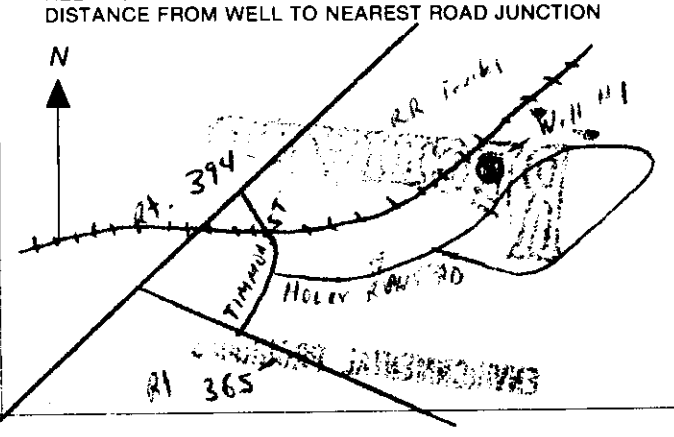
B 3 LOCATION OF WELL
8 COUNTY: WORCESTER
23 SUBDIVISION:
SECTION: | LOT:
52 NEAREST TOWN: SNOW HILL
MILES FROM TOWN (enter 0 if in town): 1 MI

B 4
DIRECTION OF WELL FROM TOWN (CIRCLE BOX): N, NE, E, SE, S, SW, W, TOWN
NEAR WHAT ROAD: HOLLY RONE RD
ON WHICH SIDE OF ROAD (CIRCLE APPROPRIATE BOX): NORTH, WEST, EAST, SOUTH
DISTANCE FROM ROAD: 50
ENTER FT or MI:

NOT TO BE FILLED IN BY DRILLER
HEALTH DEPARTMENT APPROVAL
COUNTY NAME: WORCESTER | COUNTY NO.: 63-95-88
STATE SIGNATURE: | INSERT S
DATE ISSUED: 01 12 88 | CO SIGNATURE: Cynthia Ivins | EXP. DATE: 7/12/88
NORTH GRID: 130000 | EAST GRID: 1265000

SHOW MAJOR FEATURES OF BOX & LOCATE WELL WITH AN X
SOURCES OF DRILLING WATER
1. MUNICIPLE
2.
3.
WRITE THE BOX NUMBER FROM THE MAP HERE
E 1,260
N 130
000 000

DRAW A SKETCH BELOW SHOWING LOCATION OF WELL IN RELATION TO NEARBY TOWNS AND ROADS AND GIVE DISTANCE FROM WELL TO NEAREST ROAD JUNCTION



SPECIAL CONDITIONS: Grout seal to be 20'.

COUNTY

Appendix C

MDE Monitoring Parameters Tables I and II

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MDE MONITORING PARAMETERS - TABLE I

Volatile Organic Compound Monitoring Parameters	Units	PQL	MCL	NCTS	Cleanup STD
Acetone	µg/L	5.0			1400
Acrylonitrile	µg/L	5.0		0.51	
Benzene	µg/L	1.0	5.0	22	5.0
Bromochloromethane	µg/L	1.0			
Bromomethane	µg/L	1.0			0.75
2-Butanone	µg/L	5.0			560
Carbon disulfide	µg/L	1.0			81
Carbon tetrachloride	µg/L	1.0	5.0	2.3	5.0
Chlorobenzene	µg/L	1.0	100	130	100
Chloroethane	µg/L	1.0			
Chloromethane	µg/L	1.0			19
1,2-Dibromo-3-chloropropane; (DBCP)	µg/L	0.04	0.2		0.20
1,2-Dibromoethane; (EDB)	µg/L	0.04	0.05		0.050
Dibromomethane	µg/L	1.0			
1,2-Dichlorobenzene	µg/L	1.0	600	420	
1,4-Dichlorobenzene	µg/L	1.0	75	63	
trans-1,4-Dichloro-2-butene	µg/L	5.0			
1,1-Dichloroethane	µg/L	1.0			2.8
1,2-Dichloroethane	µg/L	1.0	5.0	3.8	5.0
1,1-Dichloroethene	µg/L	1.0	7.0	330	7.0
cis-1,2-Dichloroethene	µg/L	1.0	70		70
trans-1,2-Dichloroethene	µg/L	1.0	100	140	100
Methylene chloride	µg/L	1.0	5.0	46	5.0
Methyl *tert*-butyl ether; (MTBE)	µg/L	2.0			20
1,2-Dichloropropane	µg/L	1.0	5.0	5.0	5.0
trans-1,3-Dichloropropene	µg/L	1.0			
cis-1,3-Dichloropropene	µg/L	1.0			
Ethylbenzene	µg/L	1.0	700	530	700
2-Hexanone	µg/L	5.0			
Iodomethane	µg/L	1.0			
4-Methyl-2-pentanone	µg/L	5.0			630
Styrene	µg/L	1.0	100		100
1,1,1,2-Tetrachloroethane	µg/L	1.0			
1,1,2,2-Tetrachloroethane	µg/L	1.0		1.7	0.076
Tetrachloroethene; (PCE)	µg/L	1.0	5.0	6.9	5.0
Toluene	µg/L	1.0	1000	1300	1000
1,1,1-Trichloroethane	µg/L	1.0	200	200	200
1,1,2-Trichloroethane	µg/L	1.0	5.0	5.9	5.0
Trichloroethene; (TCE)	µg/L	1.0	5.0	25	5.0
Trichlorofluoromethane; (CFC-11)	µg/L	1.0			
1,2,3-Trichloropropane	µg/L	1.0			
Vinyl acetate	µg/L	1.0			
Vinyl chloride	µg/L	1.0	2.0	0.25	2.0
o-Xylene	µg/L	1.0	10,000		10,000
m-+*p*-Xylenes	µg/L	1.0	(total)		
Bromodichloromethane	µg/L	1.0			80
Dibromochloromethane	µg/L	1.0	80	80	80
Bromoform	µg/L	1.0	(total)	(total)	80
Chloroform	µg/L	1.0			80

PQL = Practical Quantitation Limit
MCL = Maximum Contaminant Level
NCTS = Numerical Criteria for Toxic Substances in Surface Waters
Cleanup STD = MDE Cleanup Standards for Groundwater (for Assessment Monitoring)
µg/L = microgram per liter (parts per billion, ppb)

MDE MONITORING PARAMETERS - TABLE I (cont.)

Per- and Polyfluoroalkyl Substances (PFAS)	Units	PQL	MCL	HI MCL[1]	HBWC
Perfluorooctanoic acid (PFOA)	ng/L	4.0	4.0		
Perfluorooctanesulfonic acid (PFOS)	ng/L	4.0	4.0		
Perfluorononanoic acid (PFNA)	ng/L	4.0	10	1.0 (unitless)	10
Perfluorohexanesulfonic acid (PFHxS)	ng/L	3.0	10		10
Hexafluoropropylene oxide dimer acid (HFPO-DA; GenX)	ng/L	5.0	10		10
Perfluorobutanesulfonic acid (PFBS)	ng/L	3.0			2000

PQL = Practical Quantitation Limit (Method 1633)
MCL = Maximum Contaminant Level
HI MCL = Hazard Index MCL (Mixture of two or more: PFNA, PFHxS, HFPO-DA, and PFBS)
HBWC = Health-Based Water Concentrations
ng/L = nanogram per liter (parts per trillion, ppt)

Note:
1 – A running annual average hazard index value greater than 1.0 is a violation of the HI MCL. Hazard Index level for two or more of four PFAS as a mixture: PFNA, PFHxS, HFPO-DA, and PFBS.
Formula: Hazard Index Value = ((PFNA ng/L)/(10 ng/L)) + ((PFHxS ng/L)/(10 ng/L)) + (GenX ng/L)/(10 ng/L)) + ((PFBS ng/L)/(2000 ng/L))

To calculate the Hazard Index, follow the steps:

1. Step 1. Divide the measured concentration of HFPO-DA(GenX) by its health-based value of 10 ppt.
2. Step 2. Divide the measured concentration of PFBS by its health- based value of 2000 ppt.
3. Step 3. Divide the measured concentration of PFNA by its health-based value of 10 ppt.
4. Step 4. Divide the measured concentration of PFHxS by its health-based value of 10 ppt.
5. Step 5. Add the ratios from steps 1, 2, 3 and 4 together using the Health Index Value
6. Step 6. Compliance with the Hazard Index MCL is determined by a running annual average. To determine the running annual average, repeat steps 1-5 for each sample collected in the past year and calculate the average of these Hazard Index results.
7. Step 7. If the running annual average Hazard Index is greater than the MCL of 1, it is a violation of the Hazard Index MCL

For Reference: Understanding the Final PFAS National Primary Drinking Water Regulation Hazard Index Maximum Contaminant Level:
https://www.epa.gov/system/files/documents/2024-04/pfas-npdwr_fact-sheet_hazard-index_4.8.24.pdf

MDE MONITORING PARAMETERS - TABLE II

Elements & Indicator Monitoring Parameters	Units	PQL	MCL / SMCL	NCTS[1]	Cleanup STD
Total Antimony	µg/L	2	6	5.6	6.0
Total Arsenic	µg/L	2	10	0.18	10
Total Barium	µg/L	10	2000	1000	2000
Total Beryllium	µg/L	2	4	4.0	4.0
Total Cadmium	µg/L	4	5	0.25	5.0
Total Calcium*	µg/L	80			
Total Chromium	µg/L	10	100	100	100
Total Cobalt*	µg/L	10			
Total Copper+	µg/L	10	1300 (AL)	9	1300
Total Iron**	µg/L	5	300		1400
Total Lead	µg/L	2	15 (AL)	2.5	15
Total Magnesium*	µg/L	4			
Total Manganese**	µg/L	10	50		43
Total Mercury	µg/L	0.2	2	0.77	2.0
Total Nickel+	µg/L	11	100	52	39
Total Potassium*	µg/L	390			
Total Selenium	µg/L	35	50	5	50
Total Silver**	µg/L	10	100	3.2	9.4
Total Sodium*	µg/L	200			
Total Thallium	µg/L	2	2	0.24	2.0
Total Vanadium*	µg/L	10			8.6
Total Zinc**	µg/L	10	5000	120	600
Alkalinity*	mg/L	1.0			
Ammonia (as N)*	mg/L	1.0		See note[2]	
Chemical oxygen demand*	mg/L	10			
Chloride**	mg/L	0.39	250		
Hardness*	mg/L	0.50			
Nitrate (as N)	mg/L	0.06	10		
pH**	SU	0.1	<6.5 or >8.5		
Specific conductance*	µS/cm	1.0			
Sulfate**	mg/L	0.38	250		
Total dissolved solids**	mg/L	10	500		
Turbidity	NTU	0.11	5		

Primary MCL
* = No MCL
* * = Secondary MCL
+ = No MCL but recommended level by EPA

PQL = Practical Quantitation Limit
MCL = Maximum Contaminant Level
SMCL = Secondary Maximum Contaminant Level
NCTS = Numerical Criteria for Toxic Substances in Surface Waters
Cleanup STD = MDE Cleanup Standards for Groundwater (for Assessment Monitoring)
AL = Action Level
µg/L = microgram per liter (parts per billion, ppb)
mg/L = milligram per liter (parts per million, ppm)
µS/cm = microsiemens per centimeter
NTU = Nephelometric Turbidity Unit
SU = Standard Unit (logarithmic unit)

Note:
1 - Per COMAR 26.08.02.03-2F(1) - The metals shall be measured as dissolved metal …
2 - See COMAR 26.08.02.03-2 for ammonia

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Appendix D

Blank Low-Flow Sampling Form

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EA Engineering, Science, and Technology, Inc.

WELL PURGING AND SAMPLING RECORD

WELL ID _____ SAMPLE NO. _____

WELL/SITE DESCRIPTION _____

DATE _____/_____/_____ TIME _____ AIR TEMP. _____

WELL DEPTH _____ ft WELL DIAMETER _____ in

WATER DEPTH _____ ft WATER COLUMN HE_____ ft

PUMP RATE _____ LPM PUMP TIME _____ min

WELL WENT DRY? ( ) Yes ( ) No

STABILIZATION CRITERIA:

Turbidity (10% for values greater than 5 NTUs; if three Turbidity values are less than 5 NTUs, consider the values as stabilized).
Dissolved Oxygen (10% for values greater than 0.5 mg/L, if three Dissolved Oxygen values are less than 0.5 mg/L, consider the values as stabilized).
Specific Conductance (3%), Temperature (3%), pH (± 0.1 unit), Oxidation/Reduction Potential (±10 millivolts).

Date	Time	Volume Removed Unit: Gal	pH --	Cond. µS/cm	Temp. ºC	ORP mV	Turb. NTU	DO mg/L	Depth to Water from TOC	Pump Rate GPM

COMMENTS _____

SIGNATURE _____

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Appendix E

Example Blank Chain-of-Custody Form

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Company Name: **EA Engineering**	Project Manager: **Darl Kolar**							Analysis Requested										**CHAIN-OF-CUSTODY RECORD**		
Project Name (Landfill Name):	Project ID: **6250915**																	Maryland Spectral Services, Inc. 1500 Caton Center Drive, Suite G Baltimore, MD 21227 410–247–7600 • Fax 410–247–7602 reporting@mdspectral.com		
Sampler(s):	P.O. Number:																	Matrix Codes: NW (non-potable water), DW (drinking water)		
Field Sample ID	Date	Time	DW	Water	Soil	Other	No. of Containers	Turbidity pH Conductivity	Diss Solids Alkalinity	Chloride Sulfate	Nitrate Ammonia COD	6020 MDE Table II Metals	**8260D** VOCs and 8011*	1633 **PFAS**				Preservative	Field Notes	MSS Lab ID
				X																
				X																
				X																
				X																
				X																
				X																
				X																
				X																
				X																

***** Please analyze 2 VOCs (1,2-Dibromo-3-chloropropane and 1, 2 Dibromoethane) by method 8011 in addition to method 8260D.

Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*	Relinquished by: *(Signature)*	Date/Time	Received by: *(Signature)*
(Printed)		*(Printed)*	*(Printed)*		*(Printed)*
Relinquished by: *(Signature)*	Date/Time	Received by Lab: *(Signature)*	Turn Around Time:	Lab Use:	
(Printed)		*(Printed)*	□ Normal (7 day) □ 5 day □ 4 day □ 3 day □ Rush (2 day) □ Next Day □ Other: _____ □ Specific Due Date: _____	Temp: _____°C □ Received on Ice □ Received same day	
Delivery Method: □ Courier □ Client □ UPS □ FedEx □ USPS □ Other:_____	Special Instructions/QC Requirements & Comments:			Sample Disposal: □ Return to Client □ Disposal by lab □ Archive for _____ days	

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Appendix F

PQL Variance Request Letter from MDE

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November 26, 2024

CERTIFIED MAIL
Return Receipt Requested

Dallas Baker, P.E., Director
Department of Public Works
7091 Central Site Lane
Newark, MD 21841

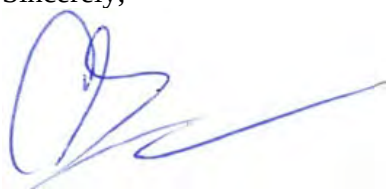
Dear Dallas Baker:

This letter pertains to the July 17, 2024, variance request letters (Request) requesting alternate Practical Quantitation Limits (PQL) concentration levels for monitoring parameters total magnesium, alkalinity, chloride, and turbidity at the Berlin, Pocomoke, and Snow Hill Municipal Landfills of Worcester County, Maryland.

The Maryland Department of the Environment (MDE) has reviewed the Request and hereby approves the alternate PQL Request for 5 years using methods 6020B (total magnesium), 2320 B-2021 (alkalinity), 180.1 Rev. 2.0 (turbidity), and 300.0 Rev. 2.1 (chloride). Following this period, parameters with an alternate PQL may be reviewed every 5 years to justify continued approval and to assess whether a more sensitive method or a qualified laboratory is necessary. This review will ensure that the reporting limits remain less than or equal to the PQLs listed in MDE Monitoring Parameters Table I or II.

MDE appreciates your cooperation regarding this matter. If you have any questions or need clarification, please contact Chris Manning, project manager, at christopher.manning@maryland.gov. Alternatively, you can contact Dr. Binyam Woldemichael, section head of Investigations and Remediation, at binyam.woldemichael@maryland.gov. You can reach both by phone at 410-537-3315.

Sincerely,



Andrew Grenzer, Chief
Solid Waste Operations Division

cc: David Candy, Superintendent, Worcester County Department of Public Works
Darl Kolar, P.E., BCEE, Project Manager, EA
Stephanie Cobbs Williams, Acting Director, Land and Materials Administration (LMA), MDE
Brian Coblentz, Compliance Division Chief, Solid Waste Program, LMA, MDE

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Appendix G

Blank Instrument (YSI) Calibration Form

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Specific Conductivity

DATE	TIME	METER	CALIBRATED	READING	INITIALS

pH

DATE	TIME	METER	CALIBRATED	READING	INITIALS

Oxidation Reduction Potential (ORP)

DATE	TIME	METER	CALIBRATED	READING	INITIALS

Turbidity

DATE	TIME	METER	CALIBRATED	READING	INITIALS

Dissolved Oxygen (DO)

DATE	TIME	METER	CALIBRATED	READING	INITIALS

ProDSS General Specifications

Size	Instrument: 8.3 cm width x 21.6 cm length x 5.6 cm depth (3.27 in x 8.5 in x 2.21 in) Bulkhead with sensors, without depth (no guard): 33.3 cm (13.11 in) length - the length with the ISE sensors is 34.04 cm (13.4 in) Bulkhead with sensors, with depth (no guard): 35.84 cm (14.11 in) length - the length with the ISE sensors is 36.58 cm (14.4 in) Bulkhead with guard, without depth: 42.82 cm (16.86 in) length and 4.75 cm (1.87 in) outer diameter Bulkhead with guard, with depth: 45.36 cm (17.86 in) length and 4.75 cm (1.87 in) outer diameter
Weight with batteries	567 grams (1.25 lbs)
Power	Rechargeable lithium-ion battery pack provides ~48 hours with the handheld only and ~20 hours with the handheld, cable and four sensors; battery recharge time is ~9 hours with the AC power adapter The instrument can also be powered via AC or external power pack through the USB port
Instrument operating temperature	0 to 50 °C (32 to 122 °F)
Instrument storage temperature	0 to 45 °C (32 to 113 °F) with battery installed; 0 to 60 °C (32 to 140 °F) without battery installed
Display	Color, LCD graphic display; 3.9 cm width x 6.5 cm height
USB port	Built-in micro USB On-The-Go port for PC connection, recharging/powering the ProDSS and connecting directly to a USB stick
Cables	Available with or without depth sensor in 1, 4, 10, 20, 30, 40, 50, 60, 70, 80, 90, and 100-meters
Sensor ports	4 universal sensor ports on each cable; can accept any ProDSS sensor
Warranty	3-year instrument; 2-year bulkhead, cable assembly, and sensors; 1-year pH and pH/ORP sensor modules, ODO sensor caps, and Li-ion battery pack; 6-months ammonium, nitrate, and chloride sensor modules
Memory	> 100000 data sets
Logging modes	Single point or continuous with autostable feature
GLP compliance	Yes; 400 detailed GLP records can be stored and are available to view, download, and print.
Languages	English, Spanish, Portuguese, French, German, Italian, Japanese, Norwegian, Simplified Chinese, Traditional Chinese
Certifications	CEC, CE; RoHS; IP-67; WEEE; FCC; UN Part III, Section 38.3, Test methods for lithium-ion batteries (Class 9)
GPS	Optional internal GPS; coordinates are stored with measurement data and site lists
Sites and data ID	100 user-defined sites and 100 user-defined data ID tags

ProDSS System Specifications (Instrument, Sensor, and Cable)

Sensor/Parameter	Range	Accuracy	Resolution	Units
Temperature	-5 to 70 °C (temperature compensation range for DO mg/L measurement: -5 to 50 °C)	±0.2 °C	0.1 °C or 0.1 °F (user selectable)	°C, °F, K
pH	0 to 14 pH units	±0.2 pH units	0.01 pH units	pH, pH mV
ORP	-1999 to 1999 mV	±20 mV	0.1 mV	mV
Dissolved Oxygen	0 to 500%, 0 to 50 mg/L	0 to 200%: ±1% of reading or 1% saturation, whichever is greater 200 to 500%: ±8% of reading 0 to 20 mg/L: ±0.1 mg/L or 1% of reading, whichever is greater 20 to 50 mg/L: ±8% of reading	0.01 mg/L and 0.1%, or 0.1 mg/L and 1% (user selectable)	% saturation, % saturation local, mg/L, ppm
Barometer	375 to 825 mmHg	±1.5 mmHg from 0 to 50 °C	0.1 mmHg	mmHg, inHg, mbar, psi, kPa, atm
Conductivity	0 to 200 mS/cm	0 - 100 mS/cm: ±0.5% of reading or .001 mS/cm, whichever is greater 100 - 200 mS/cm: ±1.0% of reading	0.001, 0.01 or 0.1 µS/cm (range dependent)	µS/cm, mS/cm
Specific Conductance*	0 to 200 mS/cm	0 - 100 mS/cm: ±0.5% of reading or .001 mS/cm, whichever is greater 100 - 200 mS/cm: ±1.0% of reading. User selectable reference temperature (15 to 25 °C; default 25 °C) and compensation coefficient (0 to 4%/°C; default 1.91%)	0.001, 0.01, 0.1 mS/cm	µS/cm or mS/cm
Salinity*	0 to 70 ppt	±1.0% of reading or ±0.1 ppt, whichever is greater	0.01 ppt	ppt or PSU
Total Dissolved Solids (TDS)*	0 to 100 g/L	Calculated from specific conductance and a user-selectable TDS multiplier (0.30 to 1.00; default 0.65)	0.001, 0.01, 0.1 g/L	mg/L, g/L, kg/L
Resistivity*	0 to 2 Mohms	±0.1% Full Scale	0.001, 0.01, 0.1 ohms	ohm-cm, kohm-cm, Mohm-cm
Seawater Density*	0.0 to 50.0 sigma, sigma T	-	0.1 sigma or sigma T	Sigma, Sigma T
Turbidity	0 to 4000 FNU	0 to 999 FNU: 0.3 FNU or ±2% of reading, whichever is greater 1000 to 4000 FNU: ±5% of reading	0.1 FNU	FNU, NTU
Total Suspended Solids (TSS)*	-	User correlated from turbidity field measurements and lab TSS measurements from grab samples	0.01, 0.1 mg/L	mg/L
Ammonium**	0 to 200 mg/L NH_4-N	±10% of reading or 2 mg/L, whichever is greater	0.01 mg/L	NH_4-N mg/L, NH_4-N mV
Ammonia*	0 to 200 mg/L NH_3-N	-	0.01 mg/L	NH_3-N mg/L
Chloride**	0 to 18000 mg/L Cl	±15% of reading or 5 mg/L, whichever is greater	0.01 mg/L	Cl mg/L, Cl mV
Nitrate**	0 to 200 mg/L NO_3-N	±10% of reading or 2 mg/L, whichever is greater	0.01 mg/L	NO_3-N mg/L, NO_3-N mV
Depth	0 to 328 feet (0 to 100 m)	±0.013 ft (±0.004 m) for 1, 4, and 10 m cables ±0.13 ft (±0.04 m) for cables 20 m and longer	0.001 m or 0.01 ft	m, ft

*Derived/calculated parameter **ISEs for freshwater only; 20 meter maximum depth

ProDSS System Specifications (Instrument, Sensor, and Cable)

Sensor/Parameter	Sensor Type/Measurement Method	Calibration	Maximum Depth	Warranty
Temperature	Thermistor, installed on conductivity sensor	Not available	100 m	2 years for conductivity/temperature sensor
pH	Combination glass bulb electrode, Ag/AgCl reference electrode with gelled electrolyte	1, 2, or 3 point	100 m	2 years for pH and pH/ORP sensors 1 year for pH and pH/ORP sensor modules
ORP	Platinum button with Ag/AgCl reference	1 point	100 m	2 years for pH/ORP sensor 1 year for pH/ORP sensor module
Dissolved Oxygen	Optical luminescence - lifetime method	1 or 2 point	100 m	2 years for optical DO sensor 1 year for optical DO sensor cap
Barometer	-	1 point	-	3 years, integrated into ProDSS handheld
Conductivity	Four nickel electrode cell	1 point	100 m	2 years for conductivity/temperature sensor
Specific Conductance*	Calculated from conductivity and temperature	1 point	-	-
Salinity*	Calculated from conductivity and temperature	1 point	-	-
Total Dissolved Solids (TDS)*	Calculated from specific conductance and a user-selectable TDS multiplier (0.30 to 1.00; default 0.65)	-	-	-
Resistivity*	Calculated from conductivity and temperature	-	-	-
Seawater Density*	Sigma is calculated from salinity, temperature, and pressure (depth) Sigma T is calculated from salinity and temperature	-	-	-
Turbidity	Nephelometric - Optical, 90° scatter Meets ISO 7027	1, 2, or 3 point	-	2 years for turbidity sensor
Total Suspended Solids (TSS)*	User correlated from turbidity field measurements and lab TSS measurements from grab samples	-	-	-
Ammonium**	Ion selective electrode	1, 2, or 3 point	20 m	2 years for ammonium sensor 6 months for ammonium sensor module
Ammonia*	Calculated from ammonium, temperature, salinity, and pH	-	-	-
Chloride**	Ion selective electrode	1, 2, or 3 point	20 m	2 years for chloride sensor 6 months for chloride sensor module
Nitrate**	Ion selective electrode	1, 2, or 3 point	20 m	2 years for nitrate sensor 6 months for nitrate sensor module
Depth	Pressure transducer	1 point	-	2 years, integrated into cable assembly

*Derived/calculated parameter
**ISEs for freshwater only ; 20 meter maximum depth

ProDSS Calibration Guide

YSI

a xylem brand

Contents

Introduction

This guide provides helpful instructions, tips and troubleshooting suggestions for calibrating a ProDSS instrument. For more detailed information on calibration and information on how to setup and operate a ProDSS, please refer to the ProDSS User Manual.

Calibration Worksheet

The Calibration Worksheet on the following pages is provided for your convenience. This can help document your calibration and track the performance of your sensors. Please follow the detailed calibration procedures in the ProDSS manual or your facility's standard operating procedure (SOP) to ensure all calibrations are as accurate and as consistent as possible.

Refer to the YSI Solution Expiration Dates document to ensure your calibration solutions are fresh. In addition to using fresh standards, never accept out-of-range or questionable calibration results.

Calibration Date_____ ***Technician:***_____

Handheld Serial Number:_____ ***Handheld Software Version:***_____

Cable Serial Number:_____

Temperature

*Reading when sensor is dry and in room temp air:*_____ *Accurate?* ***Y*** ***N***

Conductivity

*Reading when sensor is dry and in room temp air:*_____ *Acceptable value is less than* ***1 µS/cm***

*Actual Reading in solution before calibration is accepted:*_____

*Reading in calibration solution after calibration is completed:*_____

Conductivity Cell Constant in GLP record after calibration:*_____

Acceptable range for ProDSS conductivity/temperature sensors (626902) is ***4.5*** *to* ***6.5***

Acceptable range for integral (i.e. built-in) sensors on ODO/CT assemblies is ***4.4*** *to* ***6.4***

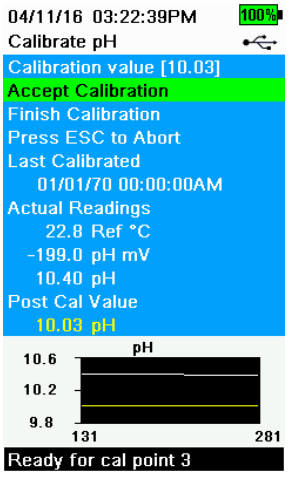
Optical Dissolved Oxygen

*Barometric pressure:*_____

*Actual Reading before DO% calibration is accepted:*_____

*Reading in DO% calibration environment after calibration is completed:*_____

*ODO gain in GLP record after calibration:*_____ *Acceptable range is* ***0.75*** *to* ***1.50***



pH

		Actual Readings during calibration		
Buffer	*Calibration Value*	*pH*	*pH mV***	*Acceptable pH mV in buffer*
7				-50 mV to 50 mV
4				+165 to +180 from pH 7 buffer mV value
10				-165 to -180 from pH 7 buffer mV value

*pH slope in GLP record after calibration:*_____ *Acceptable range is ~* ***55*** *to* ***60*** *pH/mV (Ideal is 59.16 mV/pH)*

ORP

*Actual Reading in solution before calibration is accepted:*_____

*Reading in calibration solution after calibration is completed:*_____

*ORP Cal Offset in GLP record after calibration:*_____ *Acceptable range is* ***-100*** *to* ***50***

**GLP stands for Good Laboratory Practice file. This calibration record contains important information about the calibration result.*

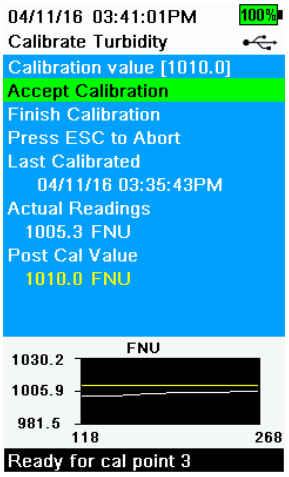
***The pH mV at the time of calibration (Sensor Value) can also be seen in the final pH GLP record.*

Turbidity

Calibration value (FNU)*	Actual Reading during calibration
0	
12.4*	
124*	
1010	

*Acceptable range for **Actual Reading** during calibration of the first point is **-10** to **10** FNU*

***Note:** The turbidity sensor can be calibrated to 3 points. Either 12.4 or 124 FNU standard can be used for the second point, but not both. Other calibration values can be used when calibrating.*



Depth (Completed in Air)

Actual Reading before calibration is accepted:_____

Reading in air after calibration is completed:_____

Ammonium

	Actual Readings during calibration		
Concentration** (i.e. Calibration Value)	mg/L	mV***	Acceptable mV when the sensor is new
1st point: 1 mg/L			-20 mV to 20 mV
2nd point: 100 mg/L			+90 to +130 from mV value in 1 mg/L standard

Nitrate

	Actual Readings during calibration		
Concentration** (i.e. Calibration Value)	mg/L	mV***	Acceptable mV when the sensor is new
1st point: 1 mg/L			180 mV to 220 mV
2nd point: 100 mg/L			-90 to -130 from mV value in 1 mg/L standard

Chloride

	Actual Readings during calibration		
Concentration** (i.e. Calibration Value)	mg/L	mV***	Acceptable mV when the sensor is new
1st point: 10 mg/L			205 mV to 245 mV
2nd point: 1,000 mg/L			-80 to -130 from mV value in 10 mg/L standard

***Other standard concentrations can be used. A 2 point calibration without chilling a third calibration solution is extremely accurate and is the preferred method. However, if there is a large temperature variation during sampling, a chilled third calibration point is recommended.*

****The mV at the time of calibration (Sensor Value) for each point can also be seen in the GLP record after a calibration is complete.*

Temperature

Calibration Tips

Before calibrating any other ProDSS sensor, verify the temperature sensor is reading accurately by comparing it to a traceable thermometer or other known reference in a water bath.

With the exception of the turbidity and TSS, accurate temperature compensation is required for all parameters, so temperature accuracy should be verified and recorded each time the ProDSS is calibrated. Be sure to consider the specification tolerances of both the ProDSS temperature sensor and the thermometer when comparing the measurements.

The ProDSS temperature sensor cannot be calibrated nor should calibration be required.

Troubleshooting Tips

If the temperature sensor is not reading accurately, ensure that it is clean and free of debris. The conductivity cleaning brush and warm water with mild detergent can be used to scrub the temperature sensor if needed. Alternatively, you can use a toothbrush to clean the sensor.

ProDSS 4 port cables feature a replaceable conductivity/temperature sensor (626902), while all other ProDSS cables have integral (i.e. built-in) temperature sensors. If using a ProDSS 4 port cable and your temperature sensor is not reading accurately even after cleaning, remove the conductivity/temperature sensor from the cable and inspect the sensor port and sensor connector for any damage or moisture. Please follow the section on Cleaning a Sensor Port if needed.

Conductivity

The conductivity calibration should be verified every day the instrument is used. However, the conductivity sensor is very stable and may hold its calibration for several weeks.

Calibration Tips

1. It is not necessary to calibrate conductivity, specific conductance and salinity. Calibrating one of these parameters will simultaneously calibrate the others. YSI recommends calibrating specific conductance (temperature compensated conductivity) for greatest ease and accuracy.
2. Ensure the conductivity sensor is clean and dry before performing a specific conductance calibration.
3. Always use fresh, traceable conductivity calibration solution when calibrating the conductivity sensor.
    a. The shelf life of conductivity solution is one month after being opened. This is due to potential changes in the value of the solution caused by evaporation which can occur after opening the bottle. Be sure to write the open date on the bottle so you know that you are using good calibration solution.

b. Never calibrate with a conductivity solution that is less than 1.0 mS/cm. You are setting the slope on a linear device so a good, strong conductivity signal will give you the best performance. Use 1.0 mS/cm for fresh water, 10 mS/cm for brackish to estuarine water and 50 mS/cm for salt water. Please note that 1.0 mS (millisiemens) = 1000 uS (microsiemens).

4. Pre-rinse the cal cup and sensors with a small amount of calibration standard or rinse standard and discard.
5. The calibration solution must cover the top vent holes of the conductivity sensor. If the entire sensor is not in solution, the instrument will read approximately half the expected value.
    a. If using a ProDSS 4 port cable, the top vent hole is located on the side of the combination conductivity/temperature sensor (i.e. 626902 sensor). Filling the ProDSS calibration cup to line 2 (i.e. the top line) when the cup is empty will ensure the vent hole is covered.

    or

    b. If using the ODO/CT assembly, ensure the vent holes at the top of the sensor are completely immersed and the solution level is at least 1/2 inch higher than these top vent holes.
6. After placing the sensor into the solution, gently move the sensor up and down to remove any air bubbles that may be trapped in the conductivity sensor.
7. If calibrating Specific Conductance, enter the value of the conductivity solution as it is listed for 25 °C. Make sure you are entering the correct units. 1 mS = 1,000 uS.
8. If you receive a warning message stating that the calibration is questionable, do not continue with the calibration. Instead, select 'No' and investigate what is causing the questionable results. If you accept a questionable calibration, your conductivity readings (and your DO mg/L readings) will be erroneous. Typical causes for this error message include: incorrect entries (entering 1000 uS/cm instead of 1.0 mS/cm), not using enough solution to cover the vent holes, air bubbles trapped in the sensor, calibrating in conductivity instead of specific conductance, dirty conductivity electrodes, and/or bad calibration solution.
9. After accepting a good calibration, navigate to the GLP file and check the conductivity cell constant for the calibration. The cell constant should be 5.0 to 6.0 for highest accuracy (4.9 to 5.9 on ODO/CT probe and cable assemblies). However, 4.5 to 6.5 is the acceptable range (4.4 to 6.4 on ODO/CT cables).

Troubleshooting Tips

If you get an error message during calibration, be sure that you are:

1. Entering the correct calibration value (1 mS/cm = 1000 uS/cm).
2. Calibrating in Specific Conductance mode.
3. Using enough solution to cover the vent holes on the sensor.
4. Dislodging any air bubbles that could be trapped in the sensor.
5. Using a fresh, traceable conductivity calibration solution.

If you are following the above recommendations and still receiving an error message, check the conductivity sensor to make sure it is clean. A clean conductivity sensor should read less than 1 uS/cm in dry air. If your sensor is dry and giving you a reading higher than 1 uS/cm in air, it should be cleaned.

Any significant jump or change in the conductivity cell constant from one calibration to the next usually indicates a problem with the calibration and/or sensor. If you are sure that your calibration standard is good and your calibration process is correct, then your sensor may need to be cleaned.

Cleaning the Conductivity Sensor

The openings that allow sample access to the conductivity electrodes should be cleaned regularly. The small cleaning brush included with each new conductivity sensor and cable is intended for this purpose. Dip the brush in clean water and insert it into each hole 10 to 12 times. In the event that deposits have formed on the electrodes, it may be necessary to use a mild detergent (laboratory grade soap or bathroom foaming tile cleaner) with the brush. Rinse thoroughly with clean water, then check the response and accuracy of the conductivity sensor with calibration solution.

Cables with user-replaceable sensors

If using a 4 port cable and your conductivity sensor is not calibrating or is reading > 1 uS/cm in dry air after being cleaned, remove the conductivity/temperature sensor from the cable and inspect the sensor port and sensor connector for any damage or moisture. Please follow the section on Cleaning a Sensor Port if needed.

Cables with integral (i.e. built-in) sensors

If your conductivity sensor is not calibrating or is reading > 1 uS/cm in dry air after performing a sensor cleaning, contact your local YSI Representative or a YSI Authorized Service Center.

pH

The pH calibration should be verified every day the instrument is used. However, a new pH sensor may be capable of holding its calibration for several days.

pH Calibration Tips

1. The pH sensor can be calibrated with up to three calibration points.
2. Calibration can be accomplished in any buffer order.
3. pH 7 buffer should be used regardless of how many calibration points you use; however, it does not have to be the first point.
4. In most cases, a two-point calibration is all that is required (4 and 7 or 7 and 10). You can bracket the expected in-situ pH values. Use a three-point calibration with 4, 7 and 10 if the in-situ pH values are unknown or if you expect the in-situ values to be on both sides of the pH scale.

5. Rinse the sensors and cal cup with a small amount of pH buffer. Fill the cup so that the pH sensor tip and the temperature sensor are submerged in buffer.
6. Calibration values will not have to be entered if using a USA (4, 7, 10) or a NIST (4.01, 6.86, 9.18) buffer set, as the ProDSS will automatically recognize these buffers and will compensate the calibration value for temperature. The buffer set can be changed in the pH Sensor Setup menu.
7. Record the pH millivolts for each calibration point. The acceptable mV outputs for each buffer are shown below.

   pH 7 mV value = 0 mV +/- 50 mV
   pH 4 mV value = +165 to +180 from pH 7 buffer mV value
   pH 10 mV value = -165 to -180 from pH 7 buffer mV value

   - A value of +50 or -50 mVs in buffer 7 does not indicate a bad sensor.
   - The mV span between pH 4 and 7 and 7 and 10 mV values should be ≈ 165 to 180 mV. 177 is the ideal distance. The slope can be 55 to 60 mV per pH unit with an ideal of 59 mV per pH unit.
   - If the mV span between pH 4 and 7 or 7 and 10 drops below 160, clean the sensor and try to recalibrate.
8. Wait for the measurement to stabilize in each buffer and then press Enter to accept each calibration point.
9. Rinse the sensor and cal cup with a small amount of the next buffer between calibration points.
10. If you want to finish calibration after 1 or 2 points, select **Finish Calibration**. Otherwise, the calibration will automatically be completed after accepting the third point in a 3 point calibration.
11. If you receive a warning message stating that the calibration is questionable, do not continue with the calibration. Instead, select 'No' and investigate what is causing the questionable results. If you accept a questionable calibration, your pH readings will be erroneous. Typical causes for this error message include: incorrect buffer set selected, a dirty sensor, or bad buffer solution.
12. After accepting a good calibration, navigate to the GLP file and check the pH Slope and Slope % of ideal. A good slope should be between 55 and 60 mVs while the ideal is 59 mV. If the slope drops below 53, the sensor should be reconditioned and recalibrated.

pH Troubleshooting Tips

Typical working life for pH sensors is approximately 12-24 months depending on usage, storage and maintenance. Proper storage and maintenance generally extends the sensor's working life.

Clean and recondition the sensor if a slow response in the field has been reported or if it takes more than 90 seconds to stabilize in pH buffer.

If you get an error message during a pH calibration, check the following:

1. Ensure the pH buffers are good and not expired.
2. The correct buffer set is enabled.
3. Check for damage to the glass bulb or the electrode body.
4. Ensure the sensor module is installed correctly, especially if it has recently been replaced.
5. If you continue to get error messages during calibration, clean and recondition the sensor.

Cleaning and Reconditioning the pH, ORP or pH/ORP Sensor

If the pH or pH/ORP sensor has been allowed to dry out or has been stored in distilled or deionized water for an extended period of time, soak the sensor in buffer 4 overnight to try and restore functionality.

Cleaning is required whenever deposits or contaminants appear on the glass and/or platinum surfaces or when the sensor's response slows. The cleaning can be chemical and/or mechanical. Removing the sensor from the cable may make cleaning easier. Initially, moisten a soft clean cloth, lens cleaning tissue or cotton swab to remove all foreign material from the glass bulb and/or platinum button. Then use a moistened cotton swab to carefully remove any material that may be blocking the reference electrode junction of the sensor.

CAUTION: When using a cotton swab, be careful NOT to wedge the swab between the guard and the glass sensor. If necessary, remove cotton from the swab tip, so that the cotton can reach all parts of the sensor tip without stress. You can also use a pipe cleaner for this cleaning if more convenient.

If good pH and/or ORP response is not restored, perform the following additional procedure:

1. Soak the sensor for 10-15 minutes in clean water containing a few drops of commercial dishwashing liquid.
2. Rinse the sensor in clean water, wipe with a cotton swab moistened with clean water, and then re-rinse with clean water.

If good pH and/or ORP response is still not restored or if hard deposits have built up on the electrode, perform the following additional procedure:

1. Soak the sensor for ~3 minutes in one molar (1 M) hydrochloric acid (HCl). This reagent can be purchased from most lab supply distributors. Be sure to follow the safety instructions included with the acid. Vinegar can also be used, but will require a longer period of soaking.
2. Rinse the sensor in clean water, wipe with a cotton swab moistened with clean water (not DI water), and then re-rinse with clean water. To be certain that all traces of the acid are removed from the sensor crevices, soak the sensor in clean tap water for about an hour with occasional stirring.

If biological contamination of the reference junction is suspected or if good response is not restored by the above procedures, perform the following additional cleaning step:

CAUTION: Do not mix the acid from the previous step with the chlorine bleach in the following step. A toxic gaseous product can form from the reaction between the acid and the chlorine bleach. Be certain to copiously rinse the sink and drain system of acid after its disposal and before the disposal of chlorine bleach.

1. Soak the sensor for approximately 1 hour in a 1:1 dilution of commercially available chlorine bleach.
2. Rinse the sensor with clean water and then soak for at least 1 hour in clean tap water with occasional stirring to remove residual bleach from the junction. (If possible, soak the sensor for a period of time longer than 1 hour in order to be certain that all traces of chlorine bleach are removed.) Then re-rinse the sensor with clean water and retest.

Prior to reinstalling the sensor, dry the port and sensor connector with compressed air. If you suspect port contamination, follow the instructions in the Cleaning a Sensor Port section of this document before reinstalling the sensor.

If your pH sensor is still not calibrating after performing a sensor cleaning, contact your local YSI Representative or a YSI Authorized Service Center.

ORP

The ORP calibration should be verified every day the instrument is used. However, a new ORP sensor may be capable of holding its calibration for several days.

ORP Calibration Tips

1. If using a pH/ORP combination sensor, calibrate pH first to ensure it is working.
2. Rinse the sensors and cal cup with a small amount of ORP calibration solution. Fill the cup so that the ORP sensor tip and the temperature sensor are submerged in solution.
3. If using YSI Zobell calibration solution, the ProDSS will automatically adjust the calibration value based on temperature. Otherwise, the Calibration value can be manually adjusted.
4. Wait for the readings to stabilize and then press Enter to accept the calibration.
5. If you receive a warning message stating that the calibration is questionable, do not continue with the calibration. Instead, select 'No' and investigate what is causing the questionable results. If you accept a questionable calibration, your ORP readings will be erroneous. Typical causes for this error message include a dirty sensor or bad calibration solution.

ORP Troubleshooting Tips

Typical working life for ORP sensors is approximately 12-24 months depending on usage, storage and maintenance. Proper storage and maintenance generally extends the sensor's working life.

Clean and recondition the sensor if the sensor exhibits a slow response in Zobell solution, i.e. it takes more than 90 seconds to stabilize when placed in Zobell.

If you get error messages during an ORP calibration, check the following:

1. Ensure the ORP calibration solution is good and not expired.
2. If you continue to get error messages during calibration, clean and recondition the sensor per the instructions in the pH Troubleshooting section of this document. If you suspect port contamination, follow the instructions in the Cleaning a Sensor Port section before reinstalling the sensor.
3. If you continue to have problems, you can check the offset of the ORP sensor by performing a factory reset to the ORP sensor. After resetting the sensor, compare the ORP mV readings in Zobell solution to the calibration value. The difference between values should be less than 100 mVs. If the difference is 80 mVs or higher, consider replacing the sensor as it is nearing the end of its life span.

Dissolved Oxygen

The dissolved oxygen sensor should be calibrated every day the instrument is used. It is not necessary to calibrate in both % and mg/L or ppm. Calibrating in % will simultaneously calibrate mg/L and ppm and vice versa.

DO Calibration Tips

1. The ProDSS optical DO sensor can be calibrated in air-saturated water, water-saturated air or against a Winkler Titration. You can perform a 1 or 2 point DO calibration. A 2 point calibration includes 1 point in a zero oxygen environment and the 2nd point at full saturation.
2. For both ease of use and accuracy, YSI recommends that you perform a 1 point calibration in water-saturated air.
3. Make sure that there is a good optical DO sensor cap installed. The cap should not be scratched or excessively dirty. Caps should be changed as needed (15-18 month expected life for caps with a 1 year warranty).
4. To perform a 1 point calibration in water-saturated air, place the sensor in a 100% humid environment. This can be accomplished several ways:
    a. For the ProDSS 4 port cables, place a small amount of water in the calibration/storage cup and place it over the sensors and sensor guard. ***Partially*** tighten the locking ring on the calibration cup to the bulkhead. The goal is to have air exchange between inside and outside the calibration cup.
    b. For the ProDSS ODO/CT (627150) or ProODO (626250) cables, moisten the sponge in the gray calibration sleeve with a small amount of clean water and place it over the sensor guard.
5. The sponge and calibration sleeve/cup should be clean since bacterial growth may consume oxygen and interfere with the calibration. Be sure the sensor is in air, not water, and that there are not any water droplets on the sensor cap or temperature sensor.

6. After entering the % calibration mode, wait approximately 5 to 10 minutes for the storage container to become completely saturated.
7. Salinity affects the ability of water to hold oxygen and is used by the instrument to calculate DO mg/L (ppm). The Salinity value displayed near the top of the DO calibration screen is either the salinity correction value entered in the Sensor menu or the Salinity value as measured by the conductivity sensor in use. If you are using a conductivity sensor, ensure that it is calibrated and reading correctly in order to obtain accurate DO mg/L (ppm) measurements. If you are not using a conductivity sensor, the Salinity correction value should be the salinity of the water you will be testing. Press the Probe key, highlight Salinity, and press Enter to modify this setting if necessary. The salinity of fresh water is typically 0-0.5 ppt and seawater is typically 35 ppt.
8. If you receive a warning message stating that the calibration is questionable, do not continue with the calibration. Instead, select 'No' and investigate what is causing the questionable results. If you accept a questionable calibration, your DO readings will be erroneous. Typical causes of a calibration error message include a dirty and/or bad sensor cap or a sensor that needs reconditioned.

DO Troubleshooting Tips

1. Ensure the ProDSS barometer is reading accurately. The DO % Saturation calibration uses the instrument's barometric pressure reading for the DO % calibration. If the barometer is not reading accurately, the calibration will be erroneous. The barometer should be reading true barometric pressure. If you suspect the barometer reading is incorrect, calibrate the barometer and then recalibrate the DO sensor. Laboratory barometer readings are usually "true" (uncorrected) values of air pressure and can be used "as is" for barometer calibration. Weather service readings are usually not "true", i.e., they are corrected to sea level, and therefore cannot be used until they are "uncorrected". An approximate formula for this "uncorrection" is: True BP in mmHg = Corrected BP in mmHg – [2.5 * (Local Altitude in ft. above sea level/100)]
2. Clean the ODO sensor cap and rehydrate it if needed.
3. If you have changed the sensor cap, ensure the sensor cap coefficients have correctly been entered. These can be seen under Sensor Setup on the handheld, or within KorDSS.
4. If you suspect port contamination, remove the sensor and follow the instructions in the Cleaning a Sensor Port section.
5. If you continue to have trouble calibrating the DO sensor, contact your local YSI Representative or a YSI Authorized Service Center.

ODO Sensor Cap Replacement

The sensor cap should be replaced about once per year for those with a 1 year warranty, but the cap may last longer. It should also be replaced if it is cracked or damaged.

The instructions for replacing the sensor cap on ProDSS ODO sensors (626900) are different than the instructions for integral (i.e. built-in) ODO sensors on ODO/CT (627150) and ProODO (626250) cable assemblies, so ensure the correct directions are being followed when replacing the sensor cap. Each replacement ODO sensor cap is shipped in a humidified container and the package should not be opened until immediately before sensor cap replacement.

The instruction sheet shipped with the replacement ODO sensor cap includes the calibration coefficients specific to your sensor cap. Make sure to save this instruction sheet in case you need to reload the calibration coefficients. ***These coefficients must be entered whenever the sensor cap has been replaced.*** Coefficients can be entered using the ProDSS handheld (under ODO Sensor Setup) or KorDSS (under the Instrument and Sensors tab).

Cleaning the ODO Sensor Cap

The sensor cap should be kept clean since some types of fouling may consume oxygen which could affect the dissolved oxygen measurements. To clean the sensor cap, gently wipe away any fouling with a lens cleaning tissue that has been moistened with water.

Caution: Do not use organic solvents to clean the sensor cap. Using an organic solvent to clean the sensor cap may cause permanent damage to the cap. For example, alcohol will dissolve the outer paint layer and other organic solvents will likely dissolve the dye in the cap.

Rehydrating the ODO Sensor Cap

To prevent sensor drift, always store the ODO sensor in a wet or water-saturated air environment. If the ODO sensor has accidentally been left dry for longer than 8 hours, it must be rehydrated.

If rehydration is necessary, soak the ODO sensor cap in warm (room temperature) tap water for approximately 24 hours. After the soak, calibrate the sensor.

Turbidity

The turbidity calibration should be verified every day the instrument is used. However, the turbidity sensor is very stable and may hold its calibration for several weeks.

Turbidity Calibration Tips

1. For proper calibration, you must use standards that have been prepared according to details in Standard Methods for the Treatment of Water and Wastewater (Section 2130 B). Standards from other vendors are NOT approved, and their use will likely result in a bad calibration and incorrect field readings. Acceptable standards include:
    - AMCO-AEPA standards prepared specifically for the ProDSS turbidity sensor manufactured by YSI (i.e. YSI turbidity standards)
    - Formazin prepared according to Standard Methods, especially for calibration points greater than 1010
    - Dilutions of 4000 FNU (NTU) formazin concentrate purchased from Hach
    - Hach StablCal™ standards in various FNU (NTU) denominations
2. It is important to use the same type of standard for all calibration points (i.e. do not mix formazin and AMCO-AEPA standard for different points in a multi-point calibration).
3. The ProDSS turbidity sensor can be calibrated by using up to three calibration points by using the following limits:

- 1st calibration point: 0-1 FNU (NTU) (see Preventing Negative Turbidity Readings).
- 2nd calibration point: 5-200 FNU (NTU)
- 3rd calibration point: 400-4200 FNU (NTU)

4. DI water can be used for the first calibration point (see Preventing Negative Turbidity Readings)
5. The ProDSS calibration cup and sensor guard ***must*** be used (and correctly installed!) when calibrating. The sensor guard must be installed when taking any measurements.
6. The sensor guard has a metal bottom that is painted black. Ensure the inside surface (i.e. the surface that faces the sensor tip) is not significantly scratched. This surface needs to be black to eliminate any stray light reflection. Also ensure the sensor guard and calibration cup are free of any reflective material.
7. Pour standard slowly down the side of the calibration container so you do not aerate the sample. This will reduce the possibility of air bubbles becoming trapped on the surface of the sensor.
8. Slowly place the turbidity sensor into the calibration cup when the cup is tilted at a 45 degree angle, as this will help prevent air bubbles from being caught on the sensor surface.
9. Wait for the turbidity measurement to stabilize in each standard and then press Enter to accept each calibration point.
10. Rinse the sensor and cal cup with a small amount of the next standard between calibration points.
11. If you want to finish calibration after accepting 1 or 2 points, select **Finish Calibration**. Otherwise, the calibration will automatically be completed after accepting the third point in a 3 point calibration.
12. If you receive a warning message stating that the calibration is questionable, do not continue with the calibration. Instead, select 'No' and investigate what is causing the questionable results. If you accept a questionable calibration, your turbidity readings will be erroneous. Typical causes for this error message include a dirty sensor or bad standard solution.

Turbidity Troubleshooting Tips

The ProDSS turbidity sensor has a two year warranty and there are no replaceable components (e.g. no optical sensor cap). Proper storage and maintenance will help extend the sensor's life.

If you get error messages during a turbidity calibration, check the following:

1. Ensure the standard solutions are good and not expired.
2. The calibration environment (e.g. calibration cup, sensor guard, and sensors) should be clean. See Preventing Negative Turbidity Readings if having issues with negative turbidity readings.
3. There should not be any reflective material on the sensor guard and calibration cup. The metal sensor guard bottom (inside; faces the sensors) should be free of any scratches.
4. If you suspect port contamination, remove the sensor and follow the instructions in the Cleaning a Sensor Port section.
5. If you continue to have trouble calibrating the turbidity sensor, contact your local YSI Representative or a YSI Authorized Service Center.

Cleaning the Turbidity Sensor

Clean the sensing window with a non-abrasive, lint-free cloth. This should be done carefully to prevent scratches. If necessary, use mild soapy water.

Preventing Negative Turbidity Readings

A negative turbidity reading is almost always connected to the 'zero' standard. Despite best practices, it is sometimes impossible to clean the sensors, calibration cup, and sensor guard to a point where the 'zero' standard will not be contaminated by some small amount.

A brand new instrument can contaminate a zero standard to ~0.1 FNU, even in a lab environment. Cleaned but used ProDSS sensors, calibration cup, and sensor guard can contaminate a zero standard to almost 1.0 FNU.

As an example, if a Calibration Value of zero is entered, but the actual reading in the 'zero' standard is 0.6 FNU, then a ProDSS turbidity sensor in a 0.3 FNU environment will display a measurement of -0.3 FNU.

Since the 'zero' calibration environment may not be 0 FNU due to contaminated standard, dirty sensors, dirty calibration cup, and/or dirty sensor guard, a Calibration Value from 0 to 1 FNU can be entered.

The following tips can help eliminate negative turbidity readings:

1. Use a calibration cup and sensor guard that is exclusively used for calibration. Calibration cups and sensor guards can easily become contaminated over time, especially if the instrument is used to measure in dirty samples and/or field conditions.
2. In cases where the equipment is properly cleaned and serviced, the level of contamination of the zero turbidity standard is quite small. Typically the average contaminant level ranges from 0.2 to 0.8 NTU. Knowing this, you can pick a number between these points (0.5) and enter this as the first calibration point.
3. Calibrating turbidity is best done in a lab environment; calibrations in the field can result in errors.
4. The only true way to determine if your zero standard is being contaminated is to analyze the zero solution with a laboratory turbidimeter.

Depth

The depth calibration is very easy to perform and should be completed every time the instrument is used to take depth measurements.

Depth Calibration Tips

1. Input a Depth Offset, Altitude, or Latitude under Sensor Setup if desired. Entering a value for these is not required to complete a calibration.
    a. **Depth offset**: Depth offset can be used if referencing water elevation against a known datum. If a depth offset is entered (in meters), the output value will shift by the value of the offset. The most common offset entered is 0.272 meters, as this is the distance from the depth sensor on 4 port cables to the sensor tips.
    b. **Altitude** and **Latitude**: To compensate for atmospheric pressure based on elevation and gravitational pull, enter the local altitude in meters relative to sea level and latitude in degrees where the ProDSS is sampling. This will ensure highest accuracy, although the altitude and latitude effects are relatively small. ***Varying altitudes*** cause approximately 90 mm change from sea level to 8000 m. A 100 m change causes 1.08 mm of change to the readings. ***Varying latitudes*** cause a 200 mm change in depth from equator to pole.
2. Ensure the depth sensor is clean and in air, not immersed in any solution.
3. For highest accuracy, keep the bulkhead still and in one position while calibrating. The holes on the side of the depth sensor should not be covered.
4. The Calibration Value will be set at zero even if a depth offset is entered. There is no need to change this as long as you're calibrating in air.
5. Wait for the depth measurement to stabilize and then press Enter to accept the calibration. Only a 1 point calibration can be completed.
6. If you receive a warning message stating that the calibration is questionable, do not continue with the calibration. Instead, select 'No' and investigate what is causing the questionable results. If you accept a questionable calibration, your depth readings will be erroneous. Typical causes of a calibration error message include dirty ports on the side of the depth sensor, not waiting for stable measurements before accepting the calibration, moisture in the depth ports, and/or covering the depth ports with your hand during calibration.

Depth Troubleshooting Tips

The YSI ProDSS depth sensor measures virtually vented depth. This type of measurement allows for real time compensation for atmospheric pressure using the instrument's internal barometer. A major advantage to this type of depth sensor is there is no vented cable, tube or desiccant to worry about. Some troubleshooting tips include:

1. The ports on the side of the depth sensor should not be covered during calibration and should be free of any debris. These ports can be cleaned with the syringe included with the maintenance kit. When cleaning, fill the syringe with clean water and gently force water into one of the ports. Flush until clean water flows from the opposite depth port.

2. A sensor guard weight installed at the end of the sensor guard can help keep the bulkhead stable when sampling at depth. Up to 5 lbs of YSI stackable sensor guard weights can be installed.
3. Enable Vertical Position under Depth Display to view the real-time position of the depth sensor in the water column. This is helpful in profiling applications to ensure the depth sensor is lowered to the desired depth without waiting for the depth data to stabilize.

Ammonium

The ammonium sensor should be calibrated every day the instrument is used. The ammonium sensor should only be used in fresh water (salinity < 2 ppt) and to depths of 55 feet (17 meters) of water.

Ammonia is calculated from the ammonium, temperature and pH readings. pH greatly affects the ammonia calculation. Therefore, for highest accuracy in the ammonia calculation, be sure to use a pH sensor in conjunction with an ammonium sensor during measurements. If a pH sensor is not in use, the instrument will assume the sample is neutral (pH 7) for the calculation.

Ammonium Calibration Tips

1. Exposure to the high ionic content of pH buffers can cause a significant, but temporary, drift in the ammonium sensor. Therefore, if calibrating a pH sensor, either:
    a. Remove the ammonium sensor from the cable bulkhead and plug the port. After pH calibration is complete, reinstall the ammonium sensor and proceed with its calibration with no stabilization delay.

    or

    b. Calibrate pH first, immersing both sensors in the pH buffers. After calibrating pH, place the sensors in 100 mg/L ammonium standard and monitor the reading. Usually, the reading starts low and may take awhile to reach a stable value. When it does, proceed with the calibration. This may take several hours.
2. The ammonium sensor can be calibrated with up to three calibration points. For highest accuracy, perform a two point calibration with 1 and 100 mg/L standards within 10 °C of your sample temperature.
3. Rinse the sensors and cal cup with a small amount of ammonium solution (1 mg/L for the first point and 100 mg/L for the second point). Fill the cup so that the ammonium sensor tip and the temperature sensor are submerged in solution. Ensure the conductivity sensor is also submerged in the calibration solution. The salinity reading from the conductivity sensor is used in the algorithm for the ammonium measurement.
4. After entering the calibration screen, change the calibration value if necessary.
5. Record the NH_4 millivolts for each calibration point. The acceptable mV outputs for each calibration solution are shown below.
    - NH_4 1 mg/L = 0 mV +/- 20 mV (new sensor only)
    - NH_4 100 mg/L = 90 to 130 mV from 1 mg/L mV value
    - The mV span between 1 mg/L and 100 mg/L values should be ≈ 90 to 130 mV. The slope should be 45 to 65 mV per decade.

6. Wait for the ammonium and temperature readings to stabilize in each calibration solution and then press Enter to accept each calibration point.
7. Rinse the sensor and cal cup between calibration points with a small amount of the next standard.
8. After pressing Enter to accept the second calibration point, highlight **Finish Calibration** and press Enter to complete the calibration. Otherwise, you can continue calibrating with a third calibration point (see the ProDSS User Manual for more information on a chilled third calibration point).
9. If you receive a warning message stating that the calibration is questionable, do not continue with the calibration. Instead, select 'No' and investigate what is causing the questionable results. If you accept a questionable calibration, your ammonium and ammonia readings will be erroneous. Typical causes for this error message include a dirty sensor or bad standard solution.

Preparing Ammonium Calibration Solutions

We recommend using YSI calibration solutions whenever possible. However, qualified users can save cost by following the following recipes for 1 and 100 mg/L standards. Other concentrations can be made by altering the amount of ammonium chloride. All other ingredient concentrations should remain unchanged. It is important to note that some of these chemicals are hazardous and therefore, the standards should only be prepared by qualified chemists in laboratories where proper safety precautions are possible. It is the responsibility of the user to obtain and study the MSDS for each chemical and to follow the required instructions with regard to handling and disposal of these materials.

You will need: solid Ammonium Chloride or a certified 100 mg/L NH_4^+-N standard solution from a supplier, Lithium Acetate Dihydrate, concentrated hydrochloric acid, high purity water, a good quality analytical balance, a 1000 mL volumetric flask, accurate volumetric measuring devices for 100 mL and 10 mL of solution, and a 1000 mL glass or plastic storage vessels. (*Caution*: Hydrochloric acid is highly corrosive and toxic and should therefore be handled with extreme care in a well-ventilated fume hood. The user could also add the equivalent amount of a less-hazardous, more dilute sample of the acid if preferred.)

100 mg/L Standard: Accurately weigh 0.3817 g of ammonium chloride and transfer quantitatively into a 1000 mL volumetric flask. Add 2.6 g of lithium acetate dihydrate to the flask. Add approximately 500 mL of distilled or deionized water to the flask, swirl to dissolve all of the reagents and then dilute to the volumetric mark with distilled or deionized water. Mix well by repeated inversion and then transfer the 100 mg/L standard to a storage bottle. Add 3 drops of concentrated hydrochloric acid to the bottle, then seal and agitate to assure homogeneity. Alternatively, 100 mL of certified 100 mg/L NH_4^+-N standard can be used in place of the solid ammonium chloride.

1 mg/L Standard: Accurately measure 10.0 mL of the above 100 mg/L standard solution into a 1000 mL volumetric flask. Add 2.6 g of lithium acetate dihydrate to the flask. Add approximately 500 mL of distilled or deionized water, swirl to dissolve the solid reagents and then dilute to the volumetric mark with water. Mix well by repeated inversion and then transfer the 1 mg/L standard to a storage bottle. Add 3 drops of concentrated hydrochloric acid to the bottle, then seal and agitate to assure homogeneity.

Ammonium Troubleshooting Tips

Typical working life for ammonium sensors is approximately 3-6 months depending on use, storage and maintenance. Proper storage and maintenance generally extends the sensor's working life.

If you get error messages during an ammonium calibration, check the following:

1. Ensure the ammonium solutions are good and not expired.
2. Clean the sensor.
3. If you continue to get error messages during calibration, soak the sensor in 100 mg/L ammonium standard for several hours or overnight.
4. If you suspect port contamination, follow the instructions in the Cleaning a Sensor Port section.
5. If you continue to have trouble calibrating the ammonium sensor, contact your local YSI Representative or a YSI Authorized Service Center.

Cleaning the Ammonium Sensor

The ammonium sensor uses a PVC membrane. As always, when handling a sensor, care should be taken to avoid damaging the membrane. After extensive use, the membranes may become coated with a deposit or scoured with fine scratches which may cause a slow or reduced response (low slope) or unstable readings. Deposits may be removed with a fine jet of deionized water or rinsing in alcohol followed by soaking in 100 mg/L ammonium calibration standard.

The sensor may require soaking in the high ammonium calibration solution to recover its performance. Soak in 100 mg/L for several hours or overnight.

Nitrate

The nitrate sensor should be calibrated every day the instrument is used. The nitrate sensor should only be used in fresh water (salinity < 2 ppt) and to depths of 55 feet (17 meters) of water.

Nitrate Calibration Tips

1. Exposure to the high ionic content of pH buffers can cause a significant, but temporary, drift in the nitrate sensor. Therefore, if calibrating a pH sensor, either:
    a. Remove the nitrate sensor from the cable bulkhead and plug the port. After pH calibration is complete, reinstall the nitrate sensor and proceed with its calibration with no stabilization delay.

    or

    b. Calibrate pH first, immersing both sensors in the pH buffers. After calibrating pH, place the sensors in 100 mg/L nitrate standard and monitor the reading. Usually, the reading starts low and may take awhile to reach a stable value. When it does, proceed with the calibration. This may take several hours.
2. The nitrate sensor can be calibrated with up to three calibration points. For highest accuracy, perform a two point calibration with 1 and 100 mg/L standards within 10 °C of your sample temperature.

3. Rinse the sensors and cal cup with a small amount of nitrate solution (1 mg/L for the first point and 100 mg/L for the second point). Fill the cup so that the nitrate sensor tip and the temperature sensor are submerged in solution. Ensure the conductivity sensor is also submerged in the calibration solution. The salinity reading from the conductivity sensor is used in the algorithm for the nitrate measurement.
4. After entering the calibration screen, change the calibration value if necessary.
5. Record the NO_3^- millivolts for each calibration point. The acceptable mV outputs for each calibration solution are shown below.
    - NO_3^- 1 mg/L = 200 mV +/- 20 mV (new sensor only)
    - NO_3^- 100 mg/L = -90 to -130 mV from 1 mg/L mV value
    - The mV span between 1 mg/L and 100 mg/L values should be ≈ 90 to 130 mV. The slope should be -45 to -65 mV per decade.
6. Wait for the nitrate and temperature readings to stabilize in each calibration solution and then press Enter to accept each calibration point.
7. Rinse the sensor and cal cup between calibration points with a small amount of the next standard.
8. After pressing Enter to accept the second calibration point, highlight **Finish Calibration** and press Enter to complete the calibration. Otherwise, you can continue calibrating with a third calibration point (see the ProDSS User Manual for more information on a chilled third calibration point).
9. If you receive a warning message stating that the calibration is questionable, do not continue with the calibration. Instead, select 'No' and investigate what is causing the questionable results. If you accept a questionable calibration, your nitrate readings will be erroneous. Typical causes for this error message include a dirty sensor or bad standard solution.

Preparing Nitrate Calibration Solution

We recommend using YSI calibration solutions whenever possible. However, qualified users can save cost by following the following recipes for 1 and 100 mg/L nitrate standards. Other concentrations can be made by altering the amount of potassium nitrate. All other concentrations should remain unchanged. It is important to note that some of these chemicals are hazardous and therefore, the standards should only be prepared by qualified chemists in laboratories where proper safety precautions are possible. It is the responsibility of the user to obtain and study the MSDS for each chemical and to follow the required instructions with regard to handling and disposal of these materials.

You will need: Solid Potassium Nitrate or a certified 1000 mg/L NO_3^--N from a supplier, Magnesium Sulfate, high purity water, good quality analytical balance, 1000 mL volumetric flask, accurate volumetric measuring devices for 100 mL, 10 mL and 1 mL of solution, and 1000 mL glass or plastic storage vessels.

100 mg/L standard: Accurately weigh 0.7222 g of anhydrous potassium nitrate and transfer quantitatively into a 1000 mL volumetric flask. Add 1.0 g of anhydrous magnesium sulfate to the flask. Add approximately 500 mL of water to the flask, swirl to dissolve all of the reagents, and then dilute to the volumetric mark with distilled or deionized water. Mix well by repeated

inversion and then transfer the 100 mg/L standard to a storage bottle. Rinse the flask extensively with water prior to its use in the preparation of the 1 mg/L standard. Alternatively, 100 mL of certified 1000 mg/L NO_3^--N standard can be used in place of the solid potassium nitrate.

1 mg/L standard: Accurately measure 10.0 mL of the above 100 mg/L standard solution into a 1000 mL volumetric flask. Add 1.0 g of anhydrous magnesium sulfate to the flask. Add approximately 500 mL of distilled or deionized water, swirl to dissolve the solid reagents, and then dilute to the volumetric mark with water. Mix well by repeated inversion and then transfer the 1 mg/L standard to a storage bottle.

Recipes are given for 1 and 100 mg/L. Other concentrations can be made by altering the amount of potassium nitrate. All other concentrations should remain unchanged.

Nitrate Troubleshooting Tips

Typical working life for nitrate sensors is approximately 3-6 months depending on use, storage and maintenance. Proper storage and maintenance generally extends the sensor's working life.

If you get error messages during a nitrate calibration, check the following:

1. Ensure the nitrate solutions are good and not expired
2. Clean the sensor.
3. If you continue to get error messages during calibration, soak the sensor in 100 mg/L nitrate standard for several hours or overnight.
4. If you suspect port contamination, follow the instructions in the Cleaning a Sensor Port section.
5. If you continue to have trouble calibrating the nitrate sensor, contact your local YSI Representative or a YSI Authorized Service Center.

Cleaning and Reconditioning the Nitrate Sensor

The nitrate sensor uses a PVC membrane. As always, when handling a sensor, care should be taken to avoid damaging the membrane. After extensive use the membranes may become coated with a deposit or scoured with fine scratches which may cause a slow or reduced response (low slope) or unstable readings. Deposits may be removed with a fine jet of deionized water or rinsing in alcohol followed by soaking in 100 mg/L nitrate calibration standard.

The sensor may require soaking in the high nitrate calibration solution to recover its performance. Soak in 100 mg/L for several hours or overnight.

Chloride

The chloride sensor should be calibrated every day the instrument is used. The chloride sensor should only be used in fresh water (salinity < 2 ppt) and to depths of 55 feet (17 meters) of water.

Chloride Calibration Tips

1. Exposure to the high ionic content of pH buffers can cause a significant, but temporary, drift in the chloride sensor. Therefore, if calibrating a pH sensor, either:
    a. Remove the chloride sensor from the cable bulkhead and plug the port. After pH calibration is complete, reinstall the chloride sensor and proceed with its calibration with no stabilization delay.

    or

    b. Calibrate pH first, immersing both sensors in the pH buffers. After calibrating pH, place the sensors in 1,000 mg/L chloride standard and monitor the reading. Usually, the reading starts low and may take awhile to reach a stable value. When it does, proceed with the calibration. This may take several hours.
2. The chloride sensor can be calibrated with up to three calibration points. For highest accuracy, perform a two point calibration with 10 and 1000 mg/L standards within 10 °C of your sample temperature.
3. Rinse the sensors and cal cup with a small amount of chloride solution (10 mg/L for the first point and 1,000 mg/L for the second point). Fill the cup so that the chloride sensor tip and the temperature sensor are submerged in solution. Ensure the conductivity sensor is also submerged in the calibration solution. The salinity reading from the conductivity sensor is used in the algorithm for the chloride measurement.
4. After entering the calibration screen, change the calibration value if necessary.
5. Record the Cl millivolts for each calibration point. The acceptable mV outputs for each calibration solution are shown below.
    - Cl 10 mg/L = 225 mV +/- 20 mV (new sensor only)
    - Cl 1,000 mg/L = -80 to -130 mV from 10 mg/L mV value
    - The mV span between 10 mg/L and 1000 mg/L values should be ≈ 80 to 130 mV. The slope should be -40 to -65 mV per decade.
6. Wait for the chloride and temperature readings to stabilize in each calibration solution and then press Enter to accept each calibration point.
7. Rinse the sensor and cal cup between calibration points with a small amount of the next buffer.
8. After pressing Enter to accept the second calibration point, highlight **Finish Calibration** and press Enter to complete the calibration. Otherwise, you can continue calibrating with a third calibration point (see the ProDSS User Manual for more information on a chilled third calibration point).
9. If you receive a warning message stating that the calibration is questionable, do not continue with the calibration. Instead, select 'No' and investigate what is causing the questionable results. If you accept a questionable calibration, your chloride readings will be erroneous. Typical causes for this error message include a dirty sensor or bad standard solution.

Preparing Chloride Standards

The following recipes are provided for preparation of 10 and 1000 mg/L chloride reagents.

It is important to note that some of the chemicals required for these solutions could be hazardous under some conditions. It is the responsibility of the user to obtain and study the MSDS for each chemical and to follow the required instructions with regard to handling and disposal of these chemicals.

You will need: Solid sodium chloride or a certified 1000 mg/L chloride solution from a supplier, magnesium sulfate, high purity water, a good quality analytical balance, 1000 mL volumetric flask, an accurate 10 mL measuring devices, and 1000 mL glass or plastic storage vessels.

1000 mg/L standard: Accurately weigh 1.655 grams of anhydrous sodium chloride and transfer into a 1000 mL volumetric flask. Add 0.5 grams of anhydrous magnesium sulfate to the flask. Add 500 mL of distilled or deionized water to the flask, swirl to dissolve all of the reagents, and then dilute to the volumetric mark with water. Mix well by repeated inversion and then transfer the 1000 mg/L standard to a storage bottle. Rinse the flask extensively with water prior to its use in the preparation of the 10 mg/L standard. Alternatively, simply add 0.5 grams of magnesium sulfate to a liter of a 1000 mg/L chloride standard from a certified supplier.
10 mg/L standard: Accurately measure 10 mL of the above 1000 mg/L standard solution into a 1000 mL volumetric flask. Add 0.5 grams of anhydrous magnesium sulfate to the flask. Add 500 mL of distilled or deionized water, swirl to dissolve the solid reagents, and then dilute to the volumetric mark with water. Mix well by repeated inversion and then transfer the 10 mg/L standard to a storage bottle.

Chloride Troubleshooting Tips

Typical working life for chloride sensors is approximately 3-6 months depending on use, storage and maintenance. Proper storage and maintenance generally extends the sensor's working life.

If you get error messages during a chloride calibration, check the following:

1. Ensure the chloride solutions are good and not expired
2. Clean the sensor.
3. If you continue to get error messages during calibration, soak the sensor in 1000 mg/L chloride standard for several hours or overnight.
4. If you suspect port contamination, follow the instructions in the Cleaning a Sensor Port section.
5. If you continue to have trouble calibrating the chloride sensor, contact your local YSI Representative or a YSI Authorized Service Center.

Cleaning and Reconditioning the Chloride Sensor

The chloride sensor is considered a pellet membrane ISE. As always, when handling sensors, care should be taken to avoid damaging the membrane. This sensor can be regenerated by washing with alcohol and/or gently polishing with fine emery paper in a circular motion to remove any deposits or discoloration, then thoroughly washing with deionized water to remove any debris.

The sensor may require soaking in the high chloride calibration solution to recover its performance. Soak in 1000 mg/L for several hours or overnight.

Installing and Uninstalling Sensors

General Precautions

It is important that the entire sensor connector and cable connector be dry when installing, removing or replacing sensors. This will prevent water from entering the port. Once a sensor is removed, examine the connector inside the port. If any moisture is present, use compressed air to completely dry the connector or place directly in front of a steady flow of fresh air. If you suspect port contamination, follow the port cleaning procedures listed under Cleaning a Sensor Port.

Remove sensors with the sensor tips facing the ground to help prevent water from entering the port upon removal.

The instrument utilizes o-rings as seals to prevent water from entering the sensor ports. When the sensors are removed, the o-rings that provide the seal should be carefully inspected for contamination (e.g. debris, grit, etc.) and cleaned if necessary.

If no dirt or damage to the o-rings is evident, wipe the o-rings with a lint free cloth or lens cloth to remove the old o-ring grease. Then, lightly apply new o-ring grease (provided in the maintenance kit) to the o-rings without removing them from their groove. If there is any indication of damage, the o-ring should be replaced with an identical o-ring. At the time of o-ring replacement, the entire o-ring assembly should be cleaned.

Do not over-grease the o-rings. The purpose of the o-ring grease it to keep the o-ring in good condition. Excess grease may collect grit particles that can compromise the seal. Excess grease can also cause the waterproofing capabilities of the o-ring to diminish, potentially causing leaks. If excess grease is present, remove it using a lens cloth or lint-free cloth.

To remove the o-rings:
Use a small, flat-bladed screwdriver or similar blunt-tipped tool to remove the o-ring from its groove. Do not use a sharp object to remove the o-rings. Using a sharp object could damage the o-ring groove which would allow water to enter the port resulting in permanent damage to the port and sensor. Check the o-ring and the groove for any excess grease or contamination. If contamination is evident, clean the o-ring and the portion of the titanium sensor where the o-ring fits with lens cleaning tissue or equivalent lint-free cloth. Alcohol can be used to clean the titanium sensor, but use only water and mild detergent on the o-ring itself. Using alcohol on o-rings may cause a loss of elasticity and may promote cracking. Also, inspect the o-rings for nicks and imperfections.

Before re-installing the o-rings, make sure to use a clean workspace, clean hands, and avoid contact with anything that may leave fibers on the o-ring or grooves. Even a very small amount of contamination (hair, grit, etc.) may cause a leak.

To re-install the o-rings:
Place a small amount of o-ring grease between your thumb and index finger. Draw the o-ring through the grease while pressing the fingers together to place a very light covering of grease to the o-ring. Place the o-ring into its groove making sure that it does not twist or roll. Do not excessively stretch the o-ring during installation.

Use your grease-coated finger to once again lightly go over the mating surface of the o-ring.

Do not over-grease the o-rings. The excess grease may collect grit particles that can compromise the seal. Excess grease can also cause the waterproofing capabilities of the o-ring to diminish, potentially causing leaks. If excess grease is present, remove it using a lens cloth or lint-free cloth.

Cleaning a Sensor Port

If you suspect port contamination, you can clean the port on the cable by filling the port with Isopropyl Alcohol for 30 seconds and then dumping it out. Next, allow the port to air dry completely or blow it out with compressed air. Installing a sensor into a port that is not completely dry is likely to cause erratic and erroneous readings.

If the connector is corroded, contact your local YSI Representative or a YSI Authorized Service Center.

Verifying Sensor Accuracy and Calibration

Sensor accuracy and calibration can be verified by immersing a sensor into calibration solution or YSI Confidence Solution®. Compare the readings on the ProDSS display to the value of the solution. If the readings have drifted more than the accuracy specification of the sensor, perform a calibration before taking field measurements.

YSI Confidence Solution can be used to check the accuracy and calibration of the conductivity, pH and ORP sensors. However, to maintain the highest accuracy of the instrument, it should not be used to perform a calibration.

Resetting a Sensor to Factory Default

Occasionally, it may be necessary to reset the instrument to its factory calibration default values. To reset the calibration values, press the Cal key, highlight Restore Default Cal and press Enter. Highlight the parameter you wish to reset to default and press Enter. Next, you will be asked to confirm the operation. Highlight Yes and press Enter to confirm.

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Appendix H

Historical Methane Results

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Worcester County Snow Hill Landfill
Landfill Gas Monitoring - Percent Methane

	GP-1		GP-2		GP-3		GP-4		GP-5		GP-6		GP-7		GP-8		GP-9		GP-10		GP-11	
	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL
5/06	0.0	0.0	0.0	0.0	34.6	692.0	0.0	0.0	10.8	216.0	0.0	0.0	69.3	1386.0	57.9	1158.0	0.0	0.0	24.5	490.0	21.1	422.0
7/06	0.0	0.0	0.0	0.0	28.8	576.0	0.0	0.0	8.4	168.0	0.0	0.0	54.1	1082.0	38.8	776.0	0.0	0.0	19.6	392.0	14.3	286.0
8/06	0.0	0.0	0.0	0.0	40.8	816.0	0.0	0.0	25.5	510.0	0.0	0.0	42.1	842.0	0.0	0.0	0.0	0.0	52.8	1056.0	27.9	558.0
10/06	0.0	0.0	0.2	4.0	45.5	910.0	0.0	0.0	50.9	1018.0	0.0	0.0	64.7	1294.0	42.6	852.0	0.0	0.0	46.7	934.0	32.9	658.0
11/06	0.0	0.0	0.0	0.0	20.4	408.0	0.0	0.0	25.4	508.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.2	404.0	0.0	0.0
2/07	0.0	0.0	0.2	4.0	16.2	324.0	0.0	0.0	23.4	468.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3	326.0	0.0	0.0
5/07	0.0	0.0	0.0	0.0	42.0	840.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.9	478.0	19.1	382.0
8/07	0.0	0.0	0.0	0.0	24.7	494.0	0.0	0.0	0.0	0.0	0.0	0.0	54.7	1094.0	10.0	200.0	0.0	0.0	17.9	358.0	2.7	54.0
11/07	0.0	0.0	0.0	0.0	38.3	766.0	0.1	2.0	35.9	718.0	0.0	0.0	67.5	1350.0	43.2	864.0	0.0	0.0	34.3	686.0	18.2	364.0
2/08	0.0	0.0	0.0	0.0	29.0	580.0	0.0	0.0	19.7	394.0	0.0	0.0	50.0	1000.0	8.8	176.0	0.0	0.0	31.1	622.0	16.8	336.0
5/08	0.0	0.0	0.0	0.0	15.6	312.0	0.0	0.0	14.5	290.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	33.2	664.0	0.0	0.0
8/08	0.0	0.0	0.0	0.0	23.7	474.0	0.0	0.0	9.3	186.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	36.7	734.0	0.0	0.0
11/08	0.0	0.0	0.0	0.0	26.0	520.0	0.0	0.0	21.9	438.0	0.0	0.0	43.3	866.0	1.9	38.0	0.0	0.0	30.8	616.0	14.7	294.0
2/09	0.0	0.0	0.0	0.0	23.5	470.0	0.0	0.0	8.0	160.0	0.0	0.0	36.0	720.0	1.0	20.0	0.0	0.0	12.4	248.0	18.2	364.0
6/09	0.0	0.0	0.0	0.0	19.8	396.0	0.0	0.0	6.4	128.0	0.0	0.0	38.8	776.0	2.6	52.0	0.0	0.0	14.4	288.0	18.0	360.0
7/09	0.0	0.0	0.0	0.0	26.8	536.0	0.0	0.0	17.8	356.0	0.4	8.0	11.3	226.0	0.0	0.0	2.5	50.0	23.4	468.0	10.4	208.0
8/09	0.0	0.0	0.0	0.0	38.2	764.0	0.0	0.0	41.3	826.0	0.3	6.0	64.6	1292.0	24.1	482.0	0.1	2.0	36.7	734.0	13.9	278.0
9/09	0.0	0.0	0.0	0.0	37.1	742.0	0.2	4.0	35.5	710.0	0.3	6.0	61.3	1226.0	15.0	300.0	0.1	2.0	40.4	808.0	24.0	480.0
10/09	0.0	0.0	0.0	0.0	34.6	692.0	0.0	0.0	33.1	662.0	0.3	6.0	54.6	1092.0	12.3	246.0	0.0	0.0	35.0	700.0	30.1	602.0
11/09	0.0	0.0	0.0	0.0	30.0	600.0	0.5	10.0	38.8	776.0	0.3	6.0	12.1	242.0	13.3	266.0	0.0	0.0	22.4	448.0	39.2	784.0
12/09	0.0	0.0	0.0	0.0	21.3	426.0	1.1	22.0	34.1	682.0	0.0	0.0	25.6	512.0	0.1	2.0	0.0	0.0	18.6	372.0	45.9	918.0
1/10	0.0	0.0	0.0	0.0	15.7	314.0	0.0	0.0	30.5	610.0	0.1	2.0	41.3	826.0	1.0	20.0	0.0	0.0	13.0	260.0	45.2	904.0
2/10	0.0	0.0	0.0	0.0	23.9	478.0	0.3	6.0	14.6	292.0	0.1	2.0	40.5	810.0	1.9	38.0	0.0	0.0	13.6	272.0	45.5	910.0
3/10	0.0	0.0	0.0	0.0	16.6	332.0	0.0	0.0	8.9	178.0	0.0	0.0	30.5	610.0	0.0	0.0	0.0	0.0	10.5	210.0	43.0	860.0
4/10	0.0	0.0	0.0	0.0	12.2	244.0	0.0	0.0	5.5	110.0	0.0	0.0	37.3	746.0	0.2	4.0	0.0	0.0	6.9	138.0	32.6	652.0
5/10	0.0	0.0	0.0	0.0	9.1	182.0	0.0	0.0	0.0	0.0	0.3	6.0	43.0	860.0	4.2	84.0	0.0	0.0	4.5	90.0	30.4	608.0
6/10	0.0	0.0	0.0	0.0	15.4	308.0	0.0	0.0	0.0	0.0	0.2	4.0	47.6	952.0	0.0	0.0	0.0	0.0	7.1	142.0	15.3	306.0
7/10	0.0	0.0	0.0	0.0	14.9	298.0	0.0	0.0	12.0	240.0	0.0	0.0	10.1	202.0	0.0	0.0	0.0	0.0	1.1	22.0	0.9	18.0
8/10	0.0	0.0	0.0	0.0	25.0	500.0	0.1	2.0	27.4	548.0	0.2	4.0	45.7	914.0	8.1	162.0	19.0	380.0	11.6	232.0	4.6	92.0
9/10	0.0	0.0	0.1	2.0	27.2	544.0	0.2	4.0	33.1	662.0	0.1	2.0	29.0	580.0	6.3	126.0	9.3	186.0	8.2	164.0	12.7	254.0
10/10	0.0	0.0	0.0	0.0	33.3	666.0	0.1	2.0	4.0	80.0	0.0	0.0	54.0	1080.0	39.2	784.0	4.8	96.0	31.9	638.0	20.8	416.0
11/10	0.0	0.0	0.1	2.0	32.5	650.0	0.1	2.0	26.4	528.0	0.3	6.0	61.3	1226.0	52.1	1042.0	7.6	152.0	36.9	738.0	27.0	540.0
12/10	0.0	0.0	0.2	4.0	17.3	346.0	0.0	0.0	3.2	64.0	0.3	6.0	62.0	1240.0	51.8	1036.0	0.4	8.0	31.3	626.0	27.5	550.0
1/11	0.0	0.0	0.0	0.0	21.3	426.0	0.0	0.0	1.4	28.0	0.0	0.0	67.4	1348.0	61.0	1220.0	0.1	2.0	25.1	502.0	28.6	572.0
2/11	0.0	0.0	0.0	0.0	27.8	556.0	0.0	0.0	19.4	388.0	0.0	0.0	70.6	1412.0	51.3	1026.0	0.3	6.0	29.9	598.0	29.2	584.0
3/11	0.0	0.0	0.1	2.0	16.1	322.0	0.2	4.0	20.1	402.0	0.4	8.0	71.7	1434.0	54.0	1080.0	0.1	2.0	31.2	624.0	28.4	568.0
4/11	0.0	0.0	0.0	0.0	1.1	22.0	0.0	0.0	0.0	0.0	0.0	0.0	68.6	1372.0	50.8	1016.0	0.2	4.0	31.0	620.0	20.5	410.0
5/11	0.0	0.0	0.1	2.0	0.1	2.0	0.0	0.0	0.0	0.0	N/A	N/A	68.1	1362.0	37.8	756.0	0.3	6.0	35.1	702.0	27.7	554.0
6/11	6.0	120.0	0.0	0.0	0.1	2.0	1.3	26.0	0.2	4.0	N/A	N/A	59.5	1190.0	0.1	2.0	0.0	0.0	30.9	618.0	14.8	296.0
7/11	0.0	0.0	0.1	2.0	23.0	460.0	0.3	6.0	12.9	258.0	0.3	6.0	49.7	994.0	12.3	246.0	0.1	2.0	32.6	652.0	18.6	372.0
8/11	0.0	0.0	0.1	2.0	20.8	416.0	0.1	2.0	7.9	158.0	0.0	0.0	48.5	970.0	0.7	14.0	6.1	122.0	42.5	850.0	26.0	520.0
9/11	0.0	0.0	0.1	2.0	27.8	556.0	0.2	4.0	34.1	682.0	0.2	4.0	49.0	980.0	14.7	294.0	0.1	2.0	35.1	702.0	34.8	696.0
10/11	0.0	0.0	0.0	0.0	21.5 (33.2)	430 (664)	0.0 (0.1)	0 (2)	8.6 (20.0)	172 (400)	0.0	0.0	42.1 (51.7)	842 (1034)	30.2 (32.6)	604 (652)	0.7 (1.8)	14 (36)	37.1 (47.1)	742 (942)	27.3 (38.3)	546 (766)
11/11	0.0	0.0	0.0	0.0	28.6	572.0	0.1	2.0	12.3	246.0	0.0	0.0	61.8	1236.0	53.2	1064.0	2.9	58.0	48.5	970.0	38.9	778.0
12/11	0.0	0.0	0.2	4.0	32.7	654.0	0.2	4.0	28.6	572.0	0.3	6.0	63.5	1270.0	56.3	1126.0	7.9	158.0	49.4	988.0	39.3	786.0
1/12	0.0 (0.1)	0.0 (2.0)	0.0	0.0	9.6 (19.1)	192 (382)	0.0 (0.1)	0 (2)	6.4 (13.8)	128 (276)	0.0 (0.1)	0.0 (2.0)	59.3 (66.0)	1186 (1320)	50.9 (60.0)	1018 (1200)	0.1 (0.3)	2.0 (6.0)	40.3 (46.2)	806 (924)	28.6 (37.9)	572 (758)
2/12	0.0	0.0	0.0 (0.1)	0.0 (2.0)	4.3 (18.2)	86 (364)	0.0 (0.1)	0 (2)	1.5 (8.0)	30 (160)	0.0 (0.4)	0.0 (8.0)	54.5 (67.8)	1090 (1356)	52.0 (69.6)	1040 (1392)	0.0 (0.6)	0.0 (12)	42.9 (45.0)	858 (900)	22.8 (36.5)	456 (730)

Notes:
Stabilized readings presented; peak readings presented in parenthesis.
GP-18A was first sampled during the 9/13 sampling event.
"--" - indicates a sample could not be collected from the gas probe during the smapling event.
Shaded columns are perimieter probes

Worcester County Snow Hill Landfill
Landfill Gas Monitoring - Percent Methane

	GP-12		GP-13		GP-14		GP-15		GP-16		GP-17		GP-18		GP-18A		GP-19		GP-20		GP-21		AS	
	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL
5/06	31.9	638.0	58.7	1174.0	19.1	382.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
7/06	34.6	692.0	51.2	1024.0	14.2	284.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
8/06	36.6	732.0	54.3	1086.0	3.9	78.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
10/06	42.1	842.0	62.2	1244.0	18.1	362.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
11/06	0.0	0.0	31.4	628.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
2/07	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
5/07	0.0	0.0	36.4	728.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
8/07	30.9	618.0	51.9	1038.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
11/07	36.5	730.0	63.5	1270.0	18.0	360.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
2/08	25.7	514.0	48.6	972.0	12.7	254.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
5/08	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/08	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
11/08	27.5	550.0	50.1	1002.0	5.4	108.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
2/09	25.2	504.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
6/09	27.9	558.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
7/09	N/A	N/A	47.8	956.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
8/09	16.6	332.0	51.5	1030.0	7.5	150.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
9/09	20.3	406.0	49.5	990.0	9.6	192.0	0.1	2.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
10/09	19.5	390.0	50.7	1014.0	9.1	182.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
11/09	24.3	486.0	48.9	978.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
12/09	25.9	518.0	53.3	1066.0	2.4	48.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
1/10	28.3	566.0	63.4	1268.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
2/10	24.8	496.0	65.0	1300.0	5.4	108.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
3/10	22.2	444.0	62.8	1256.0	5.1	102.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
4/10	24.0	480.0	60.0	1200.0	0.4	8.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
5/10	12.8	256.0	59.2	1184.0	5.6	112.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
6/10	24.0	480.0	49.6	992.0	5.7	114.0	0.2	4.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
7/10	25.4	508.0	49.2	984.0	2.2	44.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.2	4.0
8/10	31.5	630.0	51.7	1034.0	6.7	134.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
9/10	36.6	732.0	53.9	1078.0	7.7	154.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.1	2.0
10/10	39.2	784.0	55.0	1100.0	9.5	190.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
11/10	40.6	812.0	57.8	1156.0	10.3	206.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
12/10	36.3	726.0	60.3	1206.0	9.6	192.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
1/11	28.5	570.0	62.4	1248.0	6.7	134.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
2/11	35.3	706.0	61.2	1224.0	10.6	212.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
3/11	37.5	750.0	58.2	1164.0	9.3	186.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
4/11	11.6	232.0	32.8	656.0	9.2	184.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
5/11	37.5	750.0	54.1	1082.0	7.8	156.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
6/11	28.4	568.0	50.5	1010.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.1	2.0
7/11	41.6	832.0	49.9	998.0	7.3	146.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
8/11	43.9	878.0	48.8	976.0	8.8	176.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
9/11	45.3	906.0	49.0	980.0	6.2	124.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
10/11	36.8 (47.9)	736 (958)	50.5 (53.2)	1010 (1064)	7.2 (8.7)	144 (174)	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
11/11	36.7	734.0	58.1	1162.0	10.0	200.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
12/11	42.5	850.0	58.9	1178.0	8.9	178.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
1/12	29.2 (37.6)	584 (752)	44.3 (55.3)	886 (1106)	6.3 (11.8)	126 (236)	0.1 (0.2)	2.0 (4.0)	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
2/12	45.0 (47.9)	900 (958)	56.6 (61.3)	1132 (1226)	0.6 (10.3)	12 (206)	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0

Notes:

Stabilized readings presented; peak readings presented in parenthesis.

GP-18A was first sampled during the 9/13 sampling event.

"--" - indicates a sample could not be collected from the gas probe during the smapling event.

Shaded columns are perimieter probes

Worcester County Snow Hill Landfill
Landfill Gas Monitoring - Percent Methane

	GP-1		GP-2		GP-3		GP-4		GP-5		GP-6		GP-7		GP-8		GP-9		GP-10		GP-11	
	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL
3/12	0.0	0.0	0.0	0.0	17.3 (18.7)	346 (374)	0.0	0.0	1.7 (12.7)	34 (254)	0.0	0.0	52.6 (63.3)	1052 (1266)	52.1 (64.4)	1042 (1288)	0.0 (0.2)	0.0 (4.0)	19.7 (31.1)	394 (622)	25.6 (34.7)	530 (694)
4/12	0.0	0.0	0.0	0.0	22.0 (28.6)	440 (572)	0.0	0.0	0.0 (1.1)	0.0 (22)	0.0 (0.2)	0.0 (4.0)	37.3 (47.5)	746 (950)	28.4 (42.8)	568 (856)	0.0 (0.1)	0.0 (2.0)	37.8 (45.7)	756 (914)	26.2 (33.3)	524 (666)
5/12	0.0	0.0	0.0 (0.2)	0.0 (4.0)	20.1 (32.5)	402 (650)	0.0	0.0	21.1 (29.0)	422 (580)	0.0 (0.2)	0.0 (4.0)	52.6 (67.6)	1052 (1352)	38.5 (47.7)	770 (954)	0.0 (2.4)	0.0 (48)	31.0 (40.6)	620 (812)	10.6 (27.8)	212 (556)
6/12	0.2 (0.2)	4.0 (4.0)	0.2 (0.2)	4.0 (4.0)	26.6 (36.7)	532 (734)	0.0	0.0	28.5 (34.7)	57 (694)	0.1 (0.1)	2.0 (2.0)	50.3 (65.6)	1006 (1312)	35.5 (44.5)	710 (890)	4.2 (4.2)	84 (84)	43.4 (49.7)	868 (994)	25.6 (31.4)	512 (628)
7/12	0.0	0.0	0.0 (0.1)	0.0 (2.0)	28.7 (29.5)	574 (590)	0.0	0.0	4.9 (12.6)	98 (252)	0.0	0.0	59.0 (60.0)	1180 (1200)	9.1 (9.8)	182 (196)	9.9 (15.6)	198 (312)	24.6 (40.6)	492 (812)	20.9 (26.0)	418 (520)
8/12	0.1 (0.2)	2.0 (4.0)	0.0	0.0	28.3 (29.9)	566 (598)	0.1 (3.1)	2 (62)	33.4 (35.5)	668 (710)	0.2 (0.2)	4.0 (4.0)	47.1 (52.7)	942 (1054)	26.2 (26.4)	524 (528)	13.3 (26.4)	266 (528)	29.5 (36.4)	590 (728)	12.4 (25.6)	248 (512)
9/12	0.0	0.0	0.0	0.0	17.1 (29.3)	342 (586)	0.0	0.0	26.7 (31.3)	534 (626)	0.0	0.0	35.6 (48.8)	712 (976)	0.9 (1.1)	18 (22)	3.8 (7.3)	76 (146)	26.4 (46.1)	528 (922)	15.7 (37.7)	314 (754)
10/12	0.0	0.0	0.0	0.0	30.2 (30.2)	604 (604)	0.3 (0.4)	6 (8)	23.9 (23.9)	478 (478)	0.3 (0.3)	6.0 (6.0)	61.9 (61.9)	1238 (1238)	29.3 (29.3)	586 (586)	17.5 (17.5)	350 (350)	49.8 (49.8)	996 (996)	40.2 (40.2)	804 (804)
11/12	0.0	0.0	0.2 (0.2)	4.0 (4.0)	20.0 (20.0)	400 (400)	0.0	0.0	18.0 (18.00	360 (360)	0.0	0.0	42.8 (42.8)	856 (856)	0.2 (0.2)	4.0 (4.0)	0.1 (0.1)	2.0 (2.0)	23.7 (23.7)	474 (474)	36.6 (43.8)	732 (876)
12/12	0.0	0.0	0.0	0.0	11.7 (11.7)	234 (234)	0.0	0.0	15.6 (15.6)	312 (312)	0.1 (0.1)	2.0 (2.0)	61.6 (61.6)	1232 (1232)	0.2 (0.2)	4.0 (4.0)	0.4 (0.4)	8.0 (8.0)	26.5 (26.5)	530 (530)	41.5 (41.5)	830 (830)
1/13	0.0	0.0	0.0	0.0	30.1 (30.1)	602 (602)	0.1 (0.1)	0 (2)	23.8 (23.8)	476 (476)	0.1 (0.1)	2.0 (2.0)	52.6 (52.6)	1052 (1052)	0.1 (0.1)	2.0 (2.0)	0.3 (0.3)	6.0 (6.0)	25.5 (25.5)	510 (510)	39.7 (39.7)	794 (794)
2/13	0.0	0.0	0.0	0.0	24.2 (24.2)	484 (484)	0.0	0.0	10.4 (10.4)	208 (208)	0.0	0.0	61.2 (61.2)	1224 (1224)	0.0	0.0	0.0	0.0	24.9 (24.9)	498 (498)	31.9 (31.9)	638 (638)
3/13	0.0	0.0	0.0	0.0	11.9	238.0	0.0	0.0	11.8	236.0	0.0	0.0	17.3	346.0	0.0	0.0	0.0	0.0	0.0	0.0	39.4	788.0
4/13	0.0	0.0	0.0	0.0	20.1	402.0	0.0	0.0	1.5	30.0	0.2	4.0	35.2	704.0	0.0	0.0	0.1	2.0	18.4	368.0	37.1	742.0
5/13	0.0	0.0	0.0	0.0	4.5	90.0	0.0	0.0	7.8	156.0	0.0	0.0	62.1	1242.0	0.1	2.0	0.2	4.0	21.4	428.0	32.5	650.0
6/13	0.0	0.0	0.1	2.0	13.5	270.0	0.1	2.0	5.5	110.0	0.1	2.0	61.9	1238.0	3.0	60.0	0.1	2.0	27.6	552.0	32.3	646.0
7/13	0.0	0.0	0.0	0.0	35.4 (38.9)	708 (778)	0.0	0.0	35.7 (42.3)	714 (846)	0.0	0.0	41.7 (51.8)	834 (1036)	1.8 (2.2)	36 (44)	0.0 (0.1)	0.0 (2.0)	26.4 (35.3)	528 (706)	34.2 (34.4)	684 (688)
8/13	0.0	0.0	0.0	0.0	33.8	676.0	0.1	2.0	36.9	738.0	0.0	0.0	56.3	1126.0	1.6	32.0	13.0	260.0	44.9	898.0	33.1	662.0
9/13	0.0	0.0	0.0	0.0	21.9	438.0	0.0	0.0	25.4	508.0	0.1	2.0	46.4	928.0	0.2	4.0	15.4	308.0	42.9	858.0	30.5	610.0
10/13	0.0	0.0	0.1	2.0	19.2	384.0	0.1	2.0	26.3	526.0	0.1	2.0	45.8	916.0	0.3	6.0	25.0	500.0	42.3	846.0	27.8	556.0
11/13	0.0	0.0	0.0	0.0	12.3	246.0	0.1	2.0	7.5	150.0	0.0	0.0	45.1	902.0	1.8	36.0	18.3	366.0	43.2	864.0	27.7	554.0
12/13	0.0	0.0	0.0	0.0	13.1	262.0	0.0	0.0	9.8	196.0	0.1	2.0	46.9	938.0	0.1	2.0	11.7	234.0	51.7	1034.0	32.4	648.0
1/14	0.0	0.0	0.0	0.0	21.2	424.0	0.4	8.0	18.3	366.0	0.0	0.0	56.2	1124.0	0.1	2.0	8.8	176.0	53.7	1074.0	29.4	588.0
2/14	0.0	0.0	0.0	0.0	11.0	220.0	0.0	0.0	3.5	70.0	0.0	0.0	53.7	1074.0	1.5	30.0	7.5	150.0	47.5	950.0	32.0	640.0
3/14	0.0	0.0	0.0	0.0	10.8	216.0	0.0	0.0	0.1	2.0	0.0	0.0	32.4	648.0	0.0	0.0	1.3	26.0	28.2	564.0	23.3	466.0
4/14	0.0	0.0	0.0	0.0	13.7	274.0	0.0	0.0	12.6	252.0	0.0	0.0	33.1	662.0	0.0	0.0	0.0	0.0	35.2	704.0	31.0	620.0
5/14	0.0	0.0	0.1	2.0	3.3	66.0	0.0	0.0	0.1	2.0	0.1	2.0	11.5	230.0	0.0	0.0	0.1	2.0	32.9	658.0	20.2	404.0
5/14	0.0	0.0	0.0	0.0	1.7	34.0	0.0	0.0	5.4	108.0	0.0	0.0	15.9	318.0	1.2	24.0	3.9	78.0	43.6	872.0	34.3	686.0
6/14	0.0	0.0	0.0	0.0	4.5	90.0	0.0	0.0	26.0	520.0	0.1	2.0	15.7	314.0	0.0	0.0	10.8	216.0	42.4	848.0	32.6	652.0
7/14	0.1	2.0	0.0	0.0	20.8	416.0	0.1	2.0	31.8	636.0	0.0	0.0	16.2	324.0	0.2	4.0	20.5	410.0	41.5	830.0	30.8	616.0
8/14	0.0	0.0	0.0	0.0	24.0	480.0	0.0	0.0	25.5	510.0	0.0	0.0	6.3	126.0	0.0	0.0	15.2	304.0	29.5	590.0	22.8	456.0
9/14	0.0	0.0	0.0	0.0	19.6	392.0	0.0	0.0	21.7	434.0	0.0	0.0	13.8	276.0	0.0	0.0	24.1	482.0	28.9	578.0	23.3	466.0
10/14	0.0	0.0	0.0	0.0	18.2	364.0	0.0	0.0	7.1	142.0	0.0	0.0	9.8	196.0	0.0	0.0	21.3	426.0	23.8	476.0	5.0	100.0
11/14	0.0	0.0	0.0	0.0	27.5	550.0	0.0	0.0	13.4	268.0	0.2	4.0	19.2	384.0	0.2	4.0	36.6	732.0	42.8	856.0	37.2	744.0
12/14	0.0	0.0	0.0	0.0	16.1	322.0	0.0	0.0	20.1	402.0	0.0	0.0	9.7	194.0	0.0	0.0	28.2	564.0	41.6	832.0	23.9	478.0
1/15	0.0	0.0	0.0	0.0	19.2	384.0	0.0	0.0	26.5	530.0	0.0	0.0	12.8	256.0	0.0	0.0	6.3	126.0	43.1	862.0	34.1	682.0
2/15	0.0	0.0	0.0	0.0	7.0	140.0	0.0	0.0	1.8	36.0	0.0	0.0	8.6	172.0	0.0	0.0	0.3	6.0	30.0	600.0	31.4	628.0
3/15	0.0	0.0	0.0	0.0	5.5	110.0	0.0	0.0	0.4	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	24.8	496.0	24.8	496.0
4/15	0.0	0.0	0.0	0.0	5.1	102.0	0.0	0.0	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.7	574.0	21.5	430.0
5/15	0.0	0.0	0.0	0.0	3.1	62.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	58.0	0.0	0.0	1.7	34.0	23.3	466.0	25.8	516.0
6/15	0.3	6.0	0.0	0.0	27.8	556.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	82.0	0.0	0.0	10.9	218.0	33.6	672.0	27.0	540.0
7/15	0.0	0.0	0.0	0.0	28.9	578.0	0.0	0.0	4.6	92.0	0.0	0.0	6.2	124.0	0.1	2.0	22.3	446.0	33.5	670.0	24.5	490.0
8/15	0.0	0.0	0.0	0.0	29.8	596.0	0.0	0.0	17.6	352.0	0.0	0.0	5.2	104.0	0.0	0.0	23.8	476.0	32.8	656.0	25.7	514.0
9/15	0.0	0.0	0.0	0.0	25.6	512.0	0.0	0.0	28.6	572.0	0.0	0.0	5.2	104.0	0.0	0.0	30.7	614.0	33.4	668.0	23.4	468.0
10/15	0.0	0.0	0.0	0.0	38.3	766.0	0.0	0.0	31.6	632.0	0.0	0.0	5.9	118.0	0.0	0.0	26.7	534.0	41.6	832.0	29.9	598.0
11/15	0.0	0.0	0.0	0.0	17.2	344.0	0.0	0.0	14.2	284.0	0.0	0.0	0.0	0.0	0.0	0.0	4.6	92.0	39.9	798.0	29.3	586.0
12/15	0.0	0.0	0.0	0.0	24.4	488.0	0.0	0.0	17.7	354.0	0.0	0.0	0.8	16.0	0.0	0.0	36.1	722.0	40.6	812.0	--	--
1/16	0.0	0.0	0.4	8.0	28.0	560.0	0.0	0.0	4.8	96.0	0.0	0.0	--	--	--	--	--	--	--	--	--	--

Notes:

Stabilized readings presented; peak readings presented in parenthesis.

GP-18A was first sampled during the 9/13 sampling event.

"--" - indicates a sample could not be collected from the gas probe during the smapling event.

Shaded columns are perimieter probes

Worcester County Snow Hill Landfill
Landfill Gas Monitoring - Percent Methane

	GP-12		GP-13		GP-14		GP-15		GP-16		GP-17		GP-18		GP-18A		GP-19		GP-20		GP-21		AS	
	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL
3/12	20.1 (34.9)	402 (698)	32.5 (57.7)	650 (1154)	8.5 (10.1)	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
4/12	31.1 (40.0)	622 (800)	45.3 (55.9	906 (1118)	6.6 (9.7)	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
5/12	35.5 (41.6)	710 (832)	44.5 (56.7)	890 (1134	1.3 (9.5)	0.0	0.0	0.0	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	0.0	0.0
6/12	21.0 (39.0)	420 (780)	51.0 (52.6)	1020 (1052)	10.2 (10.2)	0.0	0.2 (0.2)	0.0	0.0	0.0	1.2 (13.4)	24 (268)	11.5 (21.0)	230 (420)	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7/12	24.8 (44.5)	496 (890)	50.4 (51.1)	1008 (1022	10.1 (12.4)	0.0	0.0	0.0	0.0	0.0	0.0 (0.2)	0.0 (4.0)	17.6 (17.8)	352 (356)	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/12	37.1 (41.8)	742 (836)	45.1 (50.6)	902 (1012)	5.1 (6.2)	0.0	0.2 (0.2)	0.0	0.1 (0.1)	2.0 (2.0)	0.0	0.0	12.1 (23.1)	242 (462)	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9/12	35.4 (49.1)	708 (982)	43.4 (54.0)	868 (1080)	7.4 (7.4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/12	46.5 (46.5)	930 (930)	56.4 (56.4)	1128 (1128)	12.0 (12.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	0.1 (0.1)	2.0 (2.0)	0.0	0.0	0.0	0.0	0.0	0.0
11/12	14.1 (16.5)	282 (330)	59.7 (59.7)	1194 (1194)	2.7 (2.7)	0.0	0.0	0.0	0.2 (0.2)	4.0 (4.0)	0.0	0.0	1.1 (1.1)	22 (22)	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/12	52.1 (52.1)	1042 (1042)	57.0 (57.0)	1140 (1140)	3.2 (3.2)	0.0	0.0	0.0	0.1 (0.1)	2.0 (2.0)	0.0	0.0	16.4 (16.4)	328 (328)	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1/13	49.6 (49.6)	992 (992)	63.4 (63.4)	1268 (1268)	2.0 (2.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.3 (16.3)	326 (326)	N/A	N/A	0.1 (0.1)	2.0 (2.0)	0.0	0.0	0.0	0.0	0.0	0.0
2/13	44.4 (44.4)	888 (888)	58.6 (58.6)	1172 (1172)	0.4 (0.4)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/13	51.2	1024.0	65.0	1300.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.6	212.0	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/13	49.8	996.0	61.2	1224.0	1.8	0.0	0.0	0.0	0.0	0.0	0.1	2.0	11.2	224.0	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/13	39.4	788.0	57.7	1154.0	6.0	0.0	0.0	0.0	N/A	N/A	N/A	N/A	0.0	0.0	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/13	50.2	1004.0	55.6	1112.0	6.0	0.0	0.1	0.0	0.0	0.0	0.1	2.0	20.8	416.0	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7/13	42.7 (46.2)	854 (924)	47.8 (53.2)	956 (1064)	3.8 (4.5)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	24.2 (24.8)	484 (496)	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/13	42.1	842.0	53.9	1078.0	5.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.5	70.0	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9/13	45.1	902.0	54.8	1096.0	8.1	0.0	0.0	0.0	0.0	0.0	0.1	2.0	20.3	406.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/13	37.7	754.0	58.1	1162.0	7.6	0.0	0.0	0.0	0.0	0.0	0.2	4.0	11.7	234.0	0.5	10.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0
11/13	38.8	776.0	56.7	1134.0	0.8	0.0	0.0	0.0	0.0	0.0	0.1	2.0	10.0	200.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0
12/13	48.9	978.0	61.4	1228.0	8.9	0.0	0.0	0.0	0.0	0.0	0.1	2.0	8.6	172.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0
1/14	47.5	950.0	60.9	1218.0	8.1	0.0	0.0	0.0	0.3	6.0	0.0	0.0	10.4	208.0	0.5	10.0	0.0	0.0	--	--	0.1	2.0	0.0	0.0
2/14	48.3	966.0	61.8	1236.0	9.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.5	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/14	32.2	644.0	36.1	722.0	6.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.0	40.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/14	40.5	810.0	49.0	980.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	170.0	N/A	N/A	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/14	24.3	486.0	46.8	936.0	2.0	0.0	0.0	0.0	0.1	2.0	0.1	2.0	7.9	158.0	0.1	2.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0
5/14	29.7	594.0	54.0	1080.0	7.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0 (0.1)	0.0 (2.0)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/14	34.7	694.0	49.3	986.0	6.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.7	254.0	0.1	2.0	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0
7/14	44.8	896.0	53.0	1060.0	7.0	0.0	0.1	0.0	0.2	4.0	0.2	4.0	9.9	198.0	0.1	2.0	0.0	0.0	0.2	4.0	0.0	0.0	0.1	2.0
8/14	24.7	494.0	32.5	650.0	2.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9/14	38.2	764.0	30.9	618.0	2.6	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
10/14	14.4	288.0	28.0	560.0	3.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/14	23.8	476.0	52.2	1044.0	7.2	0.0	0.0	0.0	0.1	2.0	0.1	2.0	--	--	0.0	0.0	0.0	0.0	0.1	2.0	0.1	2.0	0.0	0.0
12/14	46.2	924.0	57.0	1140.0	6.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1/15	45.6	912.0	62.5	1250.0	10.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/15	35.0	700.0	62.7	1254.0	3.1	0.0	0.1	0.0	0.2	4.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/15	1.4	28.0	51.8	1036.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
4/15	5.4	108.0	52.3	1046.0	5.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/15	21.5	430.0	53.1	1062.0	2.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/15	27.2	544.0	47.1	942.0	2.1	0.0	0.3	0.0	0.1	2.0	0.1	2.0	--	--	0.0	0.0	--	--	0.0	0.0	0.1	2.0	0.0	0.0
7/15	32.8	656.0	48.3	966.0	6.7	0.0	0.0	0.0	--	--	--	--	3.9	78.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/15	49.5	990.0	50.6	1012.0	2.8	0.0	0.1	0.0	--	--	--	--	21.4	428.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
9/15	34.3	686.0	50.0	1000.0	4.7	0.0	0.0	0.0	0.0	0.0	--	--	20.7	414.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/15	23.7	474.0	55.8	1116.0	7.4	0.0	0.0	0.0	0.3	6.0	--	--	0.3	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
11/15	36.9	738.0	54.4	1088.0	1.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/15	53.0	1060.0	55.7	1114.0	8.9	0.0	0.0	0.0	--	--	0.0	0.0	15.8	316.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
1/16	44.6	892.0	61.7	1234.0	8.2	0.0	0.0	0.0	--	--	0.1	2.0	15.2	304.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0

Notes:
Stabilized readings presented; peak readings presented in parenthesis.
GP-18A was first sampled during the 9/13 sampling event.
"--" - indicates a sample could not be collected from the gas probe during the smapling event.
Shaded columns are perimieter probes

Worcester County Snow Hill Landfill
Landfill Gas Monitoring - Percent Methane

	GP-1		GP-2		GP-3		GP-4		GP-5		GP-6		GP-7		GP-8		GP-9		GP-10		GP-11	
	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL
2/16	0.0	0.0	0.0	0.0	4.8	96.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	4.0	0.3	6.0	0.5	10.0
3/16	0.0	0.0	0.0	0.0	12.8	256.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.7	14.0	0.0	0.0
4/16	0.0	0.0	0.0	0.0	8.7	174.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	8.0	8.5	170.0	0.0	0.0
5/16	0.0	0.0	0.0	0.0	3.2	64.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	56.0	6.0	120.0	0.0	0.0
6/16	0.0	0.0	0.0	0.0	31.7	634.0	0.0	0.0	0.1	2.0	0.0	0.0	2.6	52.0	0.1	2.0	13.6	272.0	15.7	314.0	0.1	2.0
7/16	0.0	0.0	0.0	0.0	31.4	628.0	1.3	26.0	0.3	6.0	0.0	0.0	0.0	0.0	0.0	0.0	21.4	428.0	5.7	114.0	0.5	10.0
8/16	0.0	0.0	0.0	0.0	30.7	614.0	0.1	2.0	28.2	564.0	0.0	0.0	0.1	2.0	0.0	0.0	18.1	362.0	0.9	18.0	0.5	10.0
9/16	0.0	0.0	0.0	0.0	25.7	514.0	0.0	0.0	30.0	600.0	0.0	0.0	0.8	16.0	0.0	0.0	0.7	14.0	0.0	0.0	5.0	100.0
10/16	0.1	2.0	0.0	0.0	18.0	360.0	0.0	0.0	0.4	8.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	56.0	0.1	2.0	3.9	78.0
11/16	0.0	0.0	0.1	2.0	17.3	346.0	0.0	0.0	11.2	224.0	0.1	2.0	0.1	2.0	0.1	2.0	24.0	480.0	0.4	8.0	1.0	20.0
12/16	0.0	0.0	0.0	0.0	26.8 (28.0)	#VALUE!	0.0	0.0	6.1	122.0	0.0	0.0	0.0	0.0	0.0	0.0	21.6 (22.0)	432 (440)	11.7 (12.4)	234 (248)	0.0	0.0
2/17	0.0	0.0	0.0	0.0	10.7	214.0	0.1	2.0	0.0	0.0	0.0	0.0	0.1	2.0	0.1	2.0	23.1	462.0	6.1	122.0	0.0	0.0
2/17	0.0	0.0	0.0	0.0	4.9	98.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.2	44.0	1.4	28.0	0.0	0.0
3/17	0.0	0.0	0.0	0.0	7.6	152.0	0.0	0.0	0.2	4.0	0.0	0.0	0.2	4.0	0.0	0.0	24.5	490.0	9.4	188.0	0.0	0.0
4/17	0.0	0.0	0.0	0.0	4.3	86.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	144.0	0.0	0.0
5/17	0.0	0.0	0.0	0.0	0.9	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0	5.7	114.0	0.0	0.0
6/17	0.1	2.0	0.0	0.0	17.6	352.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	52.0	0.0	0.0
7/17	0.0	0.0	0.0	0.0	18.7	374.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/17	0.0	0.0	0.0	0.0	29.6	592.0	0.0	0.0	30.2	604.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.2	144.0	0.0	0.0
9/17	0.0	0.0	0.0	0.0	16.6	332.0	0.0	0.0	16.5	330.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	4.0	0.6	12.0
10/17	0.0	0.0	0.0	0.0	25.1	502.0	0.0	0.0	39.9	798.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/17	0.0	0.0	0.0	0.0	27.7	554.0	0.0	0.0	20.8	416.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/17	0.0	0.0	0.0	0.0	21.2	424.0	0.0	0.0	11.2	224.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1/18	0.0	0.0	0.0	0.0	11.9	238.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	4.0	0.0	0.0
2/18	0.0	0.0	0.0	0.0	14.8	296.0	0.0	0.0	12.8	256.0	0.0	0.0	0.0	0.0	0.0	0.0	4.1	82.0	0.3	6.0	0.0	0.0
3/18	0.0	0.0	0.0	0.0	9.3	186.0	0.0	0.0	3.1	62.0	0.0	0.0	0.0	0.0	0.0	0.0	5.8	116.0	1.4	28.0	0.0	0.0
5/18	0.0	0.0	0.0	0.0	19.8	396.0	0.0	0.0	13.6	272.0	5.1	102.0	1.6	32.0	0.0	0.0	4.6	92.0	0.7	14.0	0.0	0.0
7/18	0.0	0.0	0.0	0.0	23.3	466.0	0.0	0.0	42.9	858.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/18	0.0	0.0	0.0	0.0	31.4	628.0	0.0	0.0	41.3	826.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9/18	0.0	0.0	0.0	0.0	40.6	812.0	0.0	0.0	45.3	906.0	0.0	0.0	0.0	0.0	0.0	0.0	16.0	320.0	0.0	0.0	0.0	0.0
10/18	0.0	0.0	0.0	0.0	25.9	518.0	0.0	0.0	31.6	632.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.0	20.0	0.0	0.0
11/18	0.0	0.0	0.0	0.0	11.4	228.0	0.0	0.0	4.9	98.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1/19	0.0	0.0	0.0	0.0	11.1	222.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1/19	0.0	0.0	0.0	0.0	9.1	182.0	0.0	0.0	4.6	92.0	0.0	0.0	0.4	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/19	0.0	0.0	0.0	0.0	3.3	66.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/19	0.0	0.0	0.0	0.0	0.3	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/19	0.0	0.0	0.0	0.0	4.2	84.0	0.0	0.0	5.8	116.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	12.0	0.0	0.0
7/19	0.0	0.0	0.0	0.0	33.4	668.0	0.0	0.0	5.4	108.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0
8/19	0.0	0.0	0.0	0.0	28.2	564.0	0.0	0.0	23.0	460.0	0.0	0.0	0.0	0.0	0.0	0.0	0.6	12.0	0.0	0.0	0.0	0.0
10/19	0.0	0.0	0.0	0.0	29.3	586.0	0.0	0.0	29.5	590.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0
11/19	0.0	0.0	0.0	0.0	25.3	506.0	0.0	0.0	16.5	330.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1/20	0.0	0.0	0.0	0.0	8.6	172.0	0.0	0.0	0.5	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/20	0.0	0.0	0.0	0.0	22.4	448.0	0.0	0.0	17.9	358.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/20	0.0	0.0	0.0	0.0	4.6	92.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.1	2.0	0.1	2.0	0.1	2.0	0.1	2.0
7/20	0.0	0.0	0.0	0.0	14.8	296.0	0.0	0.0	1.7	34.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/20	0.0	0.0	0.0	0.0	32.0	640.0	0.0	0.0	14.0	280.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/20	0.0	0.0	0.0	0.0	17.3	346.0	0.0	0.0	25.0	500.0	0.0	0.0	0.1	2.0	0.0	0.0	3.6	72.0	0.0	0.0	0.0	0.0
11/20	0.0	0.0	0.0	0.0	11.4	228.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes:
Stabilized readings presented; peak readings presented in parenthesis.
GP-18A was first sampled during the 9/13 sampling event.
"--" - indicates a sample could not be collected from the gas probe during the smapling event.
Shaded columns are perimieter probes

Worcester County Snow Hill Landfill
Landfill Gas Monitoring - Percent Methane

	GP-12		GP-13		GP-14		GP-15		GP-16		GP-17		GP-18		GP-18A		GP-19		GP-20		GP-21		AS	
	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL
2/16	43.8	876.0	61.5	1230.0	4.2	0.0	0.0	0.0	0.8	16.0	0.2	4.0	8.1	162.0	0.1	2.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
3/16	39.7	794.0	60.4	1208.0	3.5	0.0	0.0	0.0	0.1	2.0	0.1	2.0	9.1	182.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
4/16	17.2	344.0	59.9	1198.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	8.5	170.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/16	26.0	520.0	55.2	1104.0	4.2	0.0	0.0	0.0	0.0	0.0	0.3	6.0	3.7	74.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
6/16	37.2	744.0	53.5	1070.0	6.6	0.0	0.0	0.0	0.2	4.0	0.2	4.0	16.8	336.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
7/16	24.1	482.0	49.0	980.0	1.5	0.0	0.0	0.0	0.0	0.0	0.1	2.0	16.9	338.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
8/16	11.5	230.0	52.0	1040.0	0.0	0.0	0.1	0.0	0.0	0.0	0.1	2.0	19.9	398.0	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0
9/16	38.1	762.0	51.1	1022.0	2.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.5	330.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/16	2.0	40.0	51.1	1022.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	2.0	14.3	286.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
11/16	40.0	800.0	56.5	1130.0	0.1	0.0	0.1	0.0	0.1	2.0	0.2	4.0	10.5	210.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
12/16	36.0 (36.7)	720 (734)	58.3 (63.0)	1166 (1260)	0.0 (0.2)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	16.7 (16.9)	334 (338)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/17	6.8	136.0	55.1	1102.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	8.4	168.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/17	1.6	32.0	58.9	1178.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	9.2	184.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/17	36.5	730.0	53.5	1070.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.7	14.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/17	38.6	772.0	65.7	1314.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/17	22.3	446.0	58.0	1160.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9	238.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/17	32.8	656.0	54.0	1080.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.2	364.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7/17	33.9	678.0	53.3	1066.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4	208.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/17	35.4	708.0	54.0	1080.0	0.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0	18.6	372.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9/17	41.9	838.0	50.4	1008.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.3	206.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/17	45.0	900.0	55.2	1104.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	15.0	300.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
11/17	56.3	1126.0	56.7	1134.0	0.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/17	48.3	966.0	58.5	1170.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1/18	41.6	832.0	64.8	1296.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/18	57.7	1154.0	63.6	1272.0	6.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
3/18	52.3	1046.0	62.0	1240.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/18	47.6	952.0	48.9	978.0	0.6	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7/18	31.6	632.0	36.2	724.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/18	47.6 (47.7)	952 (954)	48.9 (55.8)	978 (1116)	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
9/18	47.8	956.0	53.9	1078.0	1.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/18	22.4	448.0	53.5	1070.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/18	0.2	4.0	60.2	1204.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1/19	57.1	1142.0	52.1	1042.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1/19	70.1	1402.0	65.6	1312.0	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/19	59.0	1180.0	66.2	1324.0	0.1	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	--	--	--	--	0.0	0.0
3/19	38.7	774.0	38.1	762.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
5/19	52.0	1040.0	57.7	1154.0	0.2	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7/19	45.9	918.0	52.4	1048.0	3.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/19	43.0	860.0	53.4	1068.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/19	44.8	896.0	54.0	1080.0	6.3	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/19	32.8	656.0	55.7	1114.0	0.0	0.0	0.0	0.0	0.0	0.0	2.9	58.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
1/20	50.9	1018.0	59.7	1194.0	1.3	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
2/20	44.0	880.0	57.1	1142.0	2.4	0.0	0.0	0.0	0.1	2.0	1.5	30.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0
5/20	51.7	1034.0	56.3	1126.0	0.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
7/20	26.5	530.0	38.9	778.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/20	36.1	722.0	31.9	638.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/20	62.6	1252.0	-	-	11.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
11/20	35.7	714.0	53.7	1074.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes:

Stabilized readings presented; peak readings presented in parenthesis.

GP-18A was first sampled during the 9/13 sampling event.

"--" - indicates a sample could not be collected from the gas probe during the smapling event.

Shaded columns are perimieter probes

Worcester County Snow Hill Landfill
Landfill Gas Monitoring - Percent Methane

	GP-1		GP-2		GP-3		GP-4		GP-5		GP-6		GP-7		GP-8		GP-9		GP-10		GP-11	
	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL
1/21	0.0	0.0	0.0	0.0	13.3	266.0	0.0	0.0	2.8	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/21	0.0	0.0	0.0	0.0	1.0	20.0	0.0	0.0	0.9	18.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/21	0.0	0.0	0.0	0.0	10.2	204.0	0.0	0.0	1.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/21	0.0	0.0	0.0	0.0	25.1	502.0	0.0	0.0	21.2	424.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/21	0.0	0.0	0.0	0.0	15.3	306.0	0.0	0.0	0.3	6.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/21	0.0	0.0	0.0	0.0	10.6	212.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/22	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.4	88.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/22	0.0	0.0	0.0	0.0	16.9	338.0	0.0	0.0	0.5	10.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/22	0.0	0.0	0.0	0.0	8.8	176.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/22	0.0	0.0	0.0	0.0	21.8	436.0	0.0	0.0	12.5	250.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/22	0.0	0.0	0.0	0.0	9.8	196.0	0.0	0.0	0.6	12.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/23	0.0	0.0	0.0	0.0	5.6	112.0	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/23	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/23	0.0	0.0	0.0	0.0	11.6	232.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/23	0.0	0.0	0.0	0.0	26.3	526.0	0.0	0.0	9.7	194.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/23	0.0	0.0	0.0	0.0	19.2	384.0	0.0	0.0	12.8	256.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/23	0.0	0.0	0.0	0.0	6.9	138.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/24	0.0	0.0	0.0	0.0	3.3	66.0	0.0	0.0	1.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/24	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/24	0.0	0.0	0.0	0.0	0.6	12.0	0.0	0.0	1.0	20.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/24	0.0	0.0	0.0	0.0	22.5	450.0	0.0	0.0	15.5	310.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes:

Stabilized readings presented; peak readings presented in parenthesis.

GP-18A was first sampled during the 9/13 sampling event.

"--" - indicates a sample could not be collected from the gas probe during the smapling event.

Shaded columns are perimieter probes

Worcester County Snow Hill Landfill
Landfill Gas Monitoring - Percent Methane

	GP-12		GP-13		GP-14		GP-15		GP-16		GP-17		GP-18		GP-18A		GP-19		GP-20		GP-21		AS	
	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL	% CH4	% LEL
1/21	46.7	0.0	54.1	1082.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	-	-	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/21	13.7	0.0	15.9	318.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	4.5	90.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/21	44.7	0.0	58.6	1172.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.6	472.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/21	38.9	0.0	52.6	1052.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	25.2	504.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/21	47.2	0.0	45.9	918.0	0.4	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.7	234.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/21	43.4	0.0	55.6	1112.0	0.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/22	50.7	0.0	55.1	1102.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/22	50.0	0.0	56.5	1130.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.6	112.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/22	22.6	0.0	3.1	62.0	1.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.8	56.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/22	36.2	0.0	52.5	1050.0	6.3	0.0	0.0	0.0	0.0	0.0	0.0	0.0	22.2	444.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/22	43.3	0.0	52.8	1056.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	28.5	570.0	--	--	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/22	29.5	0.0	53.5	1070.0	1.2	0.0	0.0	0.0	0.0	0.0	0.0	0.0	1.7	34.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/23	48.3	0.0	54.1	1082.0	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.1	2.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/23	46.2	0.0	54.0	1080.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	12.8	256.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/23	51.8	0.0	51.2	1024.0	3.8	0.0	0.0	0.0	0.0	0.0	0.0	0.0	23.7	474.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/23	42.9	0.0	45.9	918.0	1.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	30.3	606.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
10/23	28.6	0.0	45.2	904.0	7.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.1	142.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
12/23	41.9	0.0	57.1	1142.0	6.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	2.6	52.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2/24	50.1	0.0	49.2	984.0	4.5	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.2	4.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
4/24	36.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.4	8.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
6/24	40.7	0.0	50.6	1012.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	5.5	110.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
8/24	42.5	0.0	48.6	972.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.6	72.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Notes:

Stabilized readings presented; peak readings presented in parenthesis.

GP-18A was first sampled during the 9/13 sampling event.

"--" - indicates a sample could not be collected from the gas probe during the smapling event.

Shaded columns are perimieter probes

Appendix I

LFG Probe Construction Documentation

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Maryland
Department of the Environment

Wes Moore, Governor
Aruna Miller, Lt. Governor

Serena McIlwain, Secretary
Suzanne E. Dorsey, Deputy Secretary

1800 Washington Boulevard | Suite 620 | Baltimore, MD 21230 | 1-800-633-6101 | 410-537-3000 | TTY Users 1-800-735-2258

www.mde.maryland.gov

November 13, 2024

Sharmin Sultana
EA Engineering
225 Schilling Cir
Hunt Valley, MD 21031

RE: Tracking Number: 2024-02892
Request Received November 4, 2024
Worcester County Berlin, Snow Hill, Pocomoke Landfills

Dear Sharmin Sultana:

The Maryland Department of the Environment (MDE) received your recent request for information under the Public Information Act (PIA).

After conducting a thorough search of our files, MDE has no records responsive to your request. There were no charges incurred as a result of this search.

When requesting information regarding this request, please cite the tracking number referenced above. If you have any questions, please email zachary.lansing@maryland.gov.

Sincerely,

Zachary Lansing

Zachary Lansing
PIA Liaison
Water & Science Administration

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Appendix J

Blank LFG Probe Monitoring Form

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FORM 4-1
SNOW HILL SANITARY LANDFILL
LANDFILL GAS MONITORING FORM

Date: Time: Temp (F):

Weather conditions:
Barometric Pressure (inches Hg):
Rainfall (preceding 36 hours, inches):

Sample Personnel Name:
Sample Personnel Position::

Gas Meter Name and Model:
Field Calibration Date and Time:

Calibration Date:

Gas Probe No.	**Time**	**Probe Pressure (Inches H_2O)**	**Methane (CH_4) %**		**% LEL**		**Carbon Dioxide CO_2%**	**Oxygen O_2%**	**Balance**	**Comments / Probe Condition**
			Stabilized	Peak	Stabilized	Peak				

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Appendix K

Blank GEM Calibration Form

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LANDTEC GEM 2000
GAS CALIBRATION

* Perform Instrument Gas Calibration according to instructions provided on *Instrument Inspection Checklist* and sign and date this log.

Unit: GEM 2000
Unit Serial #: GM11050
Date of Calibration: _____
Calibration Temperature: _____
Time of Calibration: _____
EA Project #: _____

Methane (CH4)		Carbon Dioxide (CO2)	
Certified Gas (%)	Reading (%)	Certified Gas (%)	Reading (%)

Oxygen (O2)	
Certified Gas (%)	Reading (%)

Barometer	
Certified (mb/ "hg)	Reading (mb/ "hg)

Calibrated by: _____ (Name)

_____ (Signature)

GEM™2000

PORTABLE GAS ANALYZER
Instrumentation

The GEM™2000 combines the GEM™500 and the GA-90 into one faster, more accurate, intrinsically safe instrument

The GEM™2000 was designed by **CES-LANDTEC** specifically for use on landfills to monitor landfill gas (LFG) extraction systems, flares, and migration control systems.

The GEM™2000 samples and analyzes the methane, carbon dioxide and oxygen content of landfill gas. The easy-to-read LCD screen shows the results as percentages of CH_4, CO_2, O_2 and "balance" gas. The GEM™2000 calculates and displays gas flow rate. It also measures and displays Btu content, temperature (w/optional probe), relative and atmospheric pressures and CH_4 LEL (Lower Explosive Limit).

GEM™2000

"The Future of
Landfill Gas Monitoring"

Performance

New technological advances in hardware and software dramatically improve speed and accuracy.

Safe

Certified Intrinsically Safe for Landfill Use

Efficient

Two operating modes, each with two screens for streamlined functionality

Flexible

DataField Software offers integration with various PC applications

Experience

Built on the success of hundreds of field-tested instruments

"The best just got better!"

DataField COMPATIBLE

©2004 CES-LANDTEC ♦ 850 South Via Lata, Suite 112 ♦ Colton, CA 92324 ♦ Phone (800) LANDTEC ♦ (909) 783-3636
Visit out web site at http://www.ces-landtec.com

GEM™2000 Multi-Functional Analyzer

Diverse Field Applications...monitors migration control systems, gas extraction systems, flares, migration probes, and more.

Gas Extraction Monitor Mode...provides automatic sampling and analysis of gas composition % by volume CH_4, CO_2, O_2 and % balance gas, % CH_4 LEL, temperature (with optional probe), static pressure, differential pressure, and barometric pressure. Also calculates gas flow rates (SCFM) as well as Btu rates.

Landfill Gas Analyzer Mode...provides automatic sampling and analysis of gas composition % by volume CH_4, CO_2, O_2 and % balance gas, % CH_4 LEL, temperature (with optional probe), barometric pressure and relative pressure. Can be used for data logging, with user programmed intervals.

Easy to Read Display...extra large backlit LCD shows up to five gases, atmospheric and gas vacuum pressure, temperature, ID code - all at the same time.

Intrinsically Safe...essential for protecting personnel who work with hazardous and explosive landfill gas.

On Site Calibration...rapid calibration checking or adjustment can be carried out on site.

Automatic Purge...automatically purges analyzer with clean air when a new ID is selected. (This feature can be turned off).

Light-Weight Compact Size...easy to carry. Weighs less than five pounds.

Quick Analysis...completes sampling and displays gas analysis and flow results in less than one minute.

Infrared Gas Analyzer...provides accurate measurements of methane (CH_4), and carbon dioxide (CO_2).

Gas Temperature...read when using optional temperature probe or can be entered manually.

Durable Oxygen Sensor...provided by the galvanic cell principle, not influenced by other gases (i.e. CH_4, CO_2 or H_2S).

User Friendly On-Screen Menu...in each mode the user performs most operations in just two screens.

PC Data Downloading...provided by RS232 interface with DataField software (Release 3.0 or later).

Data Storage/Retrieval...stores prior measurements taken for each monitoring point, 900 monitoring points total.

Date/Time Stamp...recorded for all stored data.

Prior Data Recall...allows user to view prior data for each monitoring point.

Methane Analysis...displayed as either % CH_4 by volume or CH_4 LEL (Landfill Gas Analyzer Mode only).

Durable Construction...built of strong, durable plastic material suitable for harsh landfill environments.

All Weather Use...designed to operate in extremes from 32°F to 104°F. Sealed, weather-tight case.

Built-in Adjustable Alarms...allows user to set alarm limits for CH_4 and O_2.

Rechargeable Batteries...internal, rechargeable nickel metal hydride batteries are standard.

Operating Time...approximately 8 hours with normal pump usage (approximately 10 hours without pump running).

Fast Recharge Time...approximately 2 hours from complete discharge.

Battery Check...battery life is continuously displayed.

Monitoring Point ID Codes...provides alphanumeric identification of monitoring points for data storage and recall.

ID Comments...allows user to answer up to 3 questions with a list of 9 potential answers each.

Imperial vs. SI Units...can display measurements in Imperial (USA) or SI (metric) units.

Interfaces to CES-LANDTEC DataField Software...which provides statistical management and reporting of LFG data.

Multiple Flow Meter Analysis...calculates gas flow with Accu-Flo Wellheads, orifice plates and pitot tubes.

Gold Warranty Service Program...ensures that your analyzer is properly maintained for optimum performance. (Optional).

GEM™2000 Specifications Accuracy

CONCENTRATION	%CH_4 BY VOLUME	%CO_2 BY VOLUME	%O_2 BY VOLUME
5% (LEL, CH_4)	±0.3%	±0.3%	±1.0%
Full Scale	±3.0%$_{(100\%)}$	±3.0%$_{(60\%)}$	±1.0%$_{(21\%)}$

	SENSOR RANGE	RESOLUTION
Methane - CH_4	0-100%	0.1%
Carbon Dioxide - CO_2	0-60%	0.1%
Oxygen - O_2	0-25%	0.1%
Pressures (diff)	0-10" W.C.	0.001" W.C.
(static)	0-100" W.C.	0.1" W.C.

Flow Accuracy (50% CH_4 measured in 2" Accu-Flo wellhead) - ±3% - 5-150 SCFM
Pump Flow Rate - 500cc/min. nominal flow
Vacuum - Up to 80" W.C.
UL - Certified to Class 1, Zone 1, AEx ib d IIa T4

SWANA MEMBER

An involved and contributing member of the Solid Waste Association of North America

LANDTEC

Western Sales Office
(800) 821-0496 ▸ Fax (909) 825-0591

Eastern Sales Office
(800) 390-7745 ▸ Fax (301) 391-6546

REV 0605

GEM-2000 Easy Steps - Field Calibration

Printable Version

Field Calibrating the GEM-2000

Note: Be sure to always have the GEM-2000 instrument turned on prior to connecting the calibration gas bottles.

1. Turn Instrument On (By pressing on the Red Button).
2. After the instrument has finished it's initial process, it will enter the Main Screen.
3. Press 1 Menu
4. Use your Up(2) or Down(8) keys to scroll the "Field Calibration" then press Enter in your instrument
5. Press 3 Edit target Concentrations
6. Enter manually the target concentrations for CH_4
7. Press Enter to move to CO_2, Enter CO_2 Target Concentration
8. Press Enter to move to O_2, Enter O_2 Target Concentration
9. Press Enter to complete.
10. Connect Calibration (CAL) Gas Bottle with 0% CH_4 (example 4% O_2, Bal N_2)
11. Allow gas to flow for approximately 30 seconds to ensure a compete purge of any gas in instrument
12. Press Enter to bring up Calibration Menu
13. Choose Zero Channels, Press Enter
14. Choose Zero CH_4 Press Enter when done.
15. If Calibration was successful you should see the following message “User Zero Complete”
16. Connect CAL Gas Bottle With 0% O_2 (example 50% CH_4 35%CO_2 Bal N_2)
17. Allow gas to flow for approximately 30 seconds to ensure a compete purge of any gas in instrument
18. Press Enter to bring up Calibration Menu
19. Choose Zero Channels press Enter
20. Choose Zero O_2 press Enter when done
21. If Calibration was successful you should see the following message “User Zero Complete”
22. Press Enter to go to Calibration Menu
23. Choose Span Channels, Press Enter
24. Choose Span CH_4
25. Verify that CH_4 Calibration (CAL) Gas is still connected to instrument (Wait 30 seconds for gas to flow thru instrument)
26. Press Enter to Set CH_4 Span
27. The following message should appear “Calibration Complete”
28. Press Enter to go to Calibration Menu
29. Choose Span Channels, Press Enter
30. Choose Span CO_2
31. Verify that CH_4 CAL Gas is still connected to instrument (Wait 30 seconds for gas to flow thru instrument)

32. Press Enter to Set CO_2 Span
33. The following message should appear “Calibration Complete”
34. Connect Gas Bottle With 4% O_2 (example. 0% CH_4 0% CO_2 4%O_2)
35. Allow gas to flow for approximately 30 seconds to ensure a compete purge of any gas in instrument
36. Press Enter to go to Calibration Menu
37. Choose Span Channels, Press Enter
38. Choose Span O_2
39. Press Enter to Set O_2 Span
40. “Field Calibration is Complete”
41. We suggest taking a reading from CAL GAS Bottles to verify that calibration has been done correctly.

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GEM™-2000
GA-Mode
GEM™-500
Getting Online
Field Calibration
Servicing
Return Authorization
Shipping
Incoming Assessment
Quotes
Service/Repair
Outgoing QC
Return Shipping
Calibration Details
Calibration Certificate

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Appendix L

Blank Post-Closure Inspections and Maintenance Plan (IMP)

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Landfill Post-Closure Monitoring, Inspection, and Maintenance Report (IMR) Form

Reporting Period: _____ **Date of Inspection:** _____

Section 1 - Facility			
Name of Facility:			
Owner of Facility:			
Location Address:			
Latitude :		Longitude:	
Closure Cap Area completion date (MDE Approved):		Approximate cap area:	
Inspectors:		Inspection date:	

Section 2 - Vegetation	
Type(s) of growth (check all that apply): ☐ grasses ☐ legumes ☐ herbaceous plants ☐ other (specify: _____)	Remarks:
Condition of growth: ☐ Excellent (thick growth) ☐ Good ☐ Poor (thin growth, bare soil, etc.)	Remarks:
Woody plants present? ☐ Yes ☐ No	Remarks:
Invasive plants present? ☐ Yes ☐ Phragmites ☐ Other ☐ No	Remarks:
Dead spots present? ☐ Yes ☐ No	Remarks:

Landfill Post-Closure Monitoring, Inspection, and Maintenance Report Form

Reporting Period: _____ **Date of Inspection:** _____

Section 3 – Final Cover Condition	
Is there subsidence (depressions in the cap)? ☐ Yes ☐ No	Remarks:
Is there any evidence of water ponding on the cap? ☐ Yes ☐ No	Remarks:
Are there colored leachate seeps through the cap? ☐ Yes ☐ No	Remarks:
Are there colored leachate seeps at toe slope? ☐ Yes ☐ No	Remarks:
Are there signs of burrowing animals? ☐ Yes ☐ No	Remarks:
Is there any waste pushing through the cap? ☐ Yes ☐ No	Remarks:
Does the cap cover all of the solid waste? ☐ Yes ☐ No	Remarks:
Is there evidence of erosion? ☐ Yes ☐ No	Remarks:
Is there vehicle tracking damage to the cap or vegetation? ☐ Yes ☐ No	Remarks:

Landfill Post-Closure Monitoring, Inspection, and Maintenance Report Form

Reporting Period: _____ **Date of Inspection:** _____

Section 4 - Drainage and Surface Water	
Conditions/Stability of streams/swales/ditches etc. ☐ Excellent (unobstructed) ☐ Good /Fair ☐ Poor (overgrown or sediment filled)	Remarks:
Is there evidence of colored leachate in surface waters? ☐ Yes ☐ No	Remarks:
Is there surface water monitoring? ☐ Yes ☐ No	Remarks:
Are results submitted to MDE? ☐ Yes ☐ No	Remarks:

Section 5 - Groundwater	
Is there groundwater monitoring? ☐ Yes ☐ No	Remarks:
Are results submitted to MDE? ☐ Yes ☐ No	Remarks:
Condition of groundwater monitoring wells (if present): ☐ Excellent ☐ Good ☐ Poor (missing covers, missing locks, deteriorated seals, frost heaved, etc.)	Remarks:

Landfill Post-Closure Monitoring, Inspection, and Maintenance Report Form

Reporting Period: _____ **Date of Inspection:** _____

Section 6 - Landfill Gas (LFG) Management System	
Is there an LFG collection system? ☐ Yes ☐ No	Remarks
Are the LFG wells damaged? ☐ Yes ☐ No	Remarks:
Is LFG monitoring done? ☐ Yes ☐ No	Remarks:
Are results submitted to MDE? ☐ Yes ☐ No	Remarks:
Does the LFG produce any odors? ☐ Yes ☐ No	Remarks:

Section 7 - Other Facility Conditions	
Condition of Access Roads? ☐ Good ☐ Fair ☐ Poor	Remarks:
Is there litter present? ☐ Yes ☐ No	Remarks:
Are there other site-specific issues? ☐ Yes ☐ No	Remarks:

Landfill Post-Closure Monitoring, Inspection, and Maintenance Report Form

Reporting Period: _____ **Date of Inspection:** _____

Section 8 – Corrective Actions (Describe any irregularities/problems and corrective actions planned or taken as a result of conditions noted during the inspection; add location and description to any pictures added to the inspection form)

COMAR 26.04.07.22 - Sanitary Landfills - Post-Closure Monitoring and Maintenance.

A. Landfills in Maryland shall be subject to post-closure monitoring and maintenance by the permittee as specified in this regulation, for a period of time not less than 5 years after the complete installation of the landfill cap. This time period may be extended by the Department if significant maintenance situations occur at the landfill during the 5-year period after closure.

B. **Inspections**. The closed landfill shall be inspected at least twice per year by the permit holder or the permit holder's authorized representative. The inspection shall include: (1) Observation of the cover at the landfill; (2) Notation of any drainage irregularities or signs of erosion of the cover; (3) Notation of any surface expressions of leachate at the landfill; and (4) Checking the status of the monitoring wells.

C. **Maintenance**. Irregularities or problems noted during the inspections shall be corrected within 30 days of their observance unless otherwise directed by the Department.

D. Reporting and Record Keeping. For permitted facilities the results of inspections shall be recorded and reported to the Department within 60 days of the inspection. For facilities not required to obtain a permit, the results of inspections shall be maintained for a period of 5 years following closure.

Note: Include any landfill post-closure monitoring, inspection, maintenance, and repair photos/figures at the end of this form and/or in the Landfill Post-Closure Monitoring, Inspection, and Maintenance Report narrative.

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