Pennsylvania Department of Environmental Protection

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0093866**
Facility Type	**Industrial**	APS ID	**1125030**
Major / Minor	**Minor**	Authorization ID	**1505202**

NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Applicant and Facility Information

Applicant Name	**Southern Alleghenies Landfill, Inc.**	Facility Name	**Southern Alleghenies Landfill**
Applicant Address	843 Miller Picking Road	Facility Address	843 Miller Picking Road
	Davidsville, PA 15928-8917		Davidsville, PA 15928-8917
Applicant Contact	Brian Stewart	Facility Contact	Michael Mack
Applicant Phone	(412) 576-2236	Facility Phone	(724) 963-3343
Client ID	33686	Site ID	803
SIC Code	4953	Municipality	Conemaugh Township
SIC Description	Refuse Systems	County	Somerset
Date Application Received	November 1, 2024	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: Renewal – NPDES Permit Coverage

Summary of Review

The Department received a renewal NPDES permit application from Civil & Environmental Consultants, Inc. on behalf of Southern Alleghenies Landfill, Inc. on November 1, 2024, for coverage of Southern Alleghenies Landfill (SALF).

SALF is an active municipal solid waste landfill and receives non-hazardous waste, such as municipal and industrial waste, construction and demolition debris, biosolids, yard waste, and NORM (Naturally Occurring Radioactive Material). A support pad area exists where truck washing takes place. The existing truck wash, which is located at the northern end of the property, east of the existing scale house, consists of a small basin that contains water and a pump connected to spray headers that applies the water to the wheels and undercarriage of trucks exiting the landfill. The water is returned to the basin. As needed, the water is removed from the basin by truck and hauled to the leachate treatment plant for treatment. The treated truck wash water eventually discharges through Outfall 001. Discharge from the facility comprises six (6) outfalls – one process wastewater (treated landfill leachate; Outfall 001) and five (5) stormwater (Outfalls 002-006). It was noted in the renewal application that discharge has not been observed from Outfall 005 during the current permit cycle. No stormwater sample results were submitted with Module 1 for Outfalls 002 and 004. The renewal review relied on historic DMR data for these stormwater outfalls.

The facility operates under Solid Waste Permit No. 100081 issued by the Department July 1, 1986. In addition to the Solid Waste Permit, SALF also operates under WQM Permit No. 5683203 originally issued October 17, 1986. The facility was purchased by Noble Environmental in July 2021. NPDES Permit No. PA0093866 was amended April 29, 2022, for the removal of a stormwater-groundwater source from a collection point upstream of its leachate handling facilities; restoration of a sediment trap downstream of Outfall 006; and the reinitiation of aeration in the lower treatment pond. It was noted in the May 7, 2025, inspection report that based on the pH of stormwater discharge to MH1A and the amount of rainfall received, this discharge is either diverted to SB-4 or to Leachate Pond 1/2. Reportedly, approximately 20% of the stormwater is directed to Leachate Pond 1/2.

Approve	Deny	Signatures	Date
X		Jamie Ley Jamie Ley / Environmental Engineering Specialist	September 26, 2025
X		Michael E. Fifth Michael E. Fifth, P.E. / Environmental Engineer Manager	October 6, 2025

Summary of Review

The following inspections were conducted for the facility during the current permit cycle:

MIT	FACILITY NAME	INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC
I3866	SOUTHERN ALLEGHENIES LDFL	01/13/2023	Routine/Partial Inspection	PA Dept of Environmental Protection	No Violations Noted
I3866	SOUTHERN ALLEGHENIES LDFL	05/07/2025	Routine/Partial Inspection	PA Dept of Environmental Protection	No Violations Noted
I3866	SOUTHERN ALLEGHENIES LDFL	01/31/2024	Administrative/File Review	PA Dept of Environmental Protection	No Violations Noted
I3866	SOUTHERN ALLEGHENIES LDFL	01/31/2024	Compliance Evaluation	PA Dept of Environmental Protection	Violation(s) Noted
I3866	SOUTHERN ALLEGHENIES LDFL	12/29/2021	Administrative/File Review	PA Dept of Environmental Protection	No Violations Noted
I3866	SOUTHERN ALLEGHENIES LDFL	07/31/2020	Routine/Partial Inspection	PA Dept of Environmental Protection	No Violations Noted
I3866	SOUTHERN ALLEGHENIES LDFL	12/29/2021	Compliance Evaluation	PA Dept of Environmental Protection	Violation(s) Noted

The following violations were noted:

	FACILITY	VIOLATION DATE	VIOLATION TYPE	VIOLATION TYPE DESC	RESOLVED DATE	INSPECTED DATE	INSP TYPE
	THERN ALLEGHENIES LDFL	12/29/2021	92A.44	NPDES - Violation of effluent limits in Part A of permit	01/10/2022	12/29/2021	Compliance Evaluation
	THERN ALLEGHENIES LDFL	01/31/2024	92A.44	NPDES - Violation of effluent limits in Part A of permit	06/23/2025	01/31/2024	Compliance Evaluation

Draft Permit issuance is recommended.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.0658
Latitude	40º 13' 57"	Longitude	-78º 53' 45"
Quad Name	Hooversville	Quad Code	1714
Wastewater Description:	Treated landfill leachate		
Receiving Waters	Stonycreek River	Stream Code	45084
NHD Com ID	123719605	RMI	12.13
Drainage Area	350 mi^2	Yield (cfs/mi^2)	0.08
Q_{7-10} Flow (cfs)	28.3	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1376	Slope (ft/ft)	0.001
Watershed No.	18-E	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Kiskiminetas-Conemaugh River Watersheds TMDL
Nearest Downstream Public Water Supply Intake	Saltsburg Municipal Waterworks		
PWS Waters	Conemaugh River	Flow at Intake (cfs)	124
PWS RMI	0.54	Distance from Outfall (mi)	> 50

Changes Since Last Permit Issuance:

Other Comments:

Compliance History

Effluent Violations for Outfall 001, from: May 1, 2024 To: March 31, 2025

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Ammonia	05/31/24	Avg Mo	16.7	mg/L	4.9	mg/L
Ammonia	05/31/24	Daily Max	21.9	mg/L	10.0	mg/L
Total Barium	08/31/24	Avg Mo	0.145	mg/L	.1	mg/L
Total Barium	07/31/24	Avg Mo	0.11	mg/L	.1	mg/L
Total Barium	09/30/24	Avg Mo	0.160	mg/L	.1	mg/L
Total Cyanide	05/31/24	Avg Mo	0.084	mg/L	.02	mg/L
Total Cyanide	11/30/24	Avg Mo	< 0.0610	mg/L	.02	mg/L
Total Cyanide	05/31/24	Daily Max	0.087	mg/L	.04	mg/L
Total Cyanide	11/30/24	Daily Max	< 0.1000	mg/L	.04	mg/L
Total Iron	5/31/24	Avg Mo	1.8	mg/L	1.5	mg/L
Total Iron	6/30/24	Avg Mo	1.7	mg/L	1.5	mg/L
Total Iron	11/30/24	Avg Mo	1.68	mg/L	1.5	mg/L
Total Mercury	06/30/24	Avg Mo	< 0.00155	mg/L	.0009	mg/L
Total Mercury	07/31/24	Avg Mo	0.0011	mg/L	.0009	mg/L
Total Mercury	03/31/25	Avg Mo	0.0011	mg/L	.0009	mg/L
Total Mercury	06/30/24	Daily Max	0.0029	mg/L	.0018	mg/L
Hexachlorobenzene	12/31/24	Annl Avg	< 0.000110	mg/L	.00007	mg/L

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002-006	Design Flow (MGD)	0
	40º 13' 57" 40º 14' 12" 40º 14' 11" 40º 13' 45"		-78º 53' 47" -78º 54' 05" -78º 53' 45" -78º 54' 02"
Latitude	40º 13' 34"	Longitude	-78º 54' 19"
Quad Name	Hooversville	Quad Code	1714
Wastewater Description:	Stormwater		
Receiving Waters	Stonycreek River UNT to Stonycreek River	Stream Code	45084 45265
NHD Com ID	123719605	RMI	N/A
Drainage Area	N/A	Yield (cfs/mi^2)	N/A
Q_{7-10} Flow (cfs)	N/A	Q_{7-10} Basis	N/A
Elevation (ft)	N/A	Slope (ft/ft)	N/A
Watershed No.	18-E	Chapter 93 Class.	WWF & CWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment			
Source(s) of Impairment			
TMDL Status	Final	Name	Kiskiminetas-Conemaugh River Watersheds TMDL
Nearest Downstream Public Water Supply Intake	Saltsburg Municipal Waterworks		
PWS Waters	Conemaugh River	Flow at Intake (cfs)	124
PWS RMI	0.54	Distance from Outfall (mi)	> 50

Changes Since Last Permit Issuance:

Other Comments:

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.0658
Latitude 40º 13' 57" **Longitude** -78º 53' 45"
Wastewater Description: Treated Landfill Leachate

Technology-Based Limitations

Federal Effluent Limitation Guidelines (ELGs)

Outfall 001 effluent discharge is comprised of treated landfill leachate and truck wash water treated as landfill leachate. Therefore, the process water effluent is subject to the requirements of 40 CFR Part 445 Subpart B – RCRA Non-Hazardous Waste Landfill. The applicable standards (40 CFR 445.21-445.23) are displayed in Table 1.

Table 1. BAT Effluent Limitations

Regulated Parameter	Maximum Daily[1]	Maximum Monthly Avg.[1]
BOD	140	37
TSS	88	27
Ammonia (as N)	10	4.9
a-Terpineol	0.033	0.016
Benzoic acid	0.12	0.071
p-Cresol	0.025	0.014
Phenol	0.026	0.015
Zinc	0.20	0.11
pH	([2])	([2])

[1]Milligrams per liter (mg/L, ppm)
[2]Within the range 6 to 9

Regulatory Effluent Standards and Monitoring Requirements

Flow monitoring is required pursuant to 25 Pa. Code § 92a.61(d)(1) which is displayed in Table 2 below.

Effluent standards for pH are also imposed on industrial wastes by 25 Pa. Code §§ 95.2(1) which is displayed in Table 2 below.

Pennsylvania regulations at 25 Pa. Code § 92a.48(b) require the imposition of technology-based TRC limits for facilities that use chlorination and that are not already subject to TRC limits based on applicable federal ELGs or a facility-specific BPJ evaluation. Although SALF does not disinfect wastewater in the on-site treatment plant with chlorine or any method, if there is reasonable potential for the facility's effluent to approach a treatment standard, the Department may apply the treatment standard as an effluent limit in the permit. The monthly average maximum concentration for TRC reported during the current permit cycle was 0.42 mg/L, which exceeds 50% of the treatment standard. Therefore, the technology-based TRC limits will be imposed.

Table 2. Regulatory Effluent Standards

Parameter	Monthly Avg	Daily Max	IMAX
Flow (MGD)	Monitor	Monitor	----
Total Residual Chlorine (mg/L)	0.5	1.0	----
pH (S.U.)	6.0 – 9.0 at all times		

Total Dissolved Solids (TDS)

Integral to the implementation of 25 Pa. Code § 95.10 is the principle that existing, authorized mass loadings of TDS are exempt from any treatment requirements under these provisions. Existing mass loadings of TDS up to and including the maximum daily discharge loading for any existing discharge, provided that the loading was authorized prior to August 21,

2010 are exempt. Discharge loadings of TDS authorized by the Department are typically exempt from the treatment requirements of Chapter 95.10 until the net TDS loading is increased, an existing discharge proposes a hydraulic expansion or a change in the waste stream. If there are existing mass or production-based TDS effluent limits, then these are used as the basis for the existing mass loading. The facility is not new or expanding waste loading of TDS, therefore, the facility is exempt from 25 Pa. Code § 95.10 treatment requirements.

Total Nitrogen Considerations

As stated in *Establishing Effluent Limitations for Individual Industrial Permits (SOP No. BCW-PMT-032)*, industrial facilities that discharge nitrogen in quantities that may exceed 75 lbs/day should at minimum receive a monitoring requirement for Total Nitrogen. The maximum mass loadings reported in the renewal application for TKN and Nitrate-Nitrite Nitrogen were 146.8 lbs/day and 231 lbs/day. Total Nitrogen is the sum of TKN plus Nitrate-Nitrite Nitrogen, which equates to a maximum mass loading of 377.8 lbs/day of Total Nitrogen. Therefore, a monitoring requirement for Total Nitrogen will be applied at Outfall 001.

Water Quality-Based Limitations

Toxics Management Spread Sheet

The Department of Environmental Protection (DEP) has developed the DEP Toxics Management Spreadsheet ("TMS") to facilitate calculations necessary for completing a reasonable potential (RP) analysis and determining water quality-based effluent limitations for discharges of toxic pollutants. The Toxics Management Spreadsheet is a macro-enabled Excel binary file that combines the functions of the PENTOXSD model and the Toxics Screening Analysis spreadsheet to evaluate the reasonable potential for discharges to cause excursions above water quality standards and to determine WQBELs. The Toxics Management Spread Sheet is a single discharge, mass-balance water quality calculation spread sheet that includes consideration for mixing, first-order decay and other factors to determine recommended WQBELs for toxic substances and several non-toxic substances. Required input data including stream code, river mile index, elevation, drainage area, discharge name, NPDES permit number, discharge flow rate and the discharge concentrations for parameters in the permit application or in DMRs, which are entered into the spread sheet to establish site-specific discharge conditions. Other data such as low flow yield, reach dimensions and partial mix factors may also be entered to further characterize the conditions of the discharge and receiving water. Discharge concentrations for the parameters are chosen to represent the "worst case" quality of the discharge (i.e., maximum reported discharge concentrations). The spread sheet then evaluates each parameter by computing a Waste Load Allocation for each applicable criterion, determining a recommended maximum WQBEL and comparing that recommended WQBEL with the input discharge concentration to determine which is more stringent. Based on this evaluation, the Toxics Management Spread sheet recommends average monthly and maximum daily WQBELs.

Reasonable Potential Analysis and WQBEL Development for Outfall 001

Discharges from Outfall 001 are evaluated based on concentrations reported on the application and on DMRs; data from those sources are entered into the Toxics Management Spread Sheet. The maximum reported value of the parameters from the application form or from previous DMRs is used as the input concentration in the Toxics Management Spread Sheet. All toxic pollutants whose maximum concentrations, as reported in the permit application or on DMRs, greater than the most stringent applicable water quality criteria are considered to be pollutants of concern. [This includes pollutants reported as "Not Detectable" or as "<MDL" where the method detection limit for the analytical method used by the applicant is greater than the most stringent water quality criterion]. The Toxics Management Spread Sheet was run with the discharge and receiving stream characteristics shown in Table 3.

Table 3: TMS Inputs for Point of First Use

Parameter	Value
River Mile Index	12.13
Design Flow (MGD)	0.0658
Basin/Stream Characteristics	

Parameter	Value
Area in Square Miles	350
Q_{7-10} (cfs)	28.3
Low-flow yield (cfs/mi^2)	0.08
Elevation (ft)	1376
Slope	0.001

For IW discharges, the design flow used in modeling is the average flow during production or operation taken from the permit application or DMRs. Based on facility DMRs, between February 2023 and January 2025, the average monthly average flow was 0.0658 MGD and the maximum daily max flow reported was 0.119 MGD.

Pollutants for which water quality standards have not been promulgated (e.g., TSS, oil and grease) are excluded from the analysis. All the parameters are evaluated using the model to determine the water quality-based effluent limits applicable to the discharge and the receiving stream. The spreadsheet then compares the reported discharge concentrations to the calculated water quality-based effluent limitations to determine if a reasonable potential exists to exceed the calculated WQBELs. Effluent limitations are established in the draft permit where a pollutant's maximum reported discharge concentration equals or exceeds 50% of the WQBEL. For non-conservative pollutants, monitoring requirements are established where the maximum reported concentration is between 25% - 50% of the WQBEL. For conservative pollutants, monitoring requirements are established where the maximum reported concentration is between 10% - 50% of the WQBEL. The information described above including the maximum reported discharge concentrations, the most stringent water quality criteria, the pollutant-of-concern (reasonable potential) determinations, the calculated WQBELs, and the WQBEL/monitoring recommendations are displayed in the Toxics Management Spread Sheet in Attachment B of this Fact Sheet.

The Toxics Management Spread Sheet recommended the following for Outfall 001:

Table 4: TMS Recommended Monitoring Requirements & WQBELs for Outfall 001

Parameter	AML	MDL	IMAX	Units
Total Mercury	0.014	0.022	0.035	mg/L
Acrylamide	0.095	0.15	0.24	mg/L
Butyl Benzyl Phthalate	Report	Report	Report	ug/L

During the prior renewal review, it was noted that the permittee submitted safety data sheets (SDS) of two polymers that could potentially contain acrylamide. The SDS indicated the presence of acrylamide in the polymers, however, the exact mass content/concentration was not clear. Also at that time, it was noted that SALF had demonstrated that even with the presence of acrylamide in active polymers, the facility did not expect the discharge effluent to contain any acrylamides given the possible leftover polymer leaving the clarifier.

SALF DMRs for the current permit cycle reported maximum acrylamide concentrations of 10 mg/L. The laboratory QL was 10 mg/L (DEP has no required QL for acrylamide). Acrylamide results submitted as part of the renewal application reported a maximum concentration of 5 mg/L with a laboratory QL of 5 mg/L. Monitor and report was previously imposed for acrylamide due to 10 ug/L being the lowest method detection limit (MDL) achieved by the lab(s), which is higher than the most stringent criterion (0.07 ug/L). Monitor and report will remain in the permit with a Part C condition that analyses of acrylamide be performed utilizing an MDL of 10 ug/L.

Total Residual Chlorine

To determine if WQBELs are required for discharges containing total residual chlorine (TRC), a discharge evaluation is performed using a DEP program called TRC_CALC created with Microsoft Excel for Windows. TRC_CALC calculates TRC Waste Load Allocations (WLAs) through the application of a mass balance model which considers TRC losses due to stream and discharge chlorine demands and first-order chlorine decay. Input values for the program include flow rates and chlorine demands for the receiving stream and the discharge, the number of samples taken per month, coefficients of TRC variability,

partial mix factors, and an optional factor of safety. The mass balance model calculates WLAs for acute and chronic criteria that are then converted to long term averages using calculated multipliers. The multipliers are functions of the number of samples taken per month and the TRC variability coefficients (normally kept at default values unless site specific information is available). The most stringent limitation between the acute and chronic long-term averages is converted to an average monthly limit for comparison to the BAT average monthly limit of 0.5 mg/l from 25 Pa. Code § 92a.48(b)(2). The more stringent of these average monthly TRC limitations is imposed in the permit. The results of the modeling, included in Attachment C, indicate that BAT/BPJ are required for TRC.

TMDL Considerations

Wastewater discharges from SALF are located within the Kiskiminetas-Conemaugh River watersheds for which the EPA has developed a Total Maximum Daily Load (TMDL). The TMDL was finalized on January 29, 2010, and establishes waste load allocations for the discharge of aluminum, iron, and manganese within the Kiskiminetas-Conemaugh river watersheds. Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency's Water Quality Planning and Management Regulations (codified at Title 40 of the *Code of Federal Regulations* Part 130) require states to develop a TMDL for impaired water bodies. A TMDL establishes the amount of a pollutant that a water body can assimilate without exceeding the water quality criteria for that pollutant. TMDLs provide the scientific basis for a state to establish water quality-based controls to reduce pollution from both point and non-point sources in order to restore and maintain the quality of the state's water resources (USEPA, 1991a). Stream reaches within the Kiskiminetas-Conemaugh watersheds are included in the state's 2008 Section 303(d) list because of impairments such as metals, pH, siltation, and suspended solids. The TMDL includes consideration for each river and tributary within the target watershed and its impairment sources. Stream data is then used to calculate minimum pollutant reductions that are necessary to attain water quality criteria levels. Target concentrations published in the TMDL were based on established water quality criteria of 0.750 $^{mg}/_{L}$ total recoverable aluminum, 1.5 $^{mg}/_{L}$ total recoverable iron based on a 30-day average and 1.0 $^{mg}/_{L}$ total recoverable manganese. The reduction needed to meet the minimum water quality standards is then divided between each known point and non-point pollutant source in the form of a watershed allocation.

The waste load allocations for SALF facility are listed in Table 5. Concentration limits for aluminum, iron, and manganese will be included in the NPDES permit. These limits will be based on the water quality criteria for aluminum, iron, and manganese as defined in the TMDL. Concentration limits are based on DEP's policy for "permitting at criteria" levels.

Table 5. Kiskiminetas-Conemaugh River Watersheds Non-Mining Wasteload Allocations for SALF

Metal	Baseline Load (lbs/yr)	Baseline Concentration (mg/L)	Allocated Load (lbs/yr)	Allocated Concentration (mg/L)	% Reduction
Aluminum	151	0.75	151	0.75	0
Iron	543	2.70	302	1.50	44
Manganese	201	1.00	201	1.00	0

Aluminum: The specific water quality criterion for aluminum is expressed as an acute or maximum daily in 25 Pa. Code Chapter 93. Discharges of aluminum may only be authorized to the extent that they will not cause or contribute to any violation of the water quality standards. Therefore, the water quality criterion for aluminum (0.75 mg/L) is imposed as a maximum daily effluent limit (MDL). Whenever the most stringent criterion is selected for the MDL, the Department should also impose an average monthly limit (AML) and instantaneous maximum limit (IMAX) if applicable. The imposition of an AML that is more stringent than the MDL is typically not appropriate because the water quality concerns have already been fully addressed by setting the MDL equal to the most stringent applicable criterion. Therefore, where the MDL is set at the value of the most stringent applicable criterion, the AML should be set equal to the MDL. However, the previous permit limits for aluminum are more stringent than TMDL limits. The previous permit limits for aluminum are BAT limits established in the Technical Guidance for NPDES Permitting of Landfill Leachate Discharges (June 1989), Table III-2. Therefore, per anti backsliding regulations, the previous limits will remain active at Outfall 001.

Iron: The specific water quality criterion for iron is expressed as a 30-day average of 1.5 mg/L in 25 Pa. Code § 93.7(a). The criterion is based on the protection of aquatic life and is associated with chronic exposure. There are no other criteria for total iron. Since the duration of the total iron criterion coincides with the 30-day duration of the AML, the 30-day average criterion for total iron is set equal to the AML.

In addition, because the total iron criterion is associated with chronic exposure, the MDL (representing acute exposure) and the IMAX may be made less stringent according to established procedures described in Section III.C.3.h on Page 13 of the

Water Quality Toxics Management Strategy (Doc. # 361-0100-003). These procedures state that a MDL and IMAX may be set at 2 times and 2.5 times the AML, respectively, or there is the option to use multipliers from EPA's *Technical Support Document for Water Quality-based Toxics Control*, if data are available to support the use of alternative multipliers. Accordingly, TMDL iron limits are proposed for Outfall 001. The IMAX applied was determined using a multiplier (i.e., 2.5) per Section III.C.2.h. of the Water Quality Toxics Management Strategy.

Manganese: The specific water quality criterion for manganese is expressed as an acute or maximum daily of 1.0 mg/L in 25 Pa. Code § 93.7(a). The criterion is based on the protection of human health and is associated with chronic exposure associated with a potable water supply (PWS). Since no duration is given in Chapter 93 for the manganese criterion, a duration of 30 days is used based on the water quality criteria duration for Threshold Human Health (THH) criteria given in Section III.C.3.a., Table 1 on Page 10 of *DEP's Water Quality Toxics Management Strategy*. The 30-day duration for THH criteria coincides with the 30-day duration of an AML, which is why the manganese criterion is set equal to the AML for a "permitting at criteria" scenario.

Because the manganese criterion is interpreted as having chronic exposure, the manganese MDL and IMAX may be made less stringent according to procedures established in Section III.C.2.h. of the Water Quality Toxics Management Strategy (AML multipliers of 2.0 and 2.5 for the MDL and IMAX respectively). Accordingly, TMDL manganese limits are proposed for Outfall 001.

WQM 7.0

Per "Establishing Effluent Limitations for Individual Industrial Permits" [SOP No. BCW-PMT-032] Section II.B, analysis with the WQM 7.0 Model is needed if the maximum BOD_5/$CBOD_5$ concentration exceeds 30/25 mg/L in the permit application or DMRs or if the permit writer believes that effluent NH3-N concentrations may need to be evaluated. The maximum BOD_5 concentration reported in the renewal application is 42 mg/L. In addition, the facility has reported multiple NH-3 effluent violations between January 2023 through December 2024. Therefore, WQM 7.0 Model analysis was conducted.

WQM 7.0 is a water quality modeling program for Windows that determines waste load allocations and effluent limitations for carbonaceous biochemical oxygen demand (CBOD5), ammonia nitrogen (NH3-N), and dissolved oxygen (DO) for single and multiple point-source discharge scenarios. To accomplish this, the model simulates two basic processes. In the NH3-N module, the model simulates the mixing and degradation of NH3-N in the stream and compares calculated instream NH3-N concentrations to NH3-N water quality criteria. In the DO module the model simulates the mixing and consumption of DO in the stream due to the degradation of CBOD5 and NH3-N and compares calculated instream DO concentrations to DO water quality criteria. WQM 7.0 then determines the highest pollutant loadings that the stream can assimilate while still meeting water quality criteria under design conditions. The modeling results, which are include in Attachment D, indicate that no WQBELs are required for CBOD5 or NH3-H during the summer or winter months.

Per- and Polyfluoroalkyl Substances (PFAS)

In February 2024, DEP implemented a new monitoring initiative for PFAS consistent with an EPA memorandum that provides guidance to states for addressing PFAS discharges. PFAS are a family of thousands of synthetic organic chemicals that contain a chain of strong carbon-fluorine bonds. Many PFAS are highly stable, water- and oil-resistant, and exhibit other properties that make them useful in a variety of consumer products and industrial processes. PFAS are resistant to biodegradation, photooxidation, direct photolysis, and hydrolysis and do not readily degrade naturally; thus, many PFAS accumulate over time. According to the United States Department of Health and Human Services, Agency for Toxic Substances and Disease Registry (ATSDR), the environmental persistence and mobility of some PFAS, combined with decades of widespread use, have resulted in their presence in surface water, groundwater, drinking water, rainwater, soil, sediment, ice caps, outdoor and indoor air, plants, animal tissue, and human blood serum across the globe. ATSDR also reported that exposure to certain PFAS can lead to adverse human health impacts due to their durability, toxicity, persistence, and pervasiveness, PFAS have emerged as potentially significant pollutants of concern.

In accordance with Section II.I of DEP's "Standard Operating Procedure (SOP) for Clean Water Program – Establishing Effluent Limitations for Individual Industrial Permits" [SOP No. BCW-PMT-032] and under the authority of 25 Pa. Code § 92a.61(b), DEP has determined that monitoring for a subset of common/well-studied PFAS including Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), Perfluorobutanesulfonic acid (PFBS), and Hexafluoropropylene oxide dimer acid (HFPO-DA) is necessary to help understand the extent of environmental contamination by PFAS in the Commonwealth and the extent to which point source dischargers are contributors. SOP BCW-PMT-032 directs permit writers to consider special monitoring requirements for PFOA, PFOS, PFBS, and HFPO-DA in the following instances:

a. If sampling that is completed as part of the permit renewal application reveals a detection of PFOA, PFOS, HFPO-DA or PFBS (any of these compounds), the application manager will establish a quarterly monitoring requirement for PFOA, PFOS, HFPO-DA and PFBS (all of these compounds) in the permit.

b. If sampling that is completed as part of the permit renewal application demonstrates non-detect values at or below the Target QLs for PFOA, PFOS, HFPO-DA and PFBS (all of these compounds in a minimum of 3 samples), the application manager will establish an annual monitoring requirement for PFOA, PFOS, HFPO-DA and PFBS in the permit.

c. In all cases the application manager will include a condition in the permit that the permittee may cease monitoring for PFOA, PFOS, HFPO-DA and PFBS when the permittee reports non-detect values at or below the Target QL for four consecutive monitoring periods for each PFAS parameter that is analyzed. Use the following language: The permittee may discontinue monitoring for PFOA, PFOS, HFPO-DA, and PFBS if the results in 4 consecutive monitoring periods indicate non-detects at or below Quantitation Limits of 4.0 ng/L for PFOA, 3.7 ng/L for PFOS, 3.5 ng/L for PFBS and 6.4 ng/L for HFPO-DA. When monitoring is discontinued, permittees should enter a No Discharge Indicator (NODI) Code of "GG" on DMRs.

Detections of PFOA, PFOS, and PFBS were reported in the renewal application. Therefore, quarterly reporting of PFOA, PFOS, PFBS, and HFPO-DA will be required consistent with Section II.I.a of SOP BCW-PMT-032. As stated in Section II.I.c of the SOP, if non-detect values at or below DEP's Target QLs are reported for four consecutive monitoring periods (i.e., four consecutive quarterly results in SALF's case), then the monitoring may be discontinued.

Anti-Backsliding

Previous limits can be used pursuant to EPA's anti-backsliding regulation 40 CFR 122.44 (I) and are displayed below in Table 6.

Table 6: Current Effluent Limitations for Outfall 001

Parameters	Mass (lbs/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
Total Residual Chlorine	XXX	XXX	XXX	Report	Report	XXX	1/day	Grab
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	XXX	XXX	XXX	15.0	30.0	37.5	2/month	24-Hr Composite
Biochemical Oxygen Demand (BOD_5)	XXX	XXX	XXX	37.0	140.0	XXX	2/month	24-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	27.0	88.0	XXX	2/month	24-Hr Composite
Total Dissolved Solids	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 – Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	XXX	5/month	Grab
Fecal Coliform (No./100 ml) May 1 – Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	5/month	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	4.9	10.0	15.0	2/month	24-Hr Composite
Aluminum, Total	XXX	XXX	XXX	0.275	0.550	0.7	2/month	24-Hr Composite
Barium, Total	XXX	XXX	XXX	0.1	0.2	0.3	2/month	24-Hr Composite
Boron, Total	XXX	XXX	XXX	13.7	27.4	34.3	2/month	24-Hr Composite
Cobalt, Total	XXX	XXX	XXX	0.05	0.10	0.1	2/month	24-Hr Composite
Cyanide, Total	XXX	XXX	XXX	0.02	0.04	0.05	2/month	24-Hr Composite
Iron, Total	XXX	XXX	XXX	1.50	3.0	3.75	2/month	24-Hr Composite

Table 6: Current Effluent Limitations for Outfall 001

Parameters	Mass (lbs/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Manganese, Total	XXX	XXX	XXX	1.0	2.0	2.5	2/month	24-Hr Composite
Mercury, Total	XXX	XXX	XXX	0.0009	0.0018	0.00225	2/month	24-Hr Composite
Nickel, Total	XXX	XXX	XXX	0.3	0.6	0.75	2/month	24-Hr Composite
Zinc, Total	XXX	XXX	XXX	0.11	0.20	0.28	2/month	24-Hr Composite
Phenol	XXX	XXX	XXX	0.015	0.026	0.0375	2/month	24-Hr Composite
Acrylamide	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
a-Terpineol	XXX	XXX	XXX	0.016	0.033	0.04	2/month	24-Hr Composite
Benzoic Acid	XXX	XXX	XXX	0.071	0.120	0.178	2/month	24-Hr Composite
p-Cresol	XXX	XXX	XXX	0.014	0.025	0.035	2/month	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15.0 Avg Qrtly	XXX	30.0	1/quarter	Grab
Arsenic, Total	XXX	XXX	XXX	0.05 Avg Qrtly	0.10	0.1	1/quarter	24-Hr Composite
Beryllium, Total	XXX	XXX	XXX	0.001 Avg Annual	0.002	0.002	2/year	24-Hr Composite
Chromium, Hexavalent	XXX	XXX	XXX	0.15 Avg Qrtly	0.23	0.375	1/quarter	24-Hr Composite
Selenium, Total	XXX	XXX	XXX	0.075 Avg Annual	0.15	0.2	2/year	24-Hr Composite
Silver, Total	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.03	1/year	24-Hr Composite
Tin, Total	XXX	XXX	XXX	0.8 Avg Annual	1.6	2.0	2/year	24-Hr Composite
Vanadium, Total	XXX	XXX	XXX	0.009 Avg Annual	0.018	0.02	2/year	24-Hr Composite
Chlorobenzene	XXX	XXX	XXX	0.05 Avg Annual	0.10	0.125	1/year	24-Hr Composite
Benzene	XXX	XXX	XXX	0.05 Avg Annual	0.10	0.125	1/year	24-Hr Composite
Benzidine	XXX	XXX	XXX	0.0005 Avg Annual	0.001	0.00125	2/year	24-Hr Composite
Butyl Benzyl Phthalate	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.025	1/year	24-Hr Composite
1,1,1-Trichloroethane	XXX	XXX	XXX	0.1 Avg Annual	0.2	0.25	2/year	24-Hr Composite
1,2,3-Trichloropropane	XXX	XXX	XXX	0.10 Avg Annual	0.20	0.25	2/year	24-Hr Composite
1,1-Dichloroethane	XXX	XXX	XXX	0.09 Avg Annual	0.18	0.225	1/year	24-Hr Composite
4,4-DDT	XXX	XXX	XXX	0.00001 Avg Annual	0.00002	0.000025	1/year	24-Hr Composite
Chloroform	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.025	1/year	24-Hr Composite
2-Chloronaphthalene	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.025	1/year	24-Hr Composite
Diethyl Phthalate	XXX	XXX	XXX	0.025 Avg Annual	0.05	0.0625	1/year	24-Hr Composite

Table 6: Current Effluent Limitations for Outfall 001

Parameters	Mass (lbs/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Daily Maximum	Daily Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Isophorone	XXX	XXX	XXX	0.05 Avg Annual	0.10	0.125	1/year	24-Hr Composite
Gamma-BHC (Lindane)	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.025	1/year	24-Hr Composite
Hexachlorobenzene	XXX	XXX	XXX	0.00007 Avg Annual	0.000175	0.000175	1/year	24-Hr Composite
Dibromomethane	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.025	2/year	24-Hr Composite
Methyl Chloride	XXX	XXX	XXX	0.10 Avg Annual	0.20	0.25	1/year	24-Hr Composite
Methylene Chloride	XXX	XXX	XXX	0.10 Avg Qrtly	0.20	0.25	1/quarter	24-Hr Composite
Trans-1,2-Dichloroethylene	XXX	XXX	XXX	0.03 Avg Annual	0.06	0.075	2/year	24-Hr Composite
Toluene	XXX	XXX	XXX	0.05 Avg Annual	0.10	0.125	1/year	24-Hr Composite
Xylenes, Total	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.025	1/year	24-Hr Composite

Proposed Effluent Limitations for Outfall 001

Throughout the current permit term, multiple effluent violations have been reported for total cyanide and total mercury (see Attachment E). On February 22, 2022, the Department received 'Response to Notice of Violations Dated January 11, 2022' from SALF which stated the following:

'*Over several years the site has noticed that during seasonal changes, either fall to winter or spring to summer, these two parameters rise intermittently and then return to normal levels. We believe this is from the rapid change in the surface layer which causes mixing in the leachate. This would cause the solids which settled to the bottom to be picked up by the pumps and sent to the plant. This influx of cyanide and mercury is usually temporary and transient . . . The site is planning to dredge the solids from the leachate impoundment which we believe will alleviate the problem.*'

At this time, it is unclear whether dredging occurred. As per *New and Reissuance Industrial Waste and Industrial Stormwater Individual NPDES Permit Applications* (BCW-PMT-001), for existing facilities in which there are effluent violations in the past two years, and existing monitoring frequencies are less stringent than Table 6-4 of DEP's *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001), the monitoring frequencies for parameters with violations should be increased to match those in Table 6-4. Therefore, the monitoring frequencies for total cyanide and total mercury will be 1/week.

As part of the previous renewal, the following Part C condition was included in the permit:

> **In reference to Part A.III.a.(4) of this permit, the permittee shall use the following test procedures for the pollutants listed:**
>
> | Test(s) | Pollutant(s) |
> |---|---|
> | **EPA Method 605** | **Benzidine** |
>
> **The permittee may use an alternative method approved by the Department and the EPA as long as it achieves the level of detection of the cited method or numerical water quality-based limit.**

During the current permit term, benzidine was analyzed via EPA Method 625.1. The following was reported in the facility's DMRs for benzidine:

MONITORING START DATE	MONITORING END DATE	REPORT FREQUENCY	MONITORING LOCATION	PARAMETER	CONC UNITS		CONC 2 VALUE	CONC 2 LIMIT	CONC 2 SBC		CONC 3 VALUE	CONC 3 LIMIT	CONC 3 SBC	SAMPLE FREQUENCY	SAMPLE TYPE
01/01/2021	12/31/2021	Annually	Final Effluent	Benzidine	mg/L	<	0.0011	0.0005	Annual Average	<	0.0011	0.001	Daily Maximum	2/year	24-Hr Composite
01/01/2022	12/31/2022	Annually	Final Effluent	Benzidine	mg/L	<	0.0005	0.0005	Annual Average	<	0.0005	0.001	Daily Maximum	2/year	24-Hr Composite
01/01/2023	12/31/2023	Annually	Final Effluent	Benzidine	mg/L	<	0.0003	0.0005	Annual Average	<	0.0005	0.001	Daily Maximum	2/year	24-Hr Composite
01/01/2024	12/31/2024	Annually	Final Effluent	Benzidine	mg/L		0.0005	0.0005	Annual Average		0.0005	0.001	Daily Maximum	2/year	24-Hr Composite

It should be noted that there is a discrepancy in the values reported for benzidine in the analytical lab reports and eDMR for 2023:

COLLECTION DATE	PARAMETER	CONC UNITS		CONC VALUE
01/12/2023	Benzidine	ug/L	<	1.0
07/11/2023	Benzidine	ug/L	<	0.5

Annual Avg	0.8	ug/L	(0.0008 mg/L)
Daily Max	1.0	ug/L	(0.001 mg/L)

Hexachlorobenzene was also analyzed via EPA Method 625.1 during the current permit term. The following was reported in the facility's DMRs for hexachlorobenzene:

MONITORING START DATE	MONITORING END DATE	REPORT FREQUENCY	MONITORING LOCATION	PARAMETER	CONC UNITS		CONC 2 VALUE	CONC 2 LIMIT	CONC 2 SBC		CONC 3 VALUE	CONC 3 LIMIT	CONC 3 SBC	SAMPLE FREQUENCY	SAMPLE TYPE
01/01/2021	12/31/2021	Annually	Final Effluent	Hexachlorobenzene	mg/L	<	0.0001	0.00007	Annual Average	<	0.0001	0.000175	Daily Maximum	2/year	24-Hr Composite
01/01/2022	12/31/2022	Annually	Final Effluent	Hexachlorobenzene	mg/L	<	0.00005	0.00007	Annual Average	<	0.00005	0.000175	Daily Maximum	1/year	24-Hr Composite
01/01/2023	12/31/2023	Annually	Final Effluent	Hexachlorobenzene	mg/L	<	0.0001	0.00007	Annual Average	<	0.0001	0.000175	Daily Maximum	1/year	24-Hr Composite
01/01/2024	12/31/2024	Annually	Final Effluent	Hexachlorobenzene	mg/L	<	0.00011	0.00007	Annual Average	<	0.00011	0.000175	Daily Maximum	1/year	24-Hr Composite

Hexachlorobenzene was reported as non-detect throughout the current permit term but was frequently analyzed at a quantitation limit above the effluent limitations.

The above Part C condition for benzidine shall be carried over from the previous permit. Hexachlorobenzene shall be added to this Part C condition to ensure the sample analyses achieve the necessary level of detection to meet the effluent limitations. EPA test method 612 (GC/ECD) shall be specified for hexachlorobenzene, but the permittee may use an alternate method approved by the Department and the EPA as long as it achieves the level of detection of the cited method or numerical water quality-based limit.

It should also be noted that Gamma-BHC (Lindane) was included in the current permit but not coded in the facility's electronic DMR. The analytical lab reports were included with the facility's electronic DMR submissions which showed that the facility has been sampling for Gamma-BHC (Lindane) as specified in the current permit. Gamma-BHC (Lindane) will be included in the facility's electronic DMR moving forward.

The proposed effluent limitations and monitoring requirements for Outfall 001 are shown below in Table 7. The limits are the most stringent values from the above limitation analysis.

Table 7: Proposed Effluent Limitations for Outfall 001

Parameters	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
Total Residual Chlorine	XXX	XXX	XXX	0.5	1.0	XXX	1/day	Grab
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	XXX	XXX	XXX	15.0	30.0	37.5	2/month	24-Hr Composite
Biochemical Oxygen Demand (BOD_5)	XXX	XXX	XXX	37.0	140.0	XXX	2/month	24-Hr Composite
Total Suspended Solids	XXX	XXX	XXX	27.0	88.0	XXX	2/month	24-Hr Composite

Table 7: Proposed Effluent Limitations for Outfall 001

Parameters	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Total Dissolved Solids	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 – Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	XXX	5/month	Grab
Fecal Coliform (No./100 ml) May 1 – Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	5/month	Grab
Total Nitrogen	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
Ammonia-Nitrogen	XXX	XXX	XXX	4.9	10.0	15.0	2/month	24-Hr Composite
Aluminum, Total	XXX	XXX	XXX	0.275	0.550	0.7	2/month	24-Hr Composite
Barium, Total	XXX	XXX	XXX	0.1	0.2	0.3	2/month	24-Hr Composite
Boron, Total	XXX	XXX	XXX	13.7	27.4	34.3	2/month	24-Hr Composite
Cobalt, Total	XXX	XXX	XXX	0.05	0.10	0.1	2/month	24-Hr Composite
Cyanide, Total	XXX	XXX	XXX	0.02	0.04	0.05	1/week	24-Hr Composite
Iron, Total	XXX	XXX	XXX	1.50	3.0	3.75	2/month	24-Hr Composite
Manganese, Total	XXX	XXX	XXX	1.0	2.0	2.5	2/month	24-Hr Composite
Mercury, Total	XXX	XXX	XXX	0.0009	0.0018	0.00225	1/week	24-Hr Composite
Nickel, Total	XXX	XXX	XXX	0.3	0.6	0.75	2/month	24-Hr Composite
Zinc, Total	XXX	XXX	XXX	0.11	0.20	0.28	2/month	24-Hr Composite
Phenol	XXX	XXX	XXX	0.015	0.026	0.0375	2/month	24-Hr Composite
Acrylamide	XXX	XXX	XXX	Report	Report	XXX	2/month	24-Hr Composite
a-Terpineol	XXX	XXX	XXX	0.016	0.033	0.04	2/month	24-Hr Composite
Benzoic Acid	XXX	XXX	XXX	0.071	0.120	0.178	2/month	24-Hr Composite
p-Cresol	XXX	XXX	XXX	0.014	0.025	0.035	2/month	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15.0 Avg Qrtly	XXX	30.0	1/quarter	Grab
Arsenic, Total	XXX	XXX	XXX	0.05 Avg Qrtly	0.10	0.1	1/quarter	24-Hr Composite
Beryllium, Total	XXX	XXX	XXX	0.001 Avg Annual	0.002	0.002	2/year	24-Hr Composite
Chromium, Hexavalent	XXX	XXX	XXX	0.15 Avg Qrtly	0.23	0.375	1/quarter	24-Hr Composite
Selenium, Total	XXX	XXX	XXX	0.075 Avg Annual	0.15	0.2	2/year	24-Hr Composite
Silver, Total	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.03	1/year	24-Hr Composite
Tin, Total	XXX	XXX	XXX	0.8 Avg Annual	1.6	2.0	2/year	24-Hr Composite
Vanadium, Total	XXX	XXX	XXX	0.009 Avg Annual	0.018	0.02	2/year	24-Hr Composite
Chlorobenzene	XXX	XXX	XXX	0.05 Avg Annual	0.10	0.125	1/year	24-Hr Composite

Table 7: Proposed Effluent Limitations for Outfall 001

Parameters	Mass (lb/day)		Concentration (mg/L)				Monitoring Requirements	
	Average Monthly	Daily Maximum	Instant. Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Benzene	XXX	XXX	XXX	0.05 Avg Annual	0.10	0.125	1/year	24-Hr Composite
Benzidine	XXX	XXX	XXX	0.0005 Avg Annual	0.001	0.00125	2/year	24-Hr Composite
Butyl Benzyl Phthalate	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.025	1/year	24-Hr Composite
1,1,1-Trichloroethane	XXX	XXX	XXX	0.1 Avg Annual	0.2	0.25	2/year	24-Hr Composite
1,2,3-Trichloropropane	XXX	XXX	XXX	0.10 Avg Annual	0.20	0.25	2/year	24-Hr Composite
1,1-Dichloroethane	XXX	XXX	XXX	0.09 Avg Annual	0.18	0.225	1/year	24-Hr Composite
4,4-DDT	XXX	XXX	XXX	0.00001 Avg Annual	0.00002	0.000025	1/year	24-Hr Composite
Chloroform	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.025	1/year	24-Hr Composite
2-Chloronaphthalene	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.025	1/year	24-Hr Composite
Diethyl Phthalate	XXX	XXX	XXX	0.025 Avg Annual	0.05	0.0625	1/year	24-Hr Composite
Isophorone	XXX	XXX	XXX	0.05 Avg Annual	0.10	0.125	1/year	24-Hr Composite
Gamma-BHC (Lindane)	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.025	1/year	24-Hr Composite
Hexachlorobenzene	XXX	XXX	XXX	0.00007 Avg Annual	0.000175	0.000175	1/year	24-Hr Composite
Dibromomethane	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.025	2/year	24-Hr Composite
Methyl Chloride	XXX	XXX	XXX	0.10 Avg Annual	0.20	0.25	1/year	24-Hr Composite
Methylene Chloride	XXX	XXX	XXX	0.10 Avg Qrtly	0.20	0.25	1/quarter	24-Hr Composite
Trans-1,2-Dichloroethylene	XXX	XXX	XXX	0.03 Avg Annual	0.06	0.075	2/year	24-Hr Composite
Toluene	XXX	XXX	XXX	0.05 Avg Annual	0.10	0.125	1/year	24-Hr Composite
Xylenes, Total	XXX	XXX	XXX	0.01 Avg Annual	0.02	0.025	1/year	24-Hr Composite
PFOA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFOS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
PFBS (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab
HFPO-DA (ng/L)	XXX	XXX	XXX	XXX	Report	XXX	1/quarter	Grab

Development of Effluent Limitations

Outfall No.	002, 003, 004, 005, 006	**Design Flow (MGD)**	0
	40º 13' 57"		-78º 53' 47"
	40º 14' 12"		-78º 54' 05"
	40º 14' 11"		-78º 53' 45"
	40º 13' 45"		-78º 54' 02"
Latitude	40º 13' 34"	**Longitude**	-78º 54' 19"
Wastewater Description:	Stormwater		

Technology-Based Limitations

Stormwater Technology Limits

Outfalls 002-006 will be subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because the outfalls discharge stormwater associated with industrial activity. The SIC code for the site is 4953 (Refuse Systems) and the corresponding appendix of the PAG-03 that would apply to the facility is Appendix C. The reporting requirements applicable to stormwater discharges are shown in Table 8 below. Along with the monitoring requirements, sector specific BMPs included in Appendix C of the PAG-03 will also be included in Part C of the Draft Permit.

Table 8: PAG-03 Appendix (C) Monitoring Requirements

Parameter	Max Daily Concentration (mg/L)	Benchmarks (mg/L)	Measurement Frequency	Sample Type
Total Nitrogen	Monitor and Report	XXX	1/6 Months	Grab
Total Phosphorus	Monitor and Report	XXX	1/6 Months	Grab
pH (S.U.)	Monitor and Report	9.0	1/6 Months	Grab
Total Suspended Solids (TSS)	Monitor and Report	100	1/6 Months	Grab
Chemical Oxygen Demand (COD)	Monitor and Report	120	1/6 Months	Grab
Ammonia-Nitrogen	Monitor and Report	XXX	1/6 Months	Grab
Total Iron	Monitor and Report	XXX	1/6 Months	Grab

A benchmark of 2.14 mg/L for Ammonia-Nitrogen was included in the current permit. The benchmark for Ammonia-Nitrogen will be carried over in the proposed permit.

Water Quality-Based Limitations

Stormwater WQBELs

Water quality analyses are typically performed under low-flow (Q7-10) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharges from Outfalls 002-006 are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations are not proposed.

TMDL Considerations

As described above in the Development of Effluent Limitations for Outfall 001, SALF is within the watershed area covered by the Kiskiminetas-Conemaugh Watershed TMDL, approved as final by EPA in 2010. This TMDL addresses certain impairments of water quality standards associated with elevated instream concentrations of aluminum, iron, and manganese. A pH impairment is addressed through a surrogate relationship with these metals. This TMDL establishes wasteload allocations for these metals for point sources, and load allocations for these metals for nonpoint sources in the watershed. The Department must assure that any effluent limitations assigned to point sources are consistent with the assumptions and requirements of any available wasteload allocation for the discharge pursuant to 40 CFR 130.7 (i.e., a final TMDL). TMDL requirements as discussed in the Development of Effluent Limitations for Outfall 001 will be applied at Outfalls 002-006. In addition, the sampling frequency of once per month for aluminum, iron, and manganese will be carried over from the previous permit.

Multiple effluent violations were reported for aluminum at Outfalls 002-004 between August 2023 and July 2025. However, there were various occasions during the current permit cycle where 'no discharge' was marked for the parameters sampled semi-annually, but results for the TMDL monthly parameters of aluminum, iron, and manganese were reported within those semi-annual periods. It was stated by the facility's consultant that discharge is occasionally observed from Outfalls 002, 003, 004, and 006 in sufficient amounts to allow for the analysis of the monthly metals, but these discharge events were not the result of a qualifying storm event. Moving forward, the facility should not grab stormwater samples on nonqualifying events. When a qualifying storm event does occur, an analysis should be performed for all parameters due to the infrequent nature of discharge from Outfalls 002-006.

Anti-Backsliding

Previous limits can be used pursuant to EPA's anti-backsliding regulation 40 CFR 122.44 (I) and are displayed below in Table 9.

Table 9: Current Effluent Limitations for Outfalls 002-006

Parameters	Mass (lbs/day)		Concentration				Monitoring Requirements	
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Aluminum, Total	XXX	XXX	XXX	XXX	0.75	XXX	1/month	Grab
Iron, Total	XXX	XXX	XXX	XXX	3.0	XXX	1/month	Grab
Manganese, Total	XXX	XXX	XXX	XXX	1.0	XXX	1/month	Grab
Flow (MGD)	XXX	Report	XXX	XXX	XXX	XXX	1/6 months	Estimate
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids (TSS)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Barium, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Proposed Effluent Limitations for Outfalls 002-006

The proposed effluent limitations and monitoring requirements for Outfalls 002-006 are shown below in Table 10. The limits are the most stringent values from the above limitation analysis.

Table 10: Proposed Effluent Limitations for Outfalls 002-006

Parameters	Mass (lbs/day)		Concentration				Monitoring Requirements	
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Frequency	Sample Type
Aluminum, Total	XXX	XXX	XXX	XXX	0.75	XXX	1/month	Grab
Iron, Total	XXX	XXX	XXX	XXX	3.0	XXX	1/month	Grab
Manganese, Total	XXX	XXX	XXX	XXX	1.0	XXX	1/month	Grab
Flow (MGD)	XXX	Report	XXX	XXX	XXX	XXX	1/6 months	Estimate
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Phosphorus	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Chemical Oxygen Demand (COD)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Suspended Solids (TSS)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Dissolved Solids	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Nitrate-Nitrite as N	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Barium, Total	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Tools and References Used to Develop Permit	
☒	WQM for Windows Model (see Attachment **D**)
☒	Toxics Management Spreadsheet (see Attachment **B**)
☒	TRC Model Spreadsheet (see Attachment **C**)
☐	Temperature Model Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	Technical Guidance for the Development and Specification of Effluent Limitations, 386-0400-001, 10/97.
☐	Policy for Permitting Surface Water Diversions, 386-2000-019, 3/98.
☐	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 386-2000-018, 11/96.
☐	Technology-Based Control Requirements for Water Treatment Plant Wastes, 386-2183-001, 10/97.
☐	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 386-2183-002, 12/97.
☐	Pennsylvania CSO Policy, 386-2000-002, 9/08.
☐	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
☐	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 386-2000-008, 4/97.
☐	Determining Water Quality-Based Effluent Limits, 386-2000-004, 12/97.
☐	Implementation Guidance Design Conditions, 386-2000-007, 9/97.
☐	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 386-2000-016, 6/2004.
☐	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 386-2000-012, 10/1997.
☐	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 386-2000-009, 3/99.
☐	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 386-2000-015, 5/2004.
☐	Implementation Guidance for Section 93.7 Ammonia Criteria, 386-2000-022, 11/97.
☐	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 386-2000-013, 4/2008.
☐	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 386-2000-011, 11/1994.
☐	Implementation Guidance for Temperature Criteria, 386-2000-001, 4/09.
☐	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 386-2000-021, 10/97.
☐	Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 386-2000-020, 10/97.
☐	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 386-2000-005, 3/99.
☐	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 386-2000-010, 3/1999.
☐	Design Stream Flows, 386-2000-003, 9/98.
☐	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 386-2000-006, 10/98.
☐	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 386-3200-001, 6/97.
☐	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
☒	SOP: BCW-PMT-001, BCW-PMT-032, BCW-PMT-033, BCW-PMT-037
☒	Other: Technical Guidance for NPDES Permitting of Landfill Leachate Discharges

Attachments:

Attachment A: Stream Stats Report

Attachment B: Toxic Management Spreadsheet – Outfall 001

Attachment C: TRC Evaluation – Outfall 001

Attachment D: WQM 7.0 Evaluation – Outfall 001

Attachment E: Total Cyanide & Total Mercury – Outfall 001

Attachment F: Line Diagram

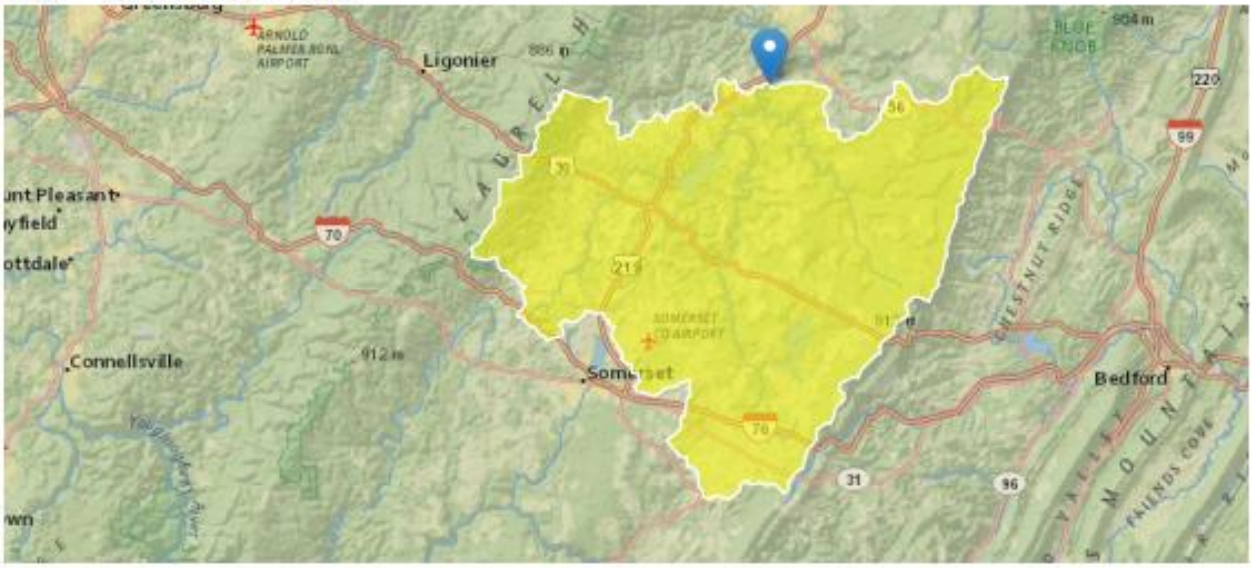
Attachment G: Site Map

Attachment A:

Stream Stats Report

StreamStats Report_Outfall 001

Region ID: PA
Workspace ID: PA20241126205422851000
Clicked Point (Latitude, Longitude): 40.23230, -78.89529
Time: 2024-11-26 15:54:46 -0500



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	350	square miles
ELEV	Mean Basin Elevation	2217	feet
PRECIP	Mean Annual Precipitation	43	inches

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	350	square miles	2.33	1720
ELEV	Mean Basin Elevation	2217	feet	898	2700
PRECIP	Mean Annual Precipitation	43	inches	38.7	47.9

Low-Flow Statistics Flow Report [Low Flow Region 3]

PIL: Lower 90% Prediction Interval, PIU: Upper 90% Prediction Interval, ASEp: Average Standard Error of Prediction, SE: Standard Error, PC: Percent Correct, RMSE: Root Mean Squared Error, PseudoR^2: Pseudo R Squared (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	51.9	ft^3/s	43	43
30 Day 2 Year Low Flow	67.7	ft^3/s	38	38
7 Day 10 Year Low Flow	28.3	ft^3/s	54	54
30 Day 10 Year Low Flow	34.6	ft^3/s	49	49
90 Day 10 Year Low Flow	48.6	ft^3/s	41	41

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Application Version: 4.24.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

Attachment B:

Toxic Management Spreadsheet – Outfall 001

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DEPARTMENT OF ENVIRONMENTAL PROTECTION

Toxics Management Spreadsheet
Version 1.4, May 2023

Discharge Information

Instructions | Discharge | Stream

Facility: **Southern Alleghenies Landfill Inc** NPDES Permit No.: **PA0093866** Outfall No.: **001**

Evaluation Type: **Major Sewage / Industrial Waste** Wastewater Description: **Landfill Leachate**

Discharge Characteristics								
Design Flow (MGD)*	Hardness (mg/l)*	pH (SU)*	Partial Mix Factors (PMFs)				Complete Mix Times (min)	
			AFC	CFC	THH	CRL	Q_{7-10}	Q_h
0.0658	436	7						

					0 if left blank		*0.5 if left blank*		*0 if left blank*			*1 if left blank*	
	Discharge Pollutant	Units	Max Discharge Conc		Trib Conc	Stream Conc	Daily CV	Hourly CV	Stream CV	Fate Coeff	FOS	Criteria Mod	Chem Transl
Group 1	Total Dissolved Solids (PWS)	mg/L		5210									
	Chloride (PWS)	mg/L		819									
	Bromide	mg/L		5.05									
	Sulfate (PWS)	mg/L		241									
	Fluoride (PWS)	mg/L	<	0.5									
Group 2	Total Aluminum	mg/L	<	0.1									
	Total Antimony	µg/L		2.4									
	Total Arsenic	mg/L	<	0.02									
	Total Barium	mg/L		0.645									
	Total Beryllium	mg/L	<	0.001									
	Total Boron	mg/L		12.5									
	Total Cadmium	µg/L	<	0.1									
	Total Chromium (III)	µg/L		23.3									
	Hexavalent Chromium	mg/L		0.042									
	Total Cobalt	mg/L		0.039									
	Total Copper	µg/L		3.6									
	Free Cyanide	µg/L											
	Total Cyanide	mg/L		0.11									
	Dissolved Iron	µg/L		602									
	Total Iron	mg/L		9.63									
	Total Lead	µg/L		0.2									
	Total Manganese	mg/L		0.6									
	Total Mercury	mg/L		7.301									
	Total Nickel	mg/L		0.175									
	Total Phenols (Phenolics) (PWS)	µg/L		26									
	Total Selenium	mg/L	<	0.02									
	Total Silver	mg/L	<	0.005									
	Total Thallium	µg/L	<	0.1									
	Total Zinc	mg/L		0.03									
	Total Molybdenum	µg/L		2.9									
	Acrolein	µg/L	<	2									
	Acrylamide	mg/L	<	10									
	Acrylonitrile	µg/L	<	0.5									
	Benzene	µg/L	<	0.5									
	Bromoform	µg/L	<	0.5									
	Carbon Tetrachloride	µg/L	<	0.2									

Group 3	Chlorobenzene	µg/L	<	0.5									
	Chlorodibromomethane	µg/L	<	0.4									
	Chloroethane	µg/L	<	0.2									
	2-Chloroethyl Vinyl Ether	µg/L	<	0.5									
	Chloroform	µg/L	<	0.5									
	Dichlorobromomethane	µg/L	<	0.2									
	1,1-Dichloroethane	µg/L	<	0.5									
	1,2-Dichloroethane	µg/L	<	0.2									
	1,1-Dichloroethylene	µg/L	<	0.2									
	1,2-Dichloropropane	µg/L	<	0.2									
	1,3-Dichloropropylene	µg/L	<	0.2									
	1,4-Dioxane	µg/L		12.4									
	Ethylbenzene	µg/L	<	0.2									
	Methyl Bromide	µg/L		10.4									
	Methyl Chloride	µg/L		6.9									
	Methylene Chloride	µg/L	<	0.5									
	1,1,2,2-Tetrachloroethane	µg/L	<	0.2									
	Tetrachloroethylene	µg/L	<	0.4									
	Toluene	µg/L	<	0.5									
	1,2-trans-Dichloroethylene	µg/L	<	1									
	1,1,1-Trichloroethane	µg/L	<	0.5									
	1,1,2-Trichloroethane	µg/L	<	0.5									
	Trichloroethylene	µg/L	<	0.2									
	Vinyl Chloride	µg/L	<	0.2									
Group 4	2-Chlorophenol	µg/L	<	1									
	2,4-Dichlorophenol	µg/L	<	1									
	2,4-Dimethylphenol	µg/L	<	1									
	4,6-Dinitro-o-Cresol	µg/L	<	5									
	2,4-Dinitrophenol	µg/L	<	5									
	2-Nitrophenol	µg/L	<	2.5									
	4-Nitrophenol	µg/L	<	2.5									
	p-Chloro-m-Cresol	µg/L	<	1									
	Pentachlorophenol	µg/L		2.7									
	Phenol	mg/L	<	0.011									
	2,4,6-Trichlorophenol	µg/L	<	1									
Group 5	Acenaphthene	µg/L	<	0.5									
	Acenaphthylene	µg/L	<	0.5									
	Anthracene	µg/L	<	0.5									
	Benzidine	µg/L	<	2.5									
	Benzo(a)Anthracene	µg/L	<	0.5									
	Benzo(a)Pyrene	µg/L	<	0.5									
	3,4-Benzofluoranthene	µg/L	<	0.5									
	Benzo(ghi)Perylene	µg/L	<	0.5									
	Benzo(k)Fluoranthene	µg/L	<	0.5									
	Bis(2-Chloroethoxy)Methane	µg/L	<	0.5									
	Bis(2-Chloroethyl)Ether	µg/L	<	0.5									
	Bis(2-Chloroisopropyl)Ether	µg/L	<	0.5									
	Bis(2-Ethylhexyl)Phthalate	µg/L		10									
	4-Bromophenyl Phenyl Ether	µg/L	<	0.5									
	Butyl Benzyl Phthalate	µg/L	<	10									
	2-Chloronaphthalene	µg/L	<	10									
	4-Chlorophenyl Phenyl Ether	µg/L	<	0.5									
	Chrysene	µg/L	<	0.5									
	Dibenzo(a,h)Anthrancene	µg/L	<	0.5									
	1,2-Dichlorobenzene	µg/L	<	0.5									
	1,3-Dichlorobenzene	µg/L	<	0.5									
	1,4-Dichlorobenzene	µg/L	<	0.5									
	3,3-Dichlorobenzidine	µg/L	<	2.5									
	Diethyl Phthalate	µg/L	<	10									
	Dimethyl Phthalate	µg/L	<	5									
	Di-n-Butyl Phthalate	µg/L	<	5									
	2,4-Dinitrotoluene	µg/L	<	1									
	2,6-Dinitrotoluene	µg/L	<	1									
	Di-n-Octyl Phthalate	µg/L	<	5									

	1,2-Diphenylhydrazine	µg/L		0.5									
	Fluoranthene	µg/L	<	0.5									
	Fluorene	µg/L	<	0.5									
	Hexachlorobenzene	µg/L	<	0.5									
	Hexachlorobutadiene	µg/L	<	0.5									
	Hexachlorocyclopentadiene	µg/L	<	2.5									
	Hexachloroethane	µg/L	<	0.5									
	Indeno(1,2,3-cd)Pyrene	µg/L	<	0.5									
	Isophorone	µg/L	<	5.3									
	Naphthalene	µg/L	<	0.5									
	Nitrobenzene	µg/L	<	0.5									
	n-Nitrosodimethylamine	µg/L	<	0.5									
	n-Nitrosodi-n-Propylamine	µg/L	<	0.5									
	n-Nitrosodiphenylamine	µg/L	<	0.5									
	Phenanthrene	µg/L	<	0.5									
	Pyrene	µg/L	<	0.5									
	1,2,4-Trichlorobenzene	µg/L	<	0.5									
Group 6	Aldrin	µg/L	<	0.02									
	alpha-BHC	µg/L	<	0.01									
	beta-BHC	µg/L	<	0.02									
	gamma-BHC	µg/L	<	0.02									
	delta BHC	µg/L	<	0.02									
	Chlordane	µg/L	<	0.25									
	4,4-DDT	µg/L	<	0.02									
	4,4-DDE	µg/L	<	0.02									
	4,4-DDD	µg/L	<	0.01									
	Dieldrin	µg/L	<	0.02									
	alpha-Endosulfan	µg/L	<	0.02									
	beta-Endosulfan	µg/L	<	0.02									
	Endosulfan Sulfate	µg/L	<	0.02									
	Endrin	µg/L	<	0.01									
	Endrin Aldehyde	µg/L	<	0.02									
	Heptachlor	µg/L	<	0.01									
	Heptachlor Epoxide	µg/L	<	0.01									
	PCB-1016	µg/L	<	0.2									
	PCB-1221	µg/L	<	0.2									
	PCB-1232	µg/L	<	0.2									
	PCB-1242	µg/L	<	0.2									
	PCB-1248	µg/L	<	0.2									
	PCB-1254	µg/L	<	0.2									
	PCB-1260	µg/L	<	0.2									
	PCBs, Total	µg/L	<										
	Toxaphene	µg/L	<	0.5									
	2,3,7,8-TCDD	ng/L	<										
Group 7	Gross Alpha	pCi/L											
	Total Beta	pCi/L	<										
	Radium 226/228	pCi/L	<										
	Total Strontium	µg/L	<										
	Total Uranium	µg/L	<										
	Osmotic Pressure	mOs/kg											
	Total Vanadium	mg/L		0.016									
	Total Xylenes	µg/L	<	1.5									
	1,2,3-Trichloropropane	mg/L	<	0.001									
	Dibromomethane	µg/L	<	0.5									

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Toxics Management Spreadsheet
Version 1.4, May 2023

Stream / Surface Water Information

Southern Alleghenies Landfill Inc, NPDES Permit No. PA0093866, Outfall 001

Instructions | Discharge | *Stream*

Receiving Surface Water Name: **Stonycreek River**

No. Reaches to Model: **1**

- (●) Statewide Criteria
- ( ) Great Lakes Criteria
- ( ) ORSANCO Criteria

Location	Stream Code*	RMI*	Elevation (ft)*	DA (mi^2)*	Slope (ft/ft)	PWS Withdrawal (MGD)	Apply Fish Criteria*
Point of Discharge	045084	12.13	1376	350	0.001		Yes
End of Reach 1	045084	11.73	1364	350.5	0.001		Yes

Q $_{7\text{-}10}$

Location	RMI	LFY (cfs/mi^2)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness*	pH*	Hardness	pH
Point of Discharge	12.13	0.0809	28.3									100	7		
End of Reach 1	11.73	0.0807	28.3												

Q $_{h}$

Location	RMI	LFY (cfs/mi^2)	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time (days)	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness	pH	Hardness	pH
Point of Discharge	12.13														
End of Reach 1	11.73														

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Toxics Management Spreadsheet
Version 1.4, May 2023

Model Results

Southern Alleghenies Landfill Inc, NPDES Permit No. PA0093866, Outfall 001

Instructions | Results | RETURN TO INPUTS | SAVE AS PDF | PRINT | All | Inputs | Results | Limits

☑ ***Hydrodynamics***

$Q_{7\text{-}10}$

RMI	Stream Flow (cfs)	PWS Withdrawal (cfs)	Net Stream Flow (cfs)	Discharge Analysis Flow (cfs)	Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Travel Time (days)	Complete Mix Time (min)
12.13	28.30		28.30	0.102	0.001	0.947	90.904	96.028	0.33	0.074	386.098
11.73	28.30		28.3								

Q_h

RMI	Stream Flow (cfs)	PWS Withdrawal (cfs)	Net Stream Flow (cfs)	Discharge Analysis Flow (cfs)	Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Travel Time (days)	Complete Mix Time (min)
12.13	137.99		137.99	0.102	0.001	1.898	90.904	47.885	0.8	0.031	136.732
11.73	137.991		137.99								

☑ ***Wasteload Allocations***

☑ ***AFC*** CCT (min): 15 PMF: 0.197 Analysis Hardness (mg/l): 106.02 Analysis pH: 7.00

Pollutants	Stream Conc	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Fluoride (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	750	750	41,849	
Total Antimony	0	0		0	1,100	1,100	61,378	
Total Arsenic	0	0		0	340	340	18,971	Chem Translator of 1 applied
Total Barium	0	0		0	21,000	21,000	1,171,765	
Total Boron	0	0		0	8,100	8,100	451,966	
Total Cadmium	0	0		0	2.132	2.26	126	Chem Translator of 0.942 applied
Total Chromium (III)	0	0		0	597.713	1,891	105,542	Chem Translator of 0.316 applied
Hexavalent Chromium	0	0		0	16	16.3	909	Chem Translator of 0.982 applied
Total Cobalt	0	0		0	95	95.0	5,301	
Total Copper	0	0		0	14.200	14.8	825	Chem Translator of 0.96 applied
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	68.823	88.0	4,908	Chem Translator of 0.782 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	1.400	1.65	91.9	Chem Translator of 0.85 applied
Total Nickel	0	0		0	491.981	493	27,507	Chem Translator of 0.998 applied
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	Chem Translator of 0.922 applied
Total Silver	0	0		0	3.557	4.18	234	Chem Translator of 0.85 applied
Total Thallium	0	0		0	65	65.0	3,627	
Total Zinc	0	0		0	123.132	126	7,025	Chem Translator of 0.978 applied
Acrolein	0	0		0	3	3.0	167	
Acrylamide	0	0		0	N/A	N/A	N/A	
Acrylonitrile	0	0		0	650	650	36,269	
Benzene	0	0		0	640	640	35,711	
Bromoform	0	0		0	1,800	1,800	100,437	
Carbon Tetrachloride	0	0		0	2,800	2,800	156,235	
Chlorobenzene	0	0		0	1,200	1,200	66,958	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	18,000	18,000	1,004,370	
Chloroform	0	0		0	1,900	1,900	106,017	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	15,000	15,000	836,975	
1,1-Dichloroethylene	0	0		0	7,500	7,500	418,487	
1,2-Dichloropropane	0	0		0	11,000	11,000	613,781	
1,3-Dichloropropylene	0	0		0	310	310	17,297	
Ethylbenzene	0	0		0	2,900	2,900	161,815	
Methyl Bromide	0	0		0	550	550	30,689	
Methyl Chloride	0	0		0	28,000	28,000	1,562,353	
Methylene Chloride	0	0		0	12,000	12,000	669,580	
1,1,2,2-Tetrachloroethane	0	0		0	1,000	1,000	55,798	
Tetrachloroethylene	0	0		0	700	700	39,059	
Toluene	0	0		0	1,700	1,700	94,857	
1,2-trans-Dichloroethylene	0	0		0	6,800	6,800	379,429	
1,1,1-Trichloroethane	0	0		0	3,000	3,000	167,395	
1,1,2-Trichloroethane	0	0		0	3,400	3,400	189,714	
Trichloroethylene	0	0		0	2,300	2,300	128,336	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	560	560	31,247	
2,4-Dichlorophenol	0	0		0	1,700	1,700	94,857	
2,4-Dimethylphenol	0	0		0	660	660	36,827	
4,6-Dinitro-o-Cresol	0	0		0	80	80.0	4,464	
2,4-Dinitrophenol	0	0		0	660	660	36,827	
2-Nitrophenol	0	0		0	8,000	8,000	446,387	
4-Nitrophenol	0	0		0	2,300	2,300	128,336	
p-Chloro-m-Cresol	0	0		0	160	160	8,928	
Pentachlorophenol	0	0		0	8.723	8.72	487	
Phenol	0	0		0	N/A	N/A	N/A	

2,4,6-Trichlorophenol	0	0		0	460	460	25,667	
Acenaphthene	0	0		0	83	83.0	4,631	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	300	300	16,739	
Benzo(a)Anthracene	0	0		0	0.5	0.5	27.9	
Benzo(a)Pyrene	0	0		0	N/A	N/A	N/A	
3,4-Benzofluoranthene	0	0		0	N/A	N/A	N/A	
Benzo(k)Fluoranthene	0	0		0	N/A	N/A	N/A	
Bis(2-Chloroethyl)Ether	0	0		0	30,000	30,000	1,673,949	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	4,500	4,500	251,092	
4-Bromophenyl Phenyl Ether	0	0		0	270	270	15,066	
Butyl Benzyl Phthalate	0	0		0	140	140	7,812	
2-Chloronaphthalene	0	0		0	N/A	N/A	N/A	
Chrysene	0	0		0	N/A	N/A	N/A	
Dibenzo(a,h)Anthrancene	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	820	820	45,755	
1,3-Dichlorobenzene	0	0		0	350	350	19,529	
1,4-Dichlorobenzene	0	0		0	730	730	40,733	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	4,000	4,000	223,193	
Dimethyl Phthalate	0	0		0	2,500	2,500	139,496	
Di-n-Butyl Phthalate	0	0		0	110	110	6,138	
2,4-Dinitrotoluene	0	0		0	1,600	1,600	89,277	
2,6-Dinitrotoluene	0	0		0	990	990	55,240	
1,2-Diphenylhydrazine	0	0		0	15	15.0	837	
Fluoranthene	0	0		0	200	200	11,160	
Fluorene	0	0		0	N/A	N/A	N/A	
Hexachlorobenzene	0	0		0	N/A	N/A	N/A	
Hexachlorobutadiene	0	0		0	10	10.0	558	
Hexachlorocyclopentadiene	0	0		0	5	5.0	279	
Hexachloroethane	0	0		0	60	60.0	3,348	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	10,000	10,000	557,983	
Naphthalene	0	0		0	140	140	7,812	
Nitrobenzene	0	0		0	4,000	4,000	223,193	
n-Nitrosodimethylamine	0	0		0	17,000	17,000	948,571	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	300	300	16,739	
Phenanthrene	0	0		0	5	5.0	279	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	130	130	7,254	
Aldrin	0	0		0	3	3.0	167	
alpha-BHC	0	0		0	N/A	N/A	N/A	
beta-BHC	0	0		0	N/A	N/A	N/A	
gamma-BHC	0	0		0	0.95	0.95	53.0	
Chlordane	0	0		0	2.4	2.4	134	
4,4-DDT	0	0		0	1.1	1.1	61.4	
4,4-DDE	0	0		0	1.1	1.1	61.4	
4,4-DDD	0	0		0	1.1	1.1	61.4	
Dieldrin	0	0		0	0.24	0.24	13.4	
alpha-Endosulfan	0	0		0	0.22	0.22	12.3	
beta-Endosulfan	0	0		0	0.22	0.22	12.3	
Endosulfan Sulfate	0	0		0	N/A	N/A	N/A	
Endrin	0	0		0	0.086	0.086	4.8	
Endrin Aldehyde	0	0		0	N/A	N/A	N/A	
Heptachlor	0	0		0	0.52	0.52	29.0	
Heptachlor Epoxide	0	0		0	0.5	0.5	27.9	
Toxaphene	0	0		0	0.73	0.73	40.7	
Total Vanadium	0	0		0	510	510	28,457	
Total Xylenes	0	0		0	1,100	1,100	61,378	
1,2,3-Trichloropropane	0	0		0	N/A	N/A	N/A	

☑ ***CFC*** CCT (min): ###### PMF: 1 Analysis Hardness (mg/l): 101.2 Analysis pH: 7.00

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Fluoride (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	220	220	61,384	
Total Arsenic	0	0		0	150	150	41,852	Chem Translator of 1 applied
Total Barium	0	0		0	4,100	4,100	1,143,967	
Total Boron	0	0		0	1,600	1,600	446,426	
Total Cadmium	0	0		0	0.248	0.27	76.2	Chem Translator of 0.909 applied
Total Chromium (III)	0	0		0	74.845	87.0	24,282	Chem Translator of 0.86 applied
Hexavalent Chromium	0	0		0	10	10.4	2,900	Chem Translator of 0.962 applied
Total Cobalt	0	0		0	19	19.0	5,301	
Total Copper	0	0		0	9.048	9.42	2,630	Chem Translator of 0.96 applied
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	1,500	1,500	418,524	WQC = 30 day average; PMF = 1
Total Lead	0	0		0	2.550	3.23	901	Chem Translator of 0.789 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	0.770	0.91	253	Chem Translator of 0.85 applied
Total Nickel	0	0		0	52.536	52.7	14,702	Chem Translator of 0.997 applied
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	4.600	4.99	1,392	Chem Translator of 0.922 applied
Total Silver	0	0		0	N/A	N/A	N/A	Chem Translator of 1 applied
Total Thallium	0	0		0	13	13.0	3,627	
Total Zinc	0	0		0	119.343	121	33,772	Chem Translator of 0.986 applied
Acrolein	0	0		0	3	3.0	837	
Acrylamide	0	0		0	N/A	N/A	N/A	

Acrylonitrile	0	0		0	130	130	36,272	
Benzene	0	0		0	130	130	36,272	
Bromoform	0	0		0	370	370	103,236	
Carbon Tetrachloride	0	0		0	560	560	156,249	
Chlorobenzene	0	0		0	240	240	66,964	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	3,500	3,500	976,557	
Chloroform	0	0		0	390	390	108,816	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	3,100	3,100	864,950	
1,1-Dichloroethylene	0	0		0	1,500	1,500	418,524	
1,2-Dichloropropane	0	0		0	2,200	2,200	613,836	
1,3-Dichloropropylene	0	0		0	61	61.0	17,020	
Ethylbenzene	0	0		0	580	580	161,829	
Methyl Bromide	0	0		0	110	110	30,692	
Methyl Chloride	0	0		0	5,500	5,500	1,534,590	
Methylene Chloride	0	0		0	2,400	2,400	669,639	
1,1,2,2-Tetrachloroethane	0	0		0	210	210	58,593	
Tetrachloroethylene	0	0		0	140	140	39,062	
Toluene	0	0		0	330	330	92,075	
1,2-trans-Dichloroethylene	0	0		0	1,400	1,400	390,623	
1,1,1-Trichloroethane	0	0		0	610	610	170,200	
1,1,2-Trichloroethane	0	0		0	680	680	189,731	
Trichloroethylene	0	0		0	450	450	125,557	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	110	110	30,692	
2,4-Dichlorophenol	0	0		0	340	340	94,866	
2,4-Dimethylphenol	0	0		0	130	130	36,272	
4,6-Dinitro-o-Cresol	0	0		0	16	16.0	4,464	
2,4-Dinitrophenol	0	0		0	130	130	36,272	
2-Nitrophenol	0	0		0	1,600	1,600	446,426	
4-Nitrophenol	0	0		0	470	470	131,138	
p-Chloro-m-Cresol	0	0		0	500	500	139,508	
Pentachlorophenol	0	0		0	6.693	6.69	1,867	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	91	91.0	25,390	
Acenaphthene	0	0		0	17	17.0	4,743	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	59	59.0	16,462	
Benzo(a)Anthracene	0	0		0	0.1	0.1	27.9	
Benzo(a)Pyrene	0	0		0	N/A	N/A	N/A	
3,4-Benzofluoranthene	0	0		0	N/A	N/A	N/A	
Benzo(k)Fluoranthene	0	0		0	N/A	N/A	N/A	
Bis(2-Chloroethyl)Ether	0	0		0	6,000	6,000	1,674,098	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	910	910	253,905	
4-Bromophenyl Phenyl Ether	0	0		0	54	54.0	15,067	
Butyl Benzyl Phthalate	0	0		0	35	35.0	9,766	
2-Chloronaphthalene	0	0		0	N/A	N/A	N/A	
Chrysene	0	0		0	N/A	N/A	N/A	
Dibenzo(a,h)Anthrancene	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	160	160	44,643	
1,3-Dichlorobenzene	0	0		0	69	69.0	19,252	
1,4-Dichlorobenzene	0	0		0	150	150	41,852	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	800	800	223,213	
Dimethyl Phthalate	0	0		0	500	500	139,508	
Di-n-Butyl Phthalate	0	0		0	21	21.0	5,859	
2,4-Dinitrotoluene	0	0		0	320	320	89,285	
2,6-Dinitrotoluene	0	0		0	200	200	55,803	
1,2-Diphenylhydrazine	0	0		0	3	3.0	837	
Fluoranthene	0	0		0	40	40.0	11,161	
Fluorene	0	0		0	N/A	N/A	N/A	
Hexachlorobenzene	0	0		0	N/A	N/A	N/A	
Hexachlorobutadiene	0	0		0	2	2.0	558	
Hexachlorocyclopentadiene	0	0		0	1	1.0	279	
Hexachloroethane	0	0		0	12	12.0	3,348	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	2,100	2,100	585,934	
Naphthalene	0	0		0	43	43.0	11,998	
Nitrobenzene	0	0		0	810	810	226,003	
n-Nitrosodimethylamine	0	0		0	3,400	3,400	948,655	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	59	59.0	16,462	
Phenanthrene	0	0		0	1	1.0	279	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	26	26.0	7,254	
Aldrin	0	0		0	0.1	0.1	27.9	
alpha-BHC	0	0		0	N/A	N/A	N/A	
beta-BHC	0	0		0	N/A	N/A	N/A	
gamma-BHC	0	0		0	N/A	N/A	N/A	
Chlordane	0	0		0	0.0043	0.004	1.2	
4,4-DDT	0	0		0	0.001	0.001	0.28	
4,4-DDE	0	0		0	0.001	0.001	0.28	
4,4-DDD	0	0		0	0.001	0.001	0.28	
Dieldrin	0	0		0	0.056	0.056	15.6	
alpha-Endosulfan	0	0		0	0.056	0.056	15.6	
beta-Endosulfan	0	0		0	0.056	0.056	15.6	
Endosulfan Sulfate	0	0		0	N/A	N/A	N/A	
Endrin	0	0		0	0.036	0.036	10.0	
Endrin Aldehyde	0	0		0	N/A	N/A	N/A	
Heptachlor	0	0		0	0.0038	0.004	1.06	

Heptachlor Epoxide	0	0		0	0.0038	0.004	1.06	
Toxaphene	0	0		0	0.0002	0.0002	0.056	
Total Vanadium	0	0		0	100	100.0	27,902	
Total Xylenes	0	0		0	210	210	58,593	
1,2,3-Trichloropropane	0	0		0	N/A	N/A	N/A	

☑ ***THH*** CCT (min): ###### PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	500,000	500,000	N/A	
Chloride (PWS)	0	0		0	250,000	250,000	N/A	
Sulfate (PWS)	0	0		0	250,000	250,000	N/A	
Fluoride (PWS)	0	0		0	2,000	2,000	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	5.6	5.6	1,562	
Total Arsenic	0	0		0	10	10.0	2,790	
Total Barium	0	0		0	2,400	2,400	669,639	
Total Boron	0	0		0	3,100	3,100	864,950	
Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	
Hexavalent Chromium	0	0		0	N/A	N/A	N/A	
Total Cobalt	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Dissolved Iron	0	0		0	300	300	83,705	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	1,000	1,000	279,016	
Total Mercury	0	0		0	0.050	0.05	14.0	
Total Nickel	0	0		0	610	610	170,200	
Total Phenols (Phenolics) (PWS)	0	0		0	5	5.0	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	
Total Silver	0	0		0	N/A	N/A	N/A	
Total Thallium	0	0		0	0.24	0.24	67.0	
Total Zinc	0	0		0	N/A	N/A	N/A	
Acrolein	0	0		0	3	3.0	837	
Acrylamide	0	0		0	N/A	N/A	N/A	
Acrylonitrile	0	0		0	N/A	N/A	N/A	
Benzene	0	0		0	N/A	N/A	N/A	
Bromoform	0	0		0	N/A	N/A	N/A	
Carbon Tetrachloride	0	0		0	N/A	N/A	N/A	
Chlorobenzene	0	0		0	100	100.0	27,902	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	N/A	N/A	N/A	
Chloroform	0	0		0	5.7	5.7	1,590	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	N/A	N/A	N/A	
1,1-Dichloroethylene	0	0		0	33	33.0	9,208	
1,2-Dichloropropane	0	0		0	N/A	N/A	N/A	
1,3-Dichloropropylene	0	0		0	N/A	N/A	N/A	
Ethylbenzene	0	0		0	68	68.0	18,973	
Methyl Bromide	0	0		0	100	100.0	27,902	
Methyl Chloride	0	0		0	N/A	N/A	N/A	
Methylene Chloride	0	0		0	N/A	N/A	N/A	
1,1,2,2-Tetrachloroethane	0	0		0	N/A	N/A	N/A	
Tetrachloroethylene	0	0		0	N/A	N/A	N/A	
Toluene	0	0		0	57	57.0	15,904	
1,2-trans-Dichloroethylene	0	0		0	100	100.0	27,902	
1,1,1-Trichloroethane	0	0		0	10,000	10,000	2,790,163	
1,1,2-Trichloroethane	0	0		0	N/A	N/A	N/A	
Trichloroethylene	0	0		0	N/A	N/A	N/A	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	30	30.0	8,370	
2,4-Dichlorophenol	0	0		0	10	10.0	2,790	
2,4-Dimethylphenol	0	0		0	100	100.0	27,902	
4,6-Dinitro-o-Cresol	0	0		0	2	2.0	558	
2,4-Dinitrophenol	0	0		0	10	10.0	2,790	
2-Nitrophenol	0	0		0	N/A	N/A	N/A	
4-Nitrophenol	0	0		0	N/A	N/A	N/A	
p-Chloro-m-Cresol	0	0		0	N/A	N/A	N/A	
Pentachlorophenol	0	0		0	N/A	N/A	N/A	
Phenol	0	0		0	4,000	4,000	1,116,065	
2,4,6-Trichlorophenol	0	0		0	N/A	N/A	N/A	
Acenaphthene	0	0		0	70	70.0	19,531	
Anthracene	0	0		0	300	300	83,705	
Benzidine	0	0		0	N/A	N/A	N/A	
Benzo(a)Anthracene	0	0		0	N/A	N/A	N/A	
Benzo(a)Pyrene	0	0		0	N/A	N/A	N/A	
3,4-Benzofluoranthene	0	0		0	N/A	N/A	N/A	
Benzo(k)Fluoranthene	0	0		0	N/A	N/A	N/A	
Bis(2-Chloroethyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Chloroisopropyl)Ether	0	0		0	200	200	55,803	
Bis(2-Ethylhexyl)Phthalate	0	0		0	N/A	N/A	N/A	
4-Bromophenyl Phenyl Ether	0	0		0	N/A	N/A	N/A	
Butyl Benzyl Phthalate	0	0		0	0.1	0.1	27.9	
2-Chloronaphthalene	0	0		0	800	800	223,213	
Chrysene	0	0		0	N/A	N/A	N/A	
Dibenzo(a,h)Anthrancene	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	1,000	1,000	279,016	
1,3-Dichlorobenzene	0	0		0	7	7.0	1,953	
1,4-Dichlorobenzene	0	0		0	300	300	83,705	

3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	600	600	167,410	
Dimethyl Phthalate	0	0		0	2,000	2,000	558,033	
Di-n-Butyl Phthalate	0	0		0	20	20.0	5,580	
2,4-Dinitrotoluene	0	0		0	N/A	N/A	N/A	
2,6-Dinitrotoluene	0	0		0	N/A	N/A	N/A	
1,2-Diphenylhydrazine	0	0		0	N/A	N/A	N/A	
Fluoranthene	0	0		0	20	20.0	5,580	
Fluorene	0	0		0	50	50.0	13,951	
Hexachlorobenzene	0	0		0	N/A	N/A	N/A	
Hexachlorobutadiene	0	0		0	N/A	N/A	N/A	
Hexachlorocyclopentadiene	0	0		0	4	4.0	1,116	
Hexachloroethane	0	0		0	N/A	N/A	N/A	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	34	34.0	9,487	
Naphthalene	0	0		0	N/A	N/A	N/A	
Nitrobenzene	0	0		0	10	10.0	2,790	
n-Nitrosodimethylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	N/A	N/A	N/A	
Phenanthrene	0	0		0	N/A	N/A	N/A	
Pyrene	0	0		0	20	20.0	5,580	
1,2,4-Trichlorobenzene	0	0		0	0.07	0.07	19.5	
Aldrin	0	0		0	N/A	N/A	N/A	
alpha-BHC	0	0		0	N/A	N/A	N/A	
beta-BHC	0	0		0	N/A	N/A	N/A	
gamma-BHC	0	0		0	4.2	4.2	1,172	
Chlordane	0	0		0	N/A	N/A	N/A	
4,4-DDT	0	0		0	N/A	N/A	N/A	
4,4-DDE	0	0		0	N/A	N/A	N/A	
4,4-DDD	0	0		0	N/A	N/A	N/A	
Dieldrin	0	0		0	N/A	N/A	N/A	
alpha-Endosulfan	0	0		0	20	20.0	5,580	
beta-Endosulfan	0	0		0	20	20.0	5,580	
Endosulfan Sulfate	0	0		0	20	20.0	5,580	
Endrin	0	0		0	0.03	0.03	8.37	
Endrin Aldehyde	0	0		0	1	1.0	279	
Heptachlor	0	0		0	N/A	N/A	N/A	
Heptachlor Epoxide	0	0		0	N/A	N/A	N/A	
Toxaphene	0	0		0	N/A	N/A	N/A	
Total Vanadium	0	0		0	N/A	N/A	N/A	
Total Xylenes	0	0		0	70,000	70,000	19,531,140	
1,2,3-Trichloropropane	0	0		0	210	210	58,593	

☑ ***CRL*** CCT (min): ###### PMF: 1 Analysis Hardness (mg/l): N/A Analysis pH: N/A

Pollutants	Stream Conc (µg/L)	Stream CV	Trib Conc (µg/L)	Fate Coef	WQC (µg/L)	WQ Obj (µg/L)	WLA (µg/L)	Comments
Total Dissolved Solids (PWS)	0	0		0	N/A	N/A	N/A	
Chloride (PWS)	0	0		0	N/A	N/A	N/A	
Sulfate (PWS)	0	0		0	N/A	N/A	N/A	
Fluoride (PWS)	0	0		0	N/A	N/A	N/A	
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	N/A	N/A	N/A	
Total Arsenic	0	0		0	N/A	N/A	N/A	
Total Barium	0	0		0	N/A	N/A	N/A	
Total Boron	0	0		0	N/A	N/A	N/A	
Total Cadmium	0	0		0	N/A	N/A	N/A	
Total Chromium (III)	0	0		0	N/A	N/A	N/A	
Hexavalent Chromium	0	0		0	N/A	N/A	N/A	
Total Cobalt	0	0		0	N/A	N/A	N/A	
Total Copper	0	0		0	N/A	N/A	N/A	
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	N/A	N/A	N/A	
Total Lead	0	0		0	N/A	N/A	N/A	
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	N/A	N/A	N/A	
Total Nickel	0	0		0	N/A	N/A	N/A	
Total Phenols (Phenolics) (PWS)	0	0		0	N/A	N/A	N/A	
Total Selenium	0	0		0	N/A	N/A	N/A	
Total Silver	0	0		0	N/A	N/A	N/A	
Total Thallium	0	0		0	N/A	N/A	N/A	
Total Zinc	0	0		0	N/A	N/A	N/A	
Acrolein	0	0		0	N/A	N/A	N/A	
Acrylamide	0	0		0	0.07	0.07	95.0	
Acrylonitrile	0	0		0	0.06	0.06	81.4	
Benzene	0	0		0	0.58	0.58	787	
Bromoform	0	0		0	7	7.0	9,496	
Carbon Tetrachloride	0	0		0	0.4	0.4	543	
Chlorobenzene	0	0		0	N/A	N/A	N/A	
Chlorodibromomethane	0	0		0	0.8	0.8	1,085	
2-Chloroethyl Vinyl Ether	0	0		0	N/A	N/A	N/A	
Chloroform	0	0		0	N/A	N/A	N/A	
Dichlorobromomethane	0	0		0	0.95	0.95	1,289	
1,2-Dichloroethane	0	0		0	9.9	9.9	13,430	
1,1-Dichloroethylene	0	0		0	N/A	N/A	N/A	
1,2-Dichloropropane	0	0		0	0.9	0.9	1,221	
1,3-Dichloropropylene	0	0		0	0.27	0.27	366	
Ethylbenzene	0	0		0	N/A	N/A	N/A	
Methyl Bromide	0	0		0	N/A	N/A	N/A	
Methyl Chloride	0	0		0	N/A	N/A	N/A	

Methylene Chloride	0	0		0	20	20.0	27,132	
1,1,2,2-Tetrachloroethane	0	0		0	0.2	0.2	271	
Tetrachloroethylene	0	0		0	10	10.0	13,566	
Toluene	0	0		0	N/A	N/A	N/A	
1,2-trans-Dichloroethylene	0	0		0	N/A	N/A	N/A	
1,1,1-Trichloroethane	0	0		0	N/A	N/A	N/A	
1,1,2-Trichloroethane	0	0		0	0.55	0.55	746	
Trichloroethylene	0	0		0	0.6	0.6	814	
Vinyl Chloride	0	0		0	0.02	0.02	27.1	
2-Chlorophenol	0	0		0	N/A	N/A	N/A	
2,4-Dichlorophenol	0	0		0	N/A	N/A	N/A	
2,4-Dimethylphenol	0	0		0	N/A	N/A	N/A	
4,6-Dinitro-o-Cresol	0	0		0	N/A	N/A	N/A	
2,4-Dinitrophenol	0	0		0	N/A	N/A	N/A	
2-Nitrophenol	0	0		0	N/A	N/A	N/A	
4-Nitrophenol	0	0		0	N/A	N/A	N/A	
p-Chloro-m-Cresol	0	0		0	N/A	N/A	N/A	
Pentachlorophenol	0	0		0	0.030	0.03	40.7	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	1.5	1.5	2,035	
Acenaphthene	0	0		0	N/A	N/A	N/A	
Anthracene	0	0		0	N/A	N/A	N/A	
Benzidine	0	0		0	0.0001	0.0001	0.14	
Benzo(a)Anthracene	0	0		0	0.001	0.001	1.36	
Benzo(a)Pyrene	0	0		0	0.0001	0.0001	0.14	
3,4-Benzofluoranthene	0	0		0	0.001	0.001	1.36	
Benzo(k)Fluoranthene	0	0		0	0.01	0.01	13.6	
Bis(2-Chloroethyl)Ether	0	0		0	0.03	0.03	40.7	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	0.32	0.32	434	
4-Bromophenyl Phenyl Ether	0	0		0	N/A	N/A	N/A	
Butyl Benzyl Phthalate	0	0		0	N/A	N/A	N/A	
2-Chloronaphthalene	0	0		0	N/A	N/A	N/A	
Chrysene	0	0		0	0.12	0.12	163	
Dibenzo(a,h)Anthrancene	0	0		0	0.0001	0.0001	0.14	
1,2-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
1,3-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
1,4-Dichlorobenzene	0	0		0	N/A	N/A	N/A	
3,3-Dichlorobenzidine	0	0		0	0.05	0.05	67.8	
Diethyl Phthalate	0	0		0	N/A	N/A	N/A	
Dimethyl Phthalate	0	0		0	N/A	N/A	N/A	
Di-n-Butyl Phthalate	0	0		0	N/A	N/A	N/A	
2,4-Dinitrotoluene	0	0		0	0.05	0.05	67.8	
2,6-Dinitrotoluene	0	0		0	0.05	0.05	67.8	
1,2-Diphenylhydrazine	0	0		0	0.03	0.03	40.7	
Fluoranthene	0	0		0	N/A	N/A	N/A	
Fluorene	0	0		0	N/A	N/A	N/A	
Hexachlorobenzene	0	0		0	0.00008	0.00008	0.11	
Hexachlorobutadiene	0	0		0	0.01	0.01	13.6	
Hexachlorocyclopentadiene	0	0		0	N/A	N/A	N/A	
Hexachloroethane	0	0		0	0.1	0.1	136	
Indeno(1,2,3-cd)Pyrene	0	0		0	0.001	0.001	1.36	
Isophorone	0	0		0	N/A	N/A	N/A	
Naphthalene	0	0		0	N/A	N/A	N/A	
Nitrobenzene	0	0		0	N/A	N/A	N/A	
n-Nitrosodimethylamine	0	0		0	0.0007	0.0007	0.95	
n-Nitrosodi-n-Propylamine	0	0		0	0.005	0.005	6.78	
n-Nitrosodiphenylamine	0	0		0	3.3	3.3	4,477	
Phenanthrene	0	0		0	N/A	N/A	N/A	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	N/A	N/A	N/A	
Aldrin	0	0		0	0.0000008	8.00E-07	0.001	
alpha-BHC	0	0		0	0.0004	0.0004	0.54	
beta-BHC	0	0		0	0.008	0.008	10.9	
gamma-BHC	0	0		0	N/A	N/A	N/A	
Chlordane	0	0		0	0.0003	0.0003	0.41	
4,4-DDT	0	0		0	0.00003	0.00003	0.041	
4,4-DDE	0	0		0	0.00002	0.00002	0.027	
4,4-DDD	0	0		0	0.0001	0.0001	0.14	
Dieldrin	0	0		0	0.000001	0.000001	0.001	
alpha-Endosulfan	0	0		0	N/A	N/A	N/A	
beta-Endosulfan	0	0		0	N/A	N/A	N/A	
Endosulfan Sulfate	0	0		0	N/A	N/A	N/A	
Endrin	0	0		0	N/A	N/A	N/A	
Endrin Aldehyde	0	0		0	N/A	N/A	N/A	
Heptachlor	0	0		0	0.000006	0.000006	0.008	
Heptachlor Epoxide	0	0		0	0.00003	0.00003	0.041	
Toxaphene	0	0		0	0.0007	0.0007	0.95	
Total Vanadium	0	0		0	N/A	N/A	N/A	
Total Xylenes	0	0		0	N/A	N/A	N/A	
1,2,3-Trichloropropane	0	0		0	N/A	N/A	N/A	

☑ ***Recommended WQBELs & Monitoring Requirements***

No. Samples/Month: 4

	Mass Limits		*Concentration Limits*						
Pollutants	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units	Governing WQBEL	WQBEL Basis	Comments
Total Mercury	0.008	0.012	0.014	0.022	0.035	mg/L	0.014	THH	Discharge Conc ≥ 50% WQBEL (RP)
Acrylamide	0.052	0.081	0.095	0.15	0.24	mg/L	0.095	CRL	Discharge Conc ≥ 50% WQBEL (RP)

Butyl Benzyl Phthalate	Report	Report	Report	Report	Report	µg/L	27.9	THH	Discharge Conc > 25% WQBEL (no RP)

☑ ***Other Pollutants without Limits or Monitoring***

The following pollutants do not require effluent limits or monitoring based on water quality because reasonable potential to exceed water quality criteria was not determined and the discharge concentration was less than thresholds for monitoring, or the pollutant was not detected and a sufficiently sensitive analytical method was used (e.g., <= Target QL).

Pollutants	Governing WQBEL	Units	Comments
Total Dissolved Solids (PWS)	N/A	N/A	PWS Not Applicable
Chloride (PWS)	N/A	N/A	PWS Not Applicable
Bromide	N/A	N/A	No WQS
Sulfate (PWS)	N/A	N/A	PWS Not Applicable
Fluoride (PWS)	N/A	N/A	PWS Not Applicable
Total Aluminum	26.8	mg/L	Discharge Conc ≤ 10% WQBEL
Total Antimony	1,562	µg/L	Discharge Conc ≤ 10% WQBEL
Total Arsenic	2.79	mg/L	Discharge Conc ≤ 10% WQBEL
Total Barium	670	mg/L	Discharge Conc ≤ 10% WQBEL
Total Beryllium	N/A	N/A	No WQS
Total Boron	290	mg/L	Discharge Conc ≤ 10% WQBEL
Total Cadmium	76.2	µg/L	Discharge Conc < TQL
Total Chromium (III)	24,282	µg/L	Discharge Conc ≤ 10% WQBEL
Hexavalent Chromium	0.58	mg/L	Discharge Conc ≤ 10% WQBEL
Total Cobalt	3.4	mg/L	Discharge Conc ≤ 10% WQBEL
Total Copper	529	µg/L	Discharge Conc ≤ 10% WQBEL
Total Cyanide	N/A	N/A	No WQS
Dissolved Iron	83,705	µg/L	Discharge Conc ≤ 10% WQBEL
Total Iron	419	mg/L	Discharge Conc ≤ 10% WQBEL
Total Lead	901	µg/L	Discharge Conc ≤ 10% WQBEL
Total Manganese	279	mg/L	Discharge Conc ≤ 10% WQBEL
Total Nickel	14.7	mg/L	Discharge Conc ≤ 10% WQBEL
Total Phenols (Phenolics) (PWS)		µg/L	PWS Not Applicable
Total Selenium	1.39	mg/L	Discharge Conc ≤ 10% WQBEL
Total Silver	0.15	mg/L	Discharge Conc ≤ 10% WQBEL
Total Thallium	67.0	µg/L	Discharge Conc < TQL
Total Zinc	4.5	mg/L	Discharge Conc ≤ 10% WQBEL
Total Molybdenum	N/A	N/A	No WQS
Acrolein	107	µg/L	Discharge Conc < TQL
Acrylonitrile	81.4	µg/L	Discharge Conc < TQL
Benzene	787	µg/L	Discharge Conc < TQL
Bromoform	9,496	µg/L	Discharge Conc < TQL
Carbon Tetrachloride	543	µg/L	Discharge Conc < TQL
Chlorobenzene	27,902	µg/L	Discharge Conc < TQL
Chlorodibromomethane	1,085	µg/L	Discharge Conc < TQL
Chloroethane	N/A	N/A	No WQS
2-Chloroethyl Vinyl Ether	643,760	µg/L	Discharge Conc < TQL
Chloroform	1,590	µg/L	Discharge Conc < TQL
Dichlorobromomethane	1,289	µg/L	Discharge Conc < TQL
1,1-Dichloroethane	N/A	N/A	No WQS
1,2-Dichloroethane	13,430	µg/L	Discharge Conc < TQL
1,1-Dichloroethylene	9,208	µg/L	Discharge Conc < TQL
1,2-Dichloropropane	1,221	µg/L	Discharge Conc < TQL
1,3-Dichloropropylene	366	µg/L	Discharge Conc < TQL
1,4-Dioxane	N/A	N/A	No WQS
Ethylbenzene	18,973	µg/L	Discharge Conc < TQL
Methyl Bromide	19,670	µg/L	Discharge Conc ≤ 25% WQBEL
Methyl Chloride	1,001,405	µg/L	Discharge Conc ≤ 25% WQBEL
Methylene Chloride	27,132	µg/L	Discharge Conc < TQL
1,1,2,2-Tetrachloroethane	271	µg/L	Discharge Conc < TQL
Tetrachloroethylene	13,566	µg/L	Discharge Conc < TQL
Toluene	15,904	µg/L	Discharge Conc < TQL
1,2-trans-Dichloroethylene	27,902	µg/L	Discharge Conc ≤ 25% WQBEL
1,1,1-Trichloroethane	107,293	µg/L	Discharge Conc < TQL
1,1,2-Trichloroethane	746	µg/L	Discharge Conc < TQL
Trichloroethylene	814	µg/L	Discharge Conc < TQL
Vinyl Chloride	27.1	µg/L	Discharge Conc < TQL
2-Chlorophenol	8,370	µg/L	Discharge Conc < TQL
2,4-Dichlorophenol	2,790	µg/L	Discharge Conc < TQL
2,4-Dimethylphenol	23,605	µg/L	Discharge Conc < TQL
4,6-Dinitro-o-Cresol	558	µg/L	Discharge Conc < TQL
2,4-Dinitrophenol	2,790	µg/L	Discharge Conc < TQL
2-Nitrophenol	286,116	µg/L	Discharge Conc < TQL
4-Nitrophenol	82,258	µg/L	Discharge Conc < TQL
p-Chloro-m-Cresol	5,722	µg/L	Discharge Conc < TQL
Pentachlorophenol	40.7	µg/L	Discharge Conc ≤ 25% WQBEL
Phenol	1,116	mg/L	Discharge Conc ≤ 25% WQBEL

2,4,6-Trichlorophenol	2,035	µg/L	Discharge Conc < TQL
Acenaphthene	2,968	µg/L	Discharge Conc < TQL
Acenaphthylene	N/A	N/A	No WQS
Anthracene	83,705	µg/L	Discharge Conc < TQL
Benzidine	0.14	µg/L	Discharge Conc < TQL
Benzo(a)Anthracene	1.36	µg/L	Discharge Conc < TQL
Benzo(a)Pyrene	0.14	µg/L	Discharge Conc < TQL
3,4-Benzofluoranthene	1.36	µg/L	Discharge Conc < TQL
Benzo(ghi)Perylene	N/A	N/A	No WQS
Benzo(k)Fluoranthene	13.6	µg/L	Discharge Conc < TQL
Bis(2-Chloroethoxy)Methane	N/A	N/A	No WQS
Bis(2-Chloroethyl)Ether	40.7	µg/L	Discharge Conc < TQL
Bis(2-Chloroisopropyl)Ether	55,803	µg/L	Discharge Conc < TQL
Bis(2-Ethylhexyl)Phthalate	434	µg/L	Discharge Conc ≤ 25% WQBEL
4-Bromophenyl Phenyl Ether	9,656	µg/L	Discharge Conc < TQL
2-Chloronaphthalene	223,213	µg/L	Discharge Conc ≤ 25% WQBEL
4-Chlorophenyl Phenyl Ether	N/A	N/A	No WQS
Chrysene	163	µg/L	Discharge Conc < TQL
Dibenzo(a,h)Anthrancene	0.14	µg/L	Discharge Conc < TQL
1,2-Dichlorobenzene	29,327	µg/L	Discharge Conc < TQL
1,3-Dichlorobenzene	1,953	µg/L	Discharge Conc < TQL
1,4-Dichlorobenzene	26,108	µg/L	Discharge Conc < TQL
3,3-Dichlorobenzidine	67.8	µg/L	Discharge Conc < TQL
Diethyl Phthalate	143,058	µg/L	Discharge Conc ≤ 25% WQBEL
Dimethyl Phthalate	89,411	µg/L	Discharge Conc < TQL
Di-n-Butyl Phthalate	3,934	µg/L	Discharge Conc < TQL
2,4-Dinitrotoluene	67.8	µg/L	Discharge Conc < TQL
2,6-Dinitrotoluene	67.8	µg/L	Discharge Conc < TQL
Di-n-Octyl Phthalate	N/A	N/A	No WQS
1,2-Diphenylhydrazine	40.7	µg/L	Discharge Conc ≤ 25% WQBEL
Fluoranthene	5,580	µg/L	Discharge Conc < TQL
Fluorene	13,951	µg/L	Discharge Conc < TQL
Hexachlorobenzene	0.11	µg/L	Discharge Conc < TQL
Hexachlorobutadiene	13.6	µg/L	Discharge Conc < TQL
Hexachlorocyclopentadiene	179	µg/L	Discharge Conc < TQL
Hexachloroethane	136	µg/L	Discharge Conc < TQL
Indeno(1,2,3-cd)Pyrene	1.36	µg/L	Discharge Conc < TQL
Isophorone	9,487	µg/L	Discharge Conc ≤ 25% WQBEL
Naphthalene	5,007	µg/L	Discharge Conc < TQL
Nitrobenzene	2,790	µg/L	Discharge Conc < TQL
n-Nitrosodimethylamine	0.95	µg/L	Discharge Conc < TQL
n-Nitrosodi-n-Propylamine	6.78	µg/L	Discharge Conc < TQL
n-Nitrosodiphenylamine	4,477	µg/L	Discharge Conc < TQL
Phenanthrene	179	µg/L	Discharge Conc < TQL
Pyrene	5,580	µg/L	Discharge Conc < TQL
1,2,4-Trichlorobenzene	19.5	µg/L	Discharge Conc < TQL
Aldrin	0.001	µg/L	Discharge Conc < TQL
alpha-BHC	0.54	µg/L	Discharge Conc < TQL
beta-BHC	10.9	µg/L	Discharge Conc < TQL
gamma-BHC	34.0	µg/L	Discharge Conc < TQL
delta BHC	N/A	N/A	No WQS
Chlordane	0.41	µg/L	Discharge Conc < TQL
4,4-DDT	0.041	µg/L	Discharge Conc < TQL
4,4-DDE	0.027	µg/L	Discharge Conc < TQL
4,4-DDD	0.14	µg/L	Discharge Conc < TQL
Dieldrin	0.001	µg/L	Discharge Conc < TQL
alpha-Endosulfan	7.87	µg/L	Discharge Conc < TQL
beta-Endosulfan	7.87	µg/L	Discharge Conc < TQL
Endosulfan Sulfate	5,580	µg/L	Discharge Conc < TQL
Endrin	3.08	µg/L	Discharge Conc < TQL
Endrin Aldehyde	279	µg/L	Discharge Conc < TQL
Heptachlor	0.008	µg/L	Discharge Conc < TQL
Heptachlor Epoxide	0.041	µg/L	Discharge Conc < TQL
PCB-1016	N/A	N/A	No WQS
PCB-1221	N/A	N/A	No WQS
PCB-1232	N/A	N/A	No WQS
PCB-1242	N/A	N/A	No WQS
PCB-1248	N/A	N/A	No WQS
PCB-1254	N/A	N/A	No WQS
PCB-1260	N/A	N/A	No WQS
Toxaphene	0.056	µg/L	Discharge Conc < TQL
Total Vanadium	18.2	mg/L	Discharge Conc ≤ 10% WQBEL
Total Xylenes	39,341	µg/L	Discharge Conc < TQL
1,2,3-Trichloropropane	58.6	mg/L	Discharge Conc ≤ 25% WQBEL
Dibromomethane	N/A	N/A	No WQS

Attachment C:

TRC Evaluation – Outfall 001

TRC_CALC_SPREADSHEET_Southern Alleghenies Landfill

TRC EVALUATION

28.3	**= Q stream (cfs)**	**0.5**	**= CV Daily**
0.0658	**= Q discharge (MGD)**	**0.5**	**= CV Hourly**
30	**= no. samples**	**0.197**	**= AFC_Partial Mix Factor**
0.3	**= Chlorine Demand of Stream**	**1**	**= CFC_Partial Mix Factor**
0	**= Chlorine Demand of Discharge**	**15**	**= AFC_Criteria Compliance Time (min)**
0.5	**= BAT/BPJ Value**	**720**	**= CFC_Criteria Compliance Time (min)**
	= % Factor of Safety (FOS)		**=Decay Coefficient (K)**

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	**1.3.2.iii**	WLA afc = 17.490	**1.3.2.iii**	WLA cfc = 86.474
PENTOXSD TRG	**5.1a**	LTAMULT afc = 0.373	**5.1c**	LTAMULT cfc = 0.581
PENTOXSD TRG	**5.1b**	LTA_afc= 6.517	**5.1d**	LTA_cfc = 50.272

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500	BAT/BPJ
		INST MAX LIMIT (mg/l) = 1.635	

WLA afc	**(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))...** **...+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)**
LTAMULT afc	EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)
LTA_afc	wla_afc*LTAMULT_afc
WLA_cfc	**(.011/e(-k*CFC_tc) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))...** **...+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)**
LTAMULT_cfc	EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)
LTA_cfc	wla_cfc*LTAMULT_cfc
AML MULT	EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1))
AVG MON LIMIT	MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT)
INST MAX LIMIT	**1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc)**

Attachment D:

WQM 7.0 Evaluation – Outfall 001

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
18E	45084	STONYCREEK RIVER	**12.130**	1376.00	350.00	0.00100	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.081	28.30	0.00	0.000	0.000	0.0	0.00	0.00	25.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
SALF	PA0093866	0.0658	0.0000	0.0000	0.000	20.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	15.00	2.00	0.00	1.50
Dissolved Oxygen	5.00	8.24	0.00	0.00
NH3-N	4.90	0.00	0.00	0.70

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
18E	45084	STONYCREEK RIVER	**11.730**	1364.00	350.50	0.00100	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.081	28.30	0.00	0.000	0.000	0.0	0.00	0.00	25.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
SALF	PA0093866	0.0000	0.0000	0.0000	0.000	20.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	15.00	2.00	0.00	1.50
Dissolved Oxygen	3.00	8.24	0.00	0.00
NH3-N	4.90	0.00	0.00	0.70

WQM 7.0 Hydrodynamic Outputs

SWP Basin	Stream Code	Stream Name
18E	45084	STONYCREEK RIVER

RMI	Stream Flow (cfs)	PWS With (cfs)	Net Stream Flow (cfs)	Disc Analysis Flow (cfs)	Reach Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Reach Trav Time (days)	Analysis Temp (°C)	Analysis pH
Q7-10 Flow												
12.130	28.30	0.00	28.30	.1018	0.00100	.947	90.9	96.03	0.33	0.074	24.98	7.00
Q1-10 Flow												
12.130	18.11	0.00	18.11	.1018	0.00100	NA	NA	NA	0.26	0.095	24.97	7.00
Q30-10 Flow												
12.130	38.49	0.00	38.49	.1018	0.00100	NA	NA	NA	0.39	0.062	24.99	7.00

WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	☑
WLA Method	EMPR	Use Inputted W/D Ratio	☐
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	☐
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	☑
D.O. Saturation	90.00%	Use Balanced Technology	☑
D.O. Goal	6		

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
18E	45084	STONYCREEK RIVER

NH3-N Acute Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
12.130	SALF	11.1	9.8	11.1	9.8	0	0

NH3-N Chronic Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
12.130	SALF	1.37	4.9	1.37	4.9	0	0

Dissolved Oxygen Allocations

RMI	Discharge Name	CBOD5		NH3-N		Dissolved Oxygen		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
12.13	SALF	15	15	4.9	4.9	5	5	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
18E	45084	STONYCREEK RIVER

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
12.130	0.066	24.982	7.000
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
90.904	0.947	96.028	0.330
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
2.05	0.037	0.02	1.027
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
8.231	1.733	Tsivoglou	6
Reach Travel Time (days)			
0.074			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.007	2.05	0.02	7.54
0.015	2.05	0.02	7.54
0.022	2.04	0.02	7.54
0.030	2.04	0.02	7.54
0.037	2.04	0.02	7.54
0.044	2.04	0.02	7.54
0.052	2.04	0.02	7.54
0.059	2.04	0.02	7.54
0.067	2.04	0.02	7.54
0.074	2.04	0.02	7.54

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
18E	45084	STONYCREEK RIVER

RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
12.130	SALF	PA0093866	0.066	CBOD5	15		
				NH3-N	4.9	9.8	
				Dissolved Oxygen			5

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
18E	45084	STONYCREEK RIVER	**12.130**	1376.00	350.00	0.00100	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.081	28.30	0.00	0.000	0.000	0.0	0.00	0.00	5.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
SALF	PA0093866	0.0658	0.0000	0.0000	0.000	15.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	15.00	2.00	0.00	1.50
Dissolved Oxygen	5.00	8.24	0.00	0.00
NH3-N	4.90	0.00	0.00	0.70

Input Data WQM 7.0

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
18E	45084	STONYCREEK RIVER	**11.730**	1364.00	350.50	0.00100	0.00	☑

Stream Data

Design Cond.	LFY (cfsm)	Trib Flow (cfs)	Stream Flow (cfs)	Rch Trav Time (days)	Rch Velocity (fps)	WD Ratio	Rch Width (ft)	Rch Depth (ft)	Tributary Temp (°C)	Tributary pH	Stream Temp (°C)	Stream pH
Q7-10	0.081	28.30	0.00	0.000	0.000	0.0	0.00	0.00	5.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
SALF	PA0093866	0.0000	0.0000	0.0000	0.000	15.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	15.00	2.00	0.00	1.50
Dissolved Oxygen	3.00	8.24	0.00	0.00
NH3-N	4.90	0.00	0.00	0.70

WQM 7.0 Hydrodynamic Outputs

SWP Basin	Stream Code	Stream Name
18E	45084	STONYCREEK RIVER

RMI	Stream Flow (cfs)	PWS With (cfs)	Net Stream Flow (cfs)	Disc Analysis Flow (cfs)	Reach Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Reach Trav Time (days)	Analysis Temp (°C)	Analysis pH
Q7-10 Flow												
12.130	28.30	0.00	28.30	.1018	0.00100	.947	90.9	96.03	0.33	0.074	5.04	7.00
Q1-10 Flow												
12.130	18.11	0.00	18.11	.1018	0.00100	NA	NA	NA	0.26	0.095	5.06	7.00
Q30-10 Flow												
12.130	38.49	0.00	38.49	.1018	0.00100	NA	NA	NA	0.39	0.062	5.03	7.00

WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	☑
WLA Method	EMPR	Use Inputted W/D Ratio	☐
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	☐
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	☑
D.O. Saturation	90.00%	Use Balanced Technology	☑
D.O. Goal	6		

WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
18E	45084	STONYCREEK RIVER

NH3-N Acute Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
12.130	SALF	24.1	9.8	24.1	9.8	0	0

NH3-N Chronic Allocations

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
12.130	SALF	4.36	4.9	4.36	4.9	0	0

Dissolved Oxygen Allocations

RMI	Discharge Name	CBOD5		NH3-N		Dissolved Oxygen		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
12.13	SALF	15	15	4.9	4.9	5	5	0	0

WQM 7.0 D.O.Simulation

SWP Basin	Stream Code	Stream Name
18E	45084	STONYCREEK RIVER

RMI	Total Discharge Flow (mgd)	Analysis Temperature (°C)	Analysis pH
12.130	0.066	5.036	7.000
Reach Width (ft)	**Reach Depth (ft)**	**Reach WDRatio**	**Reach Velocity (fps)**
90.904	0.947	96.028	0.330
Reach CBOD5 (mg/L)	**Reach Kc (1/days)**	**Reach NH3-N (mg/L)**	**Reach Kn (1/days)**
2.05	0.038	0.02	0.221
Reach DO (mg/L)	**Reach Kr (1/days)**	**Kr Equation**	**Reach DO Goal (mg/L)**
8.231	1.080	Tsivoglou	6
Reach Travel Time (days)			
0.074			

Subreach Results

TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)
0.007	2.05	0.02	8.24
0.015	2.05	0.02	8.24
0.022	2.05	0.02	8.24
0.030	2.05	0.02	8.24
0.037	2.05	0.02	8.24
0.044	2.04	0.02	8.24
0.052	2.04	0.02	8.24
0.059	2.04	0.02	8.24
0.067	2.04	0.02	8.24
0.074	2.04	0.02	8.24

WQM 7.0 Effluent Limits

SWP Basin	Stream Code	Stream Name
18E	45084	STONYCREEK RIVER

RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
12.130	SALF	PA0093866	0.066	CBOD5	15		
				NH3-N	4.9	9.8	
				Dissolved Oxygen			5

Attachment E:

Total Cyanide & Total Mercury – Outfall 001

MONITORING START DATE	MONITORING END DATE	REPORT FREQUENCY	DMR VERSION	REPORT STATUS	DMR VERSION 1 LATE IND	OUTFALL	DISCHARGE	MONITORING LOCATION	PARAMETER	CONC UNITS		CONC 2 VALUE	CONC 2 LIMIT	CONC 2 SBC		CONC 3 VALUE	CONC 3 LIMIT	CONC 3 SBC	SAMPLE FREQUENCY	SAMPLE TYPE
05/01/2020	05/31/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
06/01/2020	06/30/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
07/01/2020	07/31/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0003	0.0009	Average Monthly		0.0004	0.0018	Daily Maximum	2/month	24-Hr Composite
08/01/2020	08/31/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
09/01/2020	09/30/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
10/01/2020	10/31/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
11/01/2020	11/30/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
12/01/2020	12/31/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0073	0.0009	Average Monthly		0.0143	0.0018	Daily Maximum	2/month	24-Hr Composite
01/01/2021	01/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0008	0.0009	Average Monthly		0.0024	0.0018	Daily Maximum	4/month	24-Hr Composite
02/01/2021	02/28/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	1/month	24-Hr Composite
03/01/2021	03/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.00025	0.0009	Average Monthly		0.0003	0.0018	Daily Maximum	2/month	24-Hr Composite
04/01/2021	04/30/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L		0.00245	0.0009	Average Monthly		0.0037	0.0018	Daily Maximum	2/month	24-Hr Composite
05/01/2021	05/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
06/01/2021	06/30/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
07/01/2021	07/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0004	0.0009	Average Monthly		0.0006	0.0018	Daily Maximum	2/month	24-Hr Composite
08/01/2021	08/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
09/01/2021	09/30/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
10/01/2021	10/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
11/01/2021	11/30/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
12/01/2021	12/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L		7.301	0.0009	Average Monthly		14.2	0.0018	Daily Maximum	2/month	24-Hr Composite
01/01/2022	01/31/2022	Monthly	1	Submitted	Yes	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
02/01/2022	02/28/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0576	0.0009	Average Monthly		0.115	0.0018	Daily Maximum	2/month	24-Hr Composite
03/01/2022	03/31/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.00035	0.0009	Average Monthly		0.0005	0.0018	Daily Maximum	2/month	24-Hr Composite
04/01/2022	04/30/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0004	0.0009	Average Monthly		0.0006	0.0018	Daily Maximum	2/month	24-Hr Composite
05/01/2022	05/31/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	1/month	24-Hr Composite
06/01/2022	06/30/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
07/01/2022	07/31/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
08/01/2022	08/31/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
09/01/2022	09/30/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
10/01/2022	10/31/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
11/01/2022	11/30/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
12/01/2022	12/31/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
01/01/2023	01/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite

02/01/2023	02/28/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
03/01/2023	03/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
04/01/2023	04/30/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
05/01/2023	05/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
06/01/2023	06/30/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
07/01/2023	07/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
08/01/2023	08/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
09/01/2023	09/30/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
10/01/2023	10/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
11/01/2023	11/30/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
12/01/2023	12/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
01/01/2024	01/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
02/01/2024	02/29/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly		0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
03/01/2024	03/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.00035	0.0009	Average Monthly		0.0005	0.0018	Daily Maximum	2/month	24-Hr Composite
04/01/2024	04/30/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.00125	0.0009	Average Monthly		0.0023	0.0018	Daily Maximum	2/month	24-Hr Composite
05/01/2024	05/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L		0.00045	0.0009	Average Monthly		0.0006	0.0018	Daily Maximum	2/month	24-Hr Composite
06/01/2024	06/30/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.00155	0.0009	Average Monthly		0.0029	0.0018	Daily Maximum	2/month	24-Hr Composite
07/01/2024	07/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L		0.0011	0.0009	Average Monthly		0.0012	0.0018	Daily Maximum	2/month	24-Hr Composite
08/01/2024	08/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L		0.0005	0.0009	Average Monthly		0.0007	0.0018	Daily Maximum	2/month	24-Hr Composite
09/01/2024	09/30/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.00025	0.0009	Average Monthly		0.0003	0.0018	Daily Maximum	2/month	24-Hr Composite
10/01/2024	10/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.00085	0.0009	Average Monthly		0.0015	0.0018	Daily Maximum	2/month	24-Hr Composite
11/01/2024	11/30/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L		0.0008	0.0009	Average Monthly		0.0008	0.0018	Daily Maximum	2/month	24-Hr Composite
12/01/2024	12/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.00025	0.0009	Average Monthly		0.0003	0.0018	Daily Maximum	2/month	24-Hr Composite
01/01/2025	01/31/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.00035	0.0009	Average Monthly		0.0005	0.0018	Daily Maximum	2/month	24-Hr Composite
02/01/2025	02/28/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0002	0.0009	Average Monthly	<	0.0002	0.0018	Daily Maximum	2/month	24-Hr Composite
03/01/2025	03/31/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L		0.0011	0.0009	Average Monthly		0.0018	0.0018	Daily Maximum	2/month	24-Hr Composite
04/01/2025	04/30/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0001	0.0009	Average Monthly		0.0011	0.0018	Daily Maximum	2/month	24-Hr Composite
05/01/2025	05/31/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0008	0.0009	Average Monthly		0.0014	0.0018	Daily Maximum	2/month	24-Hr Composite
06/01/2025	06/30/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L		0.00125	0.0009	Average Monthly		0.0016	0.0018	Daily Maximum	2/month	24-Hr Composite
07/01/2025	07/31/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0015	0.0009	Average Monthly		0.0028	0.0018	Daily Maximum	2/month	24-Hr Composite
08/01/2025	08/31/2025	Monthly	1	In Progress	No	001	Yes	Final Effluent	Mercury, Total	mg/L	<	0.0003	0.0009	Average Monthly		0.0004	0.0018	Daily Maximum	2/month	24-Hr Composite

MONITORING START DATE	MONITORING END DATE	REPORT FREQUENCY	DMR VERSION	REPORT STATUS	DMR VERSION 1 LATE IND	OUTFALL	DISCHARGE	MONITORING LOCATION	PARAMETER	CONC UNITS		CONC 2 VALUE	CONC 2 LIMIT	CONC 2 SBC		CONC 3 VALUE	CONC 3 LIMIT	CONC 3 SBC	SAMPLE FREQUENCY	SAMPLE TYPE
05/01/2020	05/31/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
06/01/2020	06/30/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly		0.076	0.04	Daily Maximum	2/month	24-Hr Composite
07/01/2020	07/31/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
08/01/2020	08/31/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
09/01/2020	09/30/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
10/01/2020	10/31/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
11/01/2020	11/30/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
12/01/2020	12/31/2020	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.028	0.02	Average Monthly		0.059	0.04	Daily Maximum	5/month	24-Hr Composite
01/01/2021	01/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
02/01/2021	02/28/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.0197	0.02	Average Monthly		0.0197	0.04	Daily Maximum	1/month	24-Hr Composite
03/01/2021	03/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.0065	0.02	Average Monthly		0.008	0.04	Daily Maximum	2/month	24-Hr Composite
04/01/2021	04/30/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.0085	0.02	Average Monthly		0.012	0.04	Daily Maximum	2/month	24-Hr Composite
05/01/2021	05/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.009	0.02	Average Monthly		0.01	0.04	Daily Maximum	2/month	24-Hr Composite
06/01/2021	06/30/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.015	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
07/01/2021	07/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.0065	0.02	Average Monthly		0.007	0.04	Daily Maximum	2/month	24-Hr Composite
08/01/2021	08/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.009	0.02	Average Monthly	<	0.01	0.04	Daily Maximum	2/month	24-Hr Composite
09/01/2021	09/30/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.0065	0.02	Average Monthly		0.008	0.04	Daily Maximum	2/month	24-Hr Composite
10/01/2021	10/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.01	0.02	Average Monthly		0.01	0.04	Daily Maximum	2/month	24-Hr Composite
11/01/2021	11/30/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.0207	0.02	Average Monthly		0.025	0.04	Daily Maximum	2/month	24-Hr Composite
12/01/2021	12/31/2021	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.1045	0.02	Average Monthly		0.2	0.04	Daily Maximum	2/month	24-Hr Composite
01/01/2022	01/31/2022	Monthly	1	Submitted	Yes	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.0165	0.02	Average Monthly		0.017	0.04	Daily Maximum	2/month	24-Hr Composite
02/01/2022	02/28/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.02	0.02	Average Monthly		0.024	0.04	Daily Maximum	2/month	24-Hr Composite

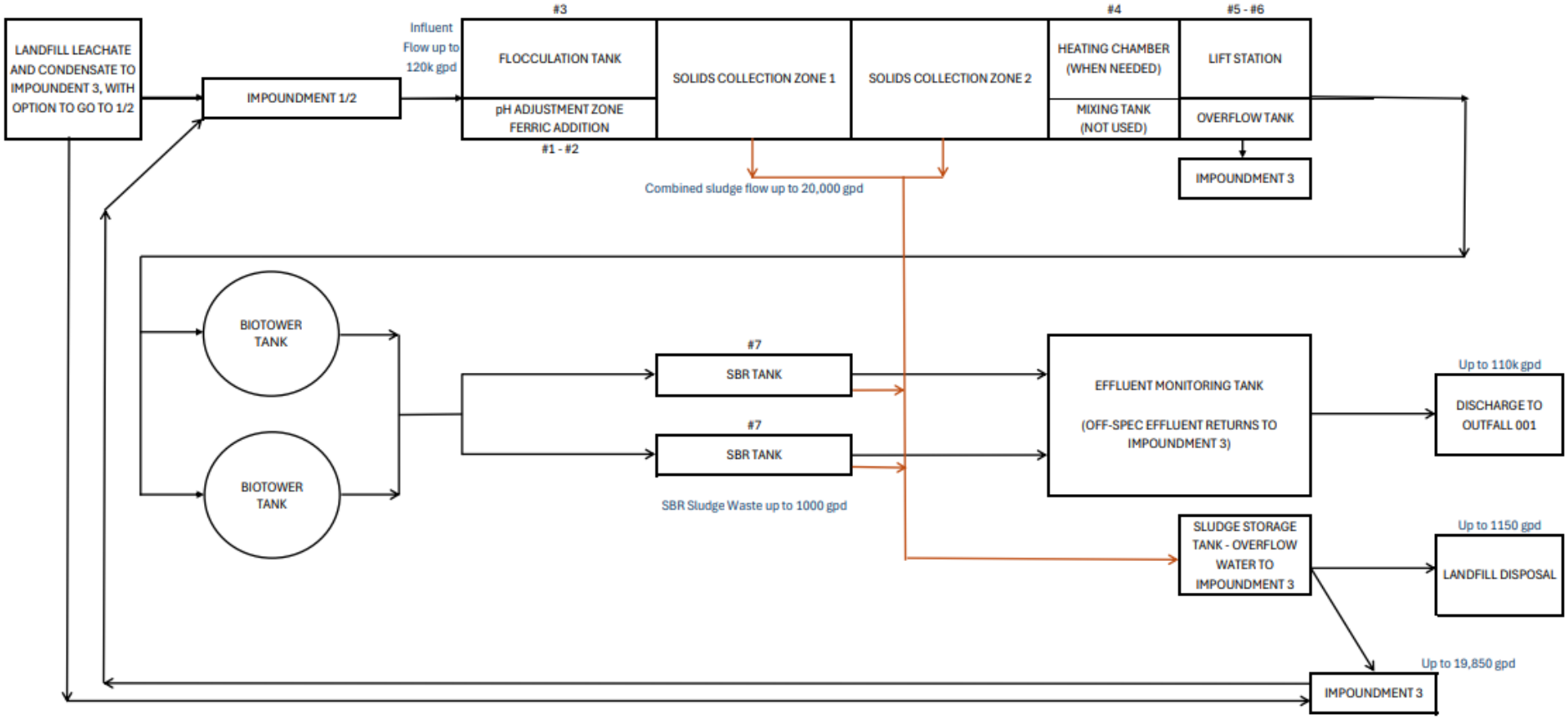
03/01/2022	03/31/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.019	0.02	Average Monthly		0.021	0.04	Daily Maximum	2/month	24-Hr Composite
04/01/2022	04/30/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.032	0.02	Average Monthly		0.036	0.04	Daily Maximum	2/month	24-Hr Composite
05/01/2022	05/31/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.04	0.02	Average Monthly		0.04	0.04	Daily Maximum	1/month	24-Hr Composite
06/01/2022	06/30/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.02	0.02	Average Monthly	<	0.023	0.04	Daily Maximum	2/month	24-Hr Composite
07/01/2022	07/31/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.03	0.02	Average Monthly		0.04	0.04	Daily Maximum	2/month	24-Hr Composite
08/01/2022	08/31/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.03	0.02	Average Monthly		0.04	0.04	Daily Maximum	2/month	24-Hr Composite
09/01/2022	09/30/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.04	0.02	Average Monthly		0.05	0.04	Daily Maximum	3/month	24-Hr Composite
10/01/2022	10/31/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.05	0.02	Average Monthly		0.05	0.04	Daily Maximum	2/month	24-Hr Composite
11/01/2022	11/30/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.03	0.02	Average Monthly		0.05	0.04	Daily Maximum	2/month	24-Hr Composite
12/01/2022	12/31/2022	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.03	0.02	Average Monthly		0.038	0.04	Daily Maximum	2/month	24-Hr Composite
01/01/2023	01/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.02	0.02	Average Monthly		0.02	0.04	Daily Maximum	2/month	24-Hr Composite
02/01/2023	02/28/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
03/01/2023	03/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
04/01/2023	04/30/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.02	0.02	Average Monthly		0.02	0.04	Daily Maximum	2/month	24-Hr Composite
05/01/2023	05/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.02	0.02	Average Monthly		0.023	0.04	Daily Maximum	2/month	24-Hr Composite
06/01/2023	06/30/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
07/01/2023	07/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.025	0.02	Average Monthly		0.026	0.04	Daily Maximum	2/month	24-Hr Composite
08/01/2023	08/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.03	0.02	Average Monthly		0.04	0.04	Daily Maximum	2/month	24-Hr Composite
09/01/2023	09/30/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
10/01/2023	10/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.036	0.02	Average Monthly		0.036	0.04	Daily Maximum	2/month	24-Hr Composite
11/01/2023	11/30/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.11	0.02	Average Monthly		0.19	0.04	Daily Maximum	2/month	24-Hr Composite
12/01/2023	12/31/2023	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.055	0.02	Average Monthly		0.11	0.04	Daily Maximum	2/month	24-Hr Composite
01/01/2024	01/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.015	0.02	Average Monthly		0.02	0.04	Daily Maximum	2/month	24-Hr Composite

02/01/2024	02/29/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
03/01/2024	03/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
04/01/2024	04/30/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.061	0.02	Average Monthly		0.082	0.04	Daily Maximum	2/month	24-Hr Composite
05/01/2024	05/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.084	0.02	Average Monthly		0.087	0.04	Daily Maximum	2/month	24-Hr Composite
06/01/2024	06/30/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
07/01/2024	07/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.015	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
08/01/2024	08/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.015	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
09/01/2024	09/30/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.015	0.02	Average Monthly		0.02	0.04	Daily Maximum	2/month	24-Hr Composite
10/01/2024	10/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.015	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
11/01/2024	11/30/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.061	0.02	Average Monthly	<	0.1	0.04	Daily Maximum	2/month	24-Hr Composite
12/01/2024	12/31/2024	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
01/01/2025	01/31/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.015	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
02/01/2025	02/28/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
03/01/2025	03/31/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
04/01/2025	04/30/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.015	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
05/01/2025	05/31/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L		0.02	0.02	Average Monthly		0.03	0.04	Daily Maximum	2/month	24-Hr Composite
06/01/2025	06/30/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.02	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
07/01/2025	07/31/2025	Monthly	1	Submitted	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.015	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite
08/01/2025	08/31/2025	Monthly	1	In Progress	No	001	Yes	Final Effluent	Cyanide, Total	mg/L	<	0.015	0.02	Average Monthly	<	0.02	0.04	Daily Maximum	2/month	24-Hr Composite

Attachment F:

Line Diagram

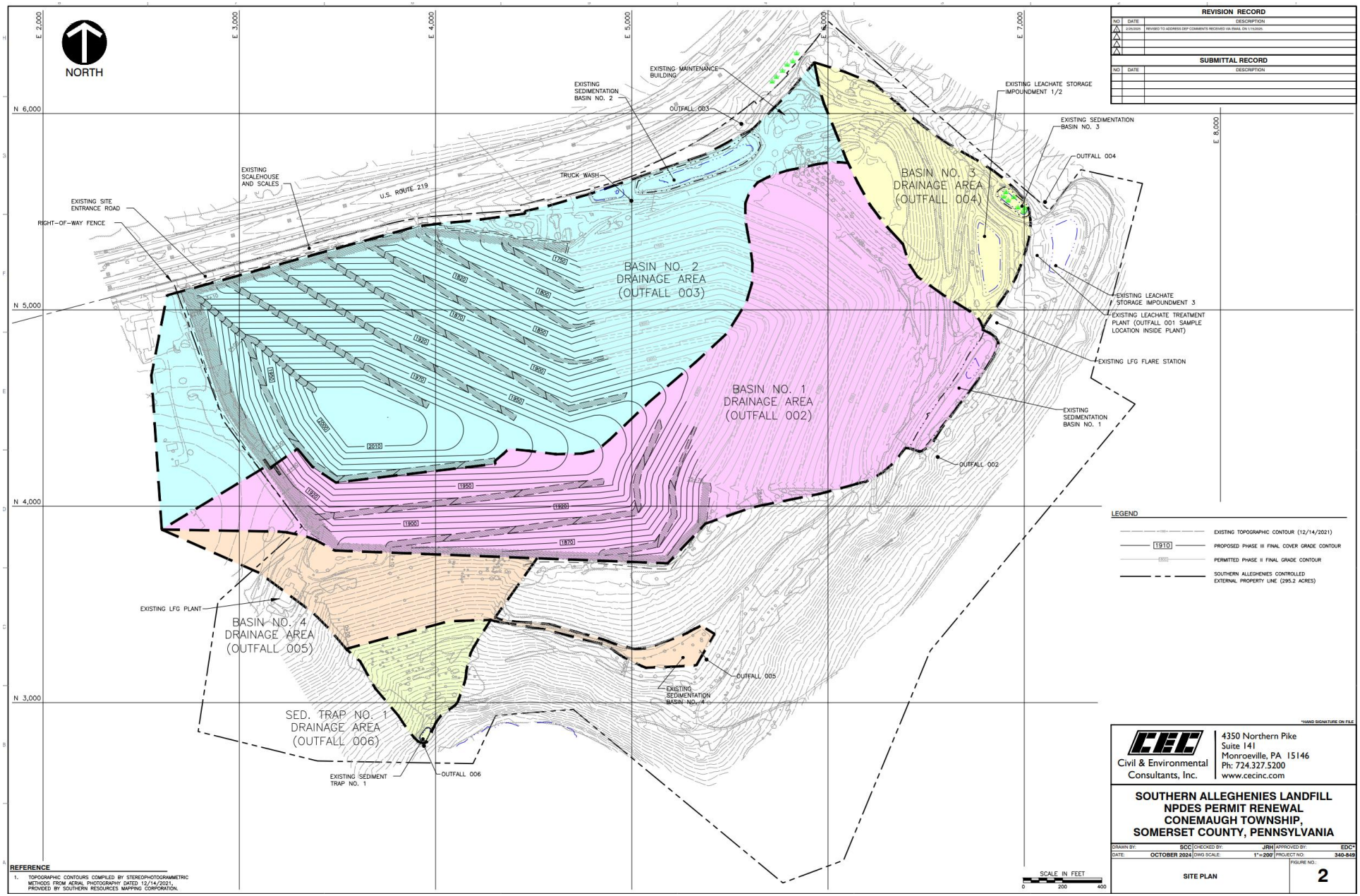
SOUTHERN ALLEGHENIES LANDFILL
NPDES RENEWAL APPLICATION
WASTEWATER TREATMENT PLANT
LINE DRAWING



Addition	Description	Flow (up to)
#1	Ferrous Sulfate	10 gph
#2	Caustic Soda	10 gph
#3	Flocculant Polymer	10 gph
#4	Scale Control	10 gph
#5	Phosphoric Acid	250 ml per day
#6	Soda Ash	250 lb/day
#7	Flocculant Polymer	30 gph

Attachment G:

Site Map


NORTH
E 2,000
E 3,000
E 4,000
E 5,000
E 6,000
E 7,000
E 8,000
N 6,000
N 5,000
N 4,000
N 3,000
REVISION RECORD
NO DATE DESCRIPTION
2/25/2025 REVISED TO ADDRESS DEP COMMENTS RECEIVED VIA EMAIL ON 1/15/2025.
SUBMITTAL RECORD
NO DATE DESCRIPTION
EXISTING MAINTENANCE BUILDING
EXISTING SEDIMENTATION BASIN NO. 2
OUTFALL 003
EXISTING LEACHATE STORAGE IMPOUNDMENT 1/2
EXISTING SEDIMENTATION BASIN NO. 3
OUTFALL 004
EXISTING SCALEHOUSE AND SCALES
TRUCK WASH
U.S. ROUTE 219
EXISTING SITE ENTRANCE ROAD
RIGHT-OF-WAY FENCE
BASIN NO. 3 DRAINAGE AREA (OUTFALL 004)
BASIN NO. 2 DRAINAGE AREA (OUTFALL 003)
EXISTING LEACHATE STORAGE IMPOUNDMENT 3
EXISTING LEACHATE TREATMENT PLANT (OUTFALL 001 SAMPLE LOCATION INSIDE PLANT)
EXISTING LFG FLARE STATION
BASIN NO. 1 DRAINAGE AREA (OUTFALL 002)
EXISTING SEDIMENTATION BASIN NO. 1
OUTFALL 002
EXISTING LFG PLANT
BASIN NO. 4 DRAINAGE AREA (OUTFALL 005)
OUTFALL 005
EXISTING SEDIMENTATION BASIN NO. 4
SED. TRAP NO. 1 DRAINAGE AREA (OUTFALL 006)
EXISTING SEDIMENT TRAP NO. 1
OUTFALL 006
LEGEND
EXISTING TOPOGRAPHIC CONTOUR (12/14/2021)
1910 PROPOSED PHASE III FINAL COVER GRADE CONTOUR
PERMITTED PHASE II FINAL GRADE CONTOUR
SOUTHERN ALLEGHENIES CONTROLLED EXTERNAL PROPERTY LINE (295.2 ACRES)
SCALE IN FEET
0 200 400
REFERENCE
1. TOPOGRAPHIC CONTOURS COMPILED BY STEREOPHOTOGRAMMETRIC METHODS FROM AERIAL PHOTOGRAPHY DATED 12/14/2021, PROVIDED BY SOUTHERN RESOURCES MAPPING CORPORATION.
*HAND SIGNATURE ON FILE
Civil & Environmental Consultants, Inc.
4350 Northern Pike
Suite 141
Monroeville, PA 15146
Ph: 724.327.5200
www.cecinc.com
SOUTHERN ALLEGHENIES LANDFILL
NPDES PERMIT RENEWAL
CONEMAUGH TOWNSHIP,
SOMERSET COUNTY, PENNSYLVANIA
DRAWN BY: SCC CHECKED BY: JRH APPROVED BY: EDC*
DATE: OCTOBER 2024 DWG SCALE: 1"=200' PROJECT NO: 340-849
SITE PLAN
FIGURE NO.: 2