

Application Type Renewal
Facility Type Municipal
Major / Minor Major

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0026841
APS ID 1126939
Authorization ID 1508667

Applicant and Facility Information

Applicant Name	<u>The Borough of Oakmont</u>	Facility Name	<u>Oakmont Borough WWTP</u>
Applicant Address	<u>767 5th Street</u> <u>Oakmont, PA 15139-9998</u>	Facility Address	<u>3 Ann Street</u> <u>Oakmont, PA 15139-9998</u>
Applicant Contact	<u>Scot Fodi</u>	Facility Contact	<u>Joseph E. Rakowski</u>
Applicant Phone	<u>(412) 828-3232</u>	Facility Phone	<u>(412) 551-3607</u>
Client ID	<u>89962</u>	Site ID	<u>252599</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Oakmont Borough</u>
Connection Status	<u>No Limitations</u>	County	<u>Allegheny</u>
Date Application Received	<u>December 2, 2024</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u></u>	If No, Reason	<u>Major Facility</u>
Purpose of Application	<u>Application for a renewal of an NPDES permit for discharge of treated Sewage</u>		

Summary of Review

Introduction

The Borough owns, operates, and maintains the Oakmont Borough WWTP and sewer system. The NPDES permit was last issued on May 26, 2020, and expired on May 31, 2025.

Facility Overview

WQM Permit No. 9662S was issued on July 6, 1960, and later amended (1 through 7), authorized the construction of a WWTP and sewer collection system. The WWTP has an annual average design flow of 1.63 MGD. The hydraulic capacity (for Chapter 94 determinations) and organic design capacity of the WWTP are 4.08 MGD and 2,040 lbs/day. The Peak Instantaneous Flow of the WWTP is 6.0 MGD.

Sewage entering the plant is mechanically screened and de-gritted. Under wet weather conditions, excess flow is pumped to the flow equalization tanks and drained as the incoming flow decreases. Sewage normally flows to the activated sludge aeration tanks for biological treatment. Following aeration, the mixed liquor flows to the final clarifiers where return sludge is pumped back to the aeration basin and excess activated sludge is pumped to the sludge thickener prior to aerobic digestion.

The existing WWTP utilizes sodium hypochlorite for disinfection purposes. WQM Permit Amendment No. 9662S A-7 authorized UV disinfection to replace the existing chlorine/de-chlorination disinfection process, which will be abandoned in place. The Borough indicates that the UV system will be online in March 2027. Interim TRC limits will be replaced by Final UV transmittance monitoring beginning on the 13th month from the permit effective date.

Approve	Deny	Signatures	Date
X		 William C. Mitchell, E.I. / Project Manager	March 10, 2026
X		 Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineering Manager	March 10, 2026

Summary of Review

The facility currently discharges treated sewage through Outfall 001 to the Allegheny River, which is currently classified as a WWF, located in State Watershed No. 18-A.

Stormwater Outfalls 004, 005, and 006 will again be permitted for the discharge of uncontaminated stormwater runoff from the areas in and around the treatment plant. Part C.IV., Requirements Applicable to Stormwater Outfalls, has been added to the permit.

The application states that there are NO industrial users connected to the sewer system.

The application identifies active Sanitary Sewer Overflows (SSOs) at the WWTP EQ tank, Washington Avenue PS, and Plum Creek PS during periods of substantial wet weather. Once construction activities are completed (WQM Permit Amendment No. 9662S A-7) the peak capacity of the WWTP will increase to 6.0 MGD, which will minimize these bypass events.

Summary of Changes Since Last Permit Issuance

- *E. Coli* monitoring added
- Total Mercury monitoring removed
- Quarterly PFOA, PFOS, PFBS, and HFPO-DA monitoring added

Sludge use and disposal description and location(s): Waste activated sludge (WAS) is continuously co-thickened with the aerobic digester sludge to maximize sludge stabilization (i.e., pathogen and vector reduction). Once stabilized, the sludge solids are dewatered utilizing a centrifuge and the dewatered sludge is disposed of at Greenridge Reclamation Landfill.

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)	1.63
Latitude	40° 31' 19.97"	Longitude	-79° 50' 51.99"
Quad Name	New Kensington West	Quad Code	1407
Wastewater Description: Sewage Effluent			
Receiving Waters	Allegheny River (WWF)	Stream Code	42122
NHD Com ID	123972840	RMI	12.85
Drainage Area	11,585	Yield (cfs/mi ²)	0.206
Q ₇₋₁₀ Flow (cfs)	2,390	Q ₇₋₁₀ Basis	US Army Corp of Engineers
Elevation (ft)	721.0	Slope (ft/ft)	0.001
Watershed No.	18-A	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use	NONE	Exceptions to Criteria	NONE
Assessment Status	Impaired		
Cause(s) of Impairment	CHLORDANE, POLYCHLORINATED BIPHENYLS (PCBS), ORGANICS		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	FINAL	Name	Allegheny River
Background/Ambient Data		Data Source	
pH (SU)	7		25 § 93.7
Temperature (°F)			
Hardness (mg/L)	100		25 § 93.8c
Other:			
Nearest Downstream Public Water Supply Intake		Wilkinsburg-Penn Joint Water Authority (Pumping capacity: 66 MGD)	
PWS Waters	Allegheny River	Flow at Intake (cfs)	2,390
PWS RMI	8.78	Distance from Outfall (mi)	4.07

Changes Since Last Permit Issuance: NONE

Other Comments: Allegheny River TMDL

The STP discharges directly to the Allegheny River which has an EPA Approved TMDL and is impaired by PCBs and Chlordane. No WLAs have been developed for this sewage discharge as neither PCB nor Chlordane is typically found in sewage but instead found in legacy sediments. No additional monitoring requirements for these pollutants will be placed on this facility at this time.

Treatment Facility Summary				
Treatment Facility Name: Oakmont Borough - WWTP				
WQM Permit No.		Issuance Date		
9662S		07/06/1960		
9662S A-1 through A-7		Varius Dates		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Conventional Activated Sludge	Existing TRC is being Replaced by UV	1.63
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
4.08	2040	Not Overloaded	Aerobic Digester/Centrifuge	Lanfill

Changes Since Last Permit Issuance: WQM Permit Amendment No. 9662S A-7 was issued in November 2024 authorizing multiple improvements to the WWTP. Please refer to the Internal Review for further details.

Other Comments: N/A

Compliance History

Operations Compliance Check Summary Report

Facility: Oakmont Borough STP

NPDES Permit No.: PA0026841

Compliance Review Period: 12/16/2020-12/16/2025

Inspection Summary:

INSP ID	INSP CATEGORY	INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC	INSPECTOR ID	INSPECTOR	INSPECTION COMMENT	CREATION DATE	UPDATE DATE	# OF VIOLATIONS
3590034	PF	07/19/2023	Compliance Evaluation	County Health Dept	No Violations Noted	90003780	SPECHT, DUSTIE		07/28/2023		0
3388817	PF	05/25/2022	Compliance Evaluation	County Health Dept	Violation(s) Noted	90003780	SPECHT, DUSTIE		05/27/2022	06/21/2022	1
4031532	PF	08/08/2025	Compliance Evaluation	County Health Dept	Violation(s) Noted	90018526	TODARO, PETER		08/08/2025	08/08/2025	1
4019935	PF	06/16/2025	Chapter 94 Inspection	PA Dept of Environmental Protection	Administratively Closed	00833634	LUCAS, AUSTIN		07/23/2025		0
3816402	PF	08/14/2024	Compliance Evaluation	County Health Dept	Violation(s) Noted	90018526	TODARO, PETER		08/20/2024	09/16/2024	2
3197284	PF	05/28/2021	Compliance Evaluation	County Health Dept	No Violations Noted	90003780	SPECHT, DUSTIE		05/28/2021	05/28/2021	0

Violation Summary:

VIOL ID	VIOLATION DATE	VIOLATION TYPE	VIOLATION TYPE DESC	VIOL CODE ID	VIOL PROGRAM	RESOLVED DATE	INSP ID	INSP CATEGORY	INSPECTED DATE	INSP TYPE	INSPECTOR	VIOLATION COMMENT
957011	05/25/2022	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP	08/10/2022	3369617	PF	05/25/2022	Compliance Evaluation	SPECHT, DUSTIE	
8198429	08/14/2024	92A.41(A)10B	NPDES - Failure to utilize approved analytical methods	17282	WPCNP	09/09/2024	3816402	PF	08/14/2024	Compliance Evaluation	TODARO, PETER	
8198430	08/14/2024	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP	09/09/2024	3816402	PF	08/14/2024	Compliance Evaluation	TODARO, PETER	
8244076	08/08/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP		4031532	PF	08/08/2025	Compliance Evaluation	TODARO, PETER	plum creek ps

Open Violations by Client ID:

INSP PROGRAM	PROGRAM SPECIFIC ID	INSP ID	VIOLATION ID	INSPECTION CATEGORY	VIOLATION DATE	VIOLATION CODE	VIOLATION	PF INSPECTOR
WPC NPDES	PA0026841	4031532	8244076	PF	08/06/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	TODARO,PETER

Enforcement Summary:

ENF ID	ENF TYPE	ENF TYPE DESC	ENF CREATION DATE	EXECUTED DATE	INITIATED DATE	VIOL CODE ID	VIOL PROGRAM NAME	VIOLATIONS	# OF VIOLATIONS	PENALTY AMOUNT	AMOUNT RECEIVED	TOTAL AMOUNT DUE	ENF FINAL STATUS	ENF CLOSED DATE
404744	NOV	Notice of Violation	08/21/2022	08/10/2022		17320	WPCWP	CSL201	1				Comply/Closed	08/10/2022
433269	NOV	Notice of Violation	09/16/2024	09/09/2024		17282	WPCNP	92A.41(A)10B; CSL201	2				Administrative Close Out	09/09/2024
433269	NOV	Notice of Violation	09/16/2024	09/09/2024		17320	WPCWP	92A.41(A)10B; CSL201	2				Administrative Close Out	09/09/2024

Effluent Violation Summary:

NON_COMPLIANCE_DATE	NON_COMPL_TYPE_DESC	NON_COMPL_CATEGORY_DESC	PARAMETER	SAMPLE_VALUE	VIOLATION_CONDITION	PERMIT_VALUE	UNIT_OF_MEASUR
8/25/2021	Violation of permit condition	Effluent	Fecal Coliform	> 15	>	200	No./100 ml
8/25/2021	Violation of permit condition	Effluent	Fecal Coliform	> 2420	>	1000	No./100 ml
9/11/2021	Violation of permit condition	Effluent	Fecal Coliform	2420	>	1000	No./100 ml

Unauthorized Discharges:

1 Non-Compliance Incident	N	9/2/2021	Other	Other Violations
1 Non-Compliance Incident	N	9/2/2021		Unauthorized Discharges
1 Monthly	N	3/22/2022		Unauthorized Discharges
1 Monthly	N	6/26/2022		Unauthorized Discharges
1 Non-Compliance Incident	N	5/5/2023		Unauthorized Discharges
1 Monthly	N	10/25/2023	Sample collection less frequent than required	Other Violations
1 Non-Compliance Incident	N	4/24/2024		Unauthorized Discharges
1 Monthly	N	7/24/2024		Unauthorized Discharges
1 Non-Compliance Incident	N	7/17/2025		Unauthorized Discharges

Compliance Status: Facility is in general compliance

Completed by: Howard Dunn

Completed date: 12/16/2025

Compliance History

DMR Data for Outfall 001 (from February 1, 2025 to January 31, 2026)

Parameter	JAN-26	DEC-25	NOV-25	OCT-25	SEP-25	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25
Flow (MGD) Average Monthly	0.978	0.975	0.975	0.93	0.947	0.95	1.45	1.6	1.6	1.5	0.73	1.13
Flow (MGD) Daily Maximum	1.308	1.859	1.859	1.893	1.565	1.1	2.7	2.6	4.2	3.2	1.0	2.7
pH (S.U.) Instantaneous Minimum	6.7	6.6	6.7	6.7	6.7	6.8	6.8	6.8	6.7	6.9	7.1	7.0
pH (S.U.) Instantaneous Maximum	6.9	7.2	6.9	6.9	6.9	6.9	6.9	6.9	7.2	7.2	7.4	7.4
DO (mg/L) Daily Minimum	6.43	4.01	4.01	4.01	4.02	4.1	4.0	4.51	4.67	4.05	4.1	5.34
TRC (mg/L) Average Monthly	0.05	0.35	0.12	0.24	0.31	0.27	0.16	0.15	0.28	0.41	0.50	0.46
TRC (mg/L) Instantaneous Maximum	0.9	0.75	0.5	0.99	0.67	0.83	0.91	0.64	0.56	1.06	0.67	0.91
CBOD5 (lbs/day) Average Monthly	43	< 41	< 30	< 29	< 28	< 30	< 39	< 40	< 56	< 52	38	< 34
CBOD5 (lbs/day) Weekly Average	51	49	45	< 35	< 41	40	< 59	< 49	64	64	55	61
CBOD5 (mg/L) Average Monthly	5	< 5	< 3	< 4	< 4	< 4.0	< 3.0	< 3.0	< 4.0	< 5	6.0	< 4.0
CBOD5 (mg/L) Weekly Average	6	5	4	< 4	< 4	5.0	< 4.0	3.0	< 4.0	9	9.0	5.0
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	1270	1312	1222	1189	1113	1491	1221	1270	1514	1254	757	742
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	1738	1731	1597	2325	1837	1827	2223	1851	2364	2156	937	1261
BOD5 (mg/L) Raw Sewage Influent Average Monthly	156.4	146	146	150	141.6	185	109.6	101	113	121.8	123	83.8
TSS (lbs/day) Average Monthly	< 43	29	< 31	< 26	< 29	< 33	< 57	< 46	< 60	< 44	< 32	< 35

**NPDES Permit Fact Sheet
Oakmont Borough WWTP**

NPDES Permit No. PA0026841

TSS (lbs/day) Raw Sewage Influent Average Monthly	830	1045	1066	975	953	1053	1074	1089	1629	1053	568	528
TSS (lbs/day) Raw Sewage Influent Daily Maximum	1463	2171	1422	1606	2147	1339	2072	1776	3816	1798	829	851
TSS (lbs/day) Weekly Average	< 63	38	42	< 30	< 38	< 44	121	< 55	109	58	< 38	< 43
TSS (mg/L) Raw Sewage Influent Average Monthly	103	115	130	125	118	130	96	88	112	103	94	71
TSS (mg/L) Average Monthly	< 5	< 3	< 4	< 3	< 4	< 4.0	< 4.0	< 4.0	< 4.0	< 4	< 5.0	< 4.0
TSS (mg/L) Weekly Average	< 8	< 4	4	< 5	< 6	< 6.0	6.0	< 5.0	7.0	8	< 6.0	5.0
Fecal Coliform (No./100 ml) Geometric Mean	< 7	< 35	194	< 27	< 9	< 18	< 12	< 16	< 11	8	30	13
Fecal Coliform (No./100 ml) Instantaneous Maximum	411	2420	2420	1987	436	< 817	161	727	489	22	436	42
Total Nitrogen (mg/L) Daily Maximum		5.99			2.65			45.6			8.64	
Ammonia (lbs/day) Average Monthly	102	39	29	35	19	15	31	61	92	9.63	90	75
Ammonia (mg/L) Average Monthly	12.66	4.3	3.64	4.47	2.32	1.89	1.86	4.89	6.47	100	14.52	9.37
Total Phosphorus (mg/L) Daily Maximum		1.43			0.27			0.95			0.54	
Total Mercury (ug/L) Average Monthly	< 0.2	< 0.0002	< 0.0002	< 0.2	< 0.2000	< 0.2000	< 0.2000	< 0.2000	< 0.2000	< 0.2000	< 0.0002	< 0.1
Total Mercury (ug/L) Daily Maximum	< 0.2	< 0.0002	< 0.0002	< 0.2	< 0.2000	< 0.2000	< 0.2000	< 0.2000	< 0.2000	< 0.2000	< 0.0002	0.1

Development of Effluent Limitations

Outfall No. <u>001</u>	Design Flow (MGD) <u>1.63</u>
Latitude <u>40° 31' 19.97"</u>	Longitude <u>-79° 50' 51.99 "</u>
Wastewater Description: <u>Sewage Effluent</u>	

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
CBOD ₅	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

Comments: The discharge was evaluated using WQM 7.0 Version 1.1 (Attachment 2) & TRC_CALC (Attachment 4) to evaluate CBOD₅, Ammonia Nitrogen, Dissolved Oxygen, and TRC (Interim Limitations). The modeling results show the above technology based effluent limitations are appropriate.

For existing discharges, if WQM modeling results for summer indicates that an average monthly limit of 25 mg/L (ammonia-nitrogen) is acceptable, the application manager will generally establish a year-round monitoring requirement for ammonia-nitrogen (Section I.A, Note 5, SOP No. BCW-PMT-033, Establishing Effluent Limitations for Individual Sewage Permits).

Water Quality-Based Limitations

A "Reasonable Potential Analysis" (Attachment 3 - TMS Version 1.4) determined no parameters were candidates for monitoring and/or limitations (No RP).

Comments: Based upon module output files (WQM 7.0, TMS, and TRC_CALC), no WQBELs will be established at this time for this facility (Attachments 2, 3, & 4).

Best Professional Judgment (BPJ) Limitations

Comments: A minimum Dissolved Oxygen (DO) limit of 4.0 mg/L will be established based on BPJ to ensure adequate operation and maintenance (Section I.A, Note 6, SOP No. BCW-PMT-033, Establishing Effluent Limitations for Individual Sewage Permits).

Anti-Backsliding

Section 402(o) of the Clean Water Act (CWA), enacted in the Water Quality Act of 1987, establishes anti-backsliding rules governing two situations. The first situation occurs when a permittee seeks to revise a Technology-Based effluent limitation based on BPJ to reflect a subsequently promulgated effluent guideline which is less stringent. The second situation addressed by Section 402(o) arises when a permittee seeks relaxation of an effluent limitation which is based upon a State treatment standard of water quality standard.

Previous limits can be used pursuant to EPA's anti-backsliding regulation 40 CFR 122.44 (l) Reissued permits. (1) Except as provided in paragraph (l)(2) of this section when a permit is renewed or reissued. Interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62). (2) In the case of effluent limitations established on the basis of Section 402(a)(1)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.

The facility is not seeking to revise the previously permitted effluent limits.

Additional Considerations

Monitoring frequency for the proposed effluent limits are based upon Table 6-3, Self-Monitoring Requirements for Sewage Dischargers, from the Departments Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits (Document No. 386-0400-001).

For POTWs, mass loading limits will be established for CBOD₅, TSS, NH₃-N, and where necessary Total P and Total N. In general, average monthly mass loading limits will be established for CBOD₅, TSS, NH₃-N, and where necessary Total P and Total N, and average weekly mass loading limits will be established for CBOD₅ and TSS. Mass loading limits will also be established for toxic pollutants with effluent concentration limits (Section IV, SOP No. BCW-PMT-033, Establishing Effluent Limitations for Individual Sewage Permits).

For POTWs with design flows greater than 2,000 GPD and for non-municipal sewage facilities that service municipalities or portions thereof, the application manager will establish influent BOD₅ and TSS monitoring in the permit using the same frequency and sample type as is used for other effluent parameters (Section IV.E.8, SOP No BCW-PWT-002, New and Reissuance Sewage Individual NPDES Permit Applications).

Sewage discharges will include monitoring, at a minimum, for *E. Coli*, in new and reissued permits, with a monitoring frequency of 1/month for design flows >= 1 MGD per 25 Pa. Code § 92a.061 and Section I.A, Note 12, SOP No. BCW-PMT-033, Establishing Effluent Limitations for Individual Sewage Permits.

Nutrient monitoring is required to establish the nutrient load from the wastewater treatment facility and the impacts that load may have on the quality of the receiving stream(s). The discharge is to waters not impaired for nutrients. A 1/year monitoring requirement for Total N & Total P has been added to the permit per 25 Pa. Code § 92a.61 and Section I.A, Note 7 & 8, SOP No. BCW-PMT-033, Establishing Effluent Limitations for Individual Sewage Permits.

Where ultraviolet (UV) disinfection is used (**Final Limitations**), TRC limits are not applicable, but the limits table(s) in Part A will generally contain, at a minimum, routine monitoring of UV transmittance (%), UV dosage (μWs/cm² or mWs/cm² or mjoules/cm²) or UV intensity (μW/cm² or mW/cm²) at the same monitoring frequency that would be used for TRC per Section I.A, Note 4, SOP No. BCW-PMT-033, Establishing Effluent Limitations for Individual Sewage Permits.

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.G of DEP's "Standard Operating Procedure (SOP) for Clean Water Program – Establishing Effluent Limitations for Individual Sewage Permits" [SOP No. BCW-PMT-033] 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-033 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.

The Borough's application indicated detection of PFOA, PFOS, and PFBS above the DEP's TQLs. Therefore, quarterly reporting of PFOA, PFOS, PFBS, and HFPO-DA will be established consistent with Section II.G of SOP BCW-PMT-033 and under the authority of 25 Pa. Code § 92a.61(b).

As stated in Section II.G.3 of SOP BCW-PMT-0332, if non-detect values at or below DEP's Target QLs are reported for four consecutive monitoring periods (i.e., four consecutive quarterly results), then the monitoring may be discontinued. Footnote (3) has been added to Part A of the NPDES Permit, which further discusses monitoring and reporting requirements.

Whole Effluent Toxicity (WET)

For Outfall 001, Acute Chronic WET Testing was completed:

- For the permit renewal application (4 tests).
- Quarterly throughout the permit term.
- Quarterly throughout the permit term and a TIE/TRE was conducted.
- Other:

The dilution series used for the tests was: 100%, 60%, 30%, 2%, and 1%. The Target Instream Waste Concentration (TIWC) to be used for analysis of the results is: 2%.

Summary of Four Most Recent Test Results

TST Data Analysis

(Please See Attachment 5 - DEP WET Analysis Spreadsheet).

Test Date	Ceriodaphnia Results (Pass/Fail)		Pimephales Results (Pass/Fail)	
	Survival	Reproduction	Survival	Growth
6/28/2021	Pass	Pass	Pass	Pass
9/5/2022	Pass	Pass	Pass	Pass
10/3/2023	Pass	Pass	Pass	Pass
7/2/2024	Pass	Pass	Pass	Pass

* A "passing" result is that in which the replicate data for the TIWC is not statistically significant from the control condition. This is exhibited when the calculated t value ("T-Test Result") is greater than the critical t value. A "failing" result is exhibited when the calculated t value ("T-Test Result") is less than the critical t value.

Is there reasonable potential for an excursion above water quality standards based on the results of these tests? (NOTE – In general, reasonable potential is determined anytime there is at least one test failure in the previous four tests).

- YES NO

Comments: N/A

Evaluation of Test Type, IWC and Dilution Series for Renewed Permit

Acute Partial Mix Factor (PMFa): **0.087** Chronic Partial Mix Factor (PMFc): **0.602**

1. Determine IWC – Acute (IWCa):

$$(Q_d \times 1.547) / ((Q_{7-10} \times PMFa) + (Q_d \times 1.547))$$

$$[(1.63 \text{ MGD} \times 1.547) / ((2390 \text{ cfs} \times 0.087) + (1.63 \text{ MGD} \times 1.547))] \times 100 = \mathbf{1.2\%}$$

Is IWCa < 1%? YES NO **(YES - Acute Tests Required OR NO - Chronic Tests Required)**

Type of Test for Permit Renewal: Chronic Testing Required

2a. Determine Target IWCa (If Acute Tests Required)

$$\mathbf{TIWCa = 1.2\% / 0.3 = 4.0\%}$$

2b. Determine Target IWCc (If Chronic Tests Required)

$$(Q_d \times 1.547) / (Q_{7-10} \times PMFC) + (Q_d \times 1.547)$$

$$[(1.63 \text{ MGD} \times 1.547) / ((2390 \text{ cfs} \times 0.602) + (1.63 \text{ MGD} \times 1.547))] \times 100 = \mathbf{0.17\%}$$

Please note that Department's WET Analysis Spreadsheet recommends a TIWCc of 1% Effluent be established in Part C of the permit.

3. Determine Dilution Series

(NOTE – check Attachment C of WET SOP for dilution series based on TIWCa or TIWCc, whichever applies).

Dilution Series = 100%, 60%, 30%, 2%, and 1%.

WET Limits

Has reasonable potential been determined? YES NO

Will WET limits be established in the permit? YES NO

If WET limits will be established, identify the species and the limit values for the permit (TU).

N/A

If WET limits will not be established, but reasonable potential was determined, indicate the rationale for not establishing WET limits:

N/A

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	4.0 Daily Min	XXX	XXX	XXX	1/day	Grab
CBOD5	335	540	XXX	25	40	50	2/week	24-Hr Composite
BOD5 Raw Sewage Influent	Report	Report	XXX	Report	Report	XXX	2/week	24-Hr Composite
TSS	405	610	XXX	30	45	60	2/week	24-Hr Composite
TSS Raw Sewage Influent	Report	Report	XXX	Report	Report	XXX	2/week	24-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/week	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/month	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/quarter	24-Hr Composite
Ammonia	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/quarter	24-Hr Composite
PFOA (ng/L)	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/quarter	Grab

Outfall 001 , Continued (from Permit Effective Date through Permit Expiration Date)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
PFOS (ng/L)	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/quarter	Grab
PFBS (ng/L)	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/quarter	Grab
HFPO-DA (ng/L)	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/quarter	Grab

Compliance Sampling Location: Outfall 001

Other Comments: N/A

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through End of 12th Month.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab

Compliance Sampling Location: Outfall 001

Other Comments: N/A

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (386-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Beginning of 13th Month through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Instantaneous Minimum	Average Monthly	Maximum	Instant. Maximum		
UV Transmittance (%)	XXX	XXX	Report	XXX	XXX	XXX	1/day	Measured

Compliance Sampling Location: Outfall 001

Other Comments: N/A

Attachment 1

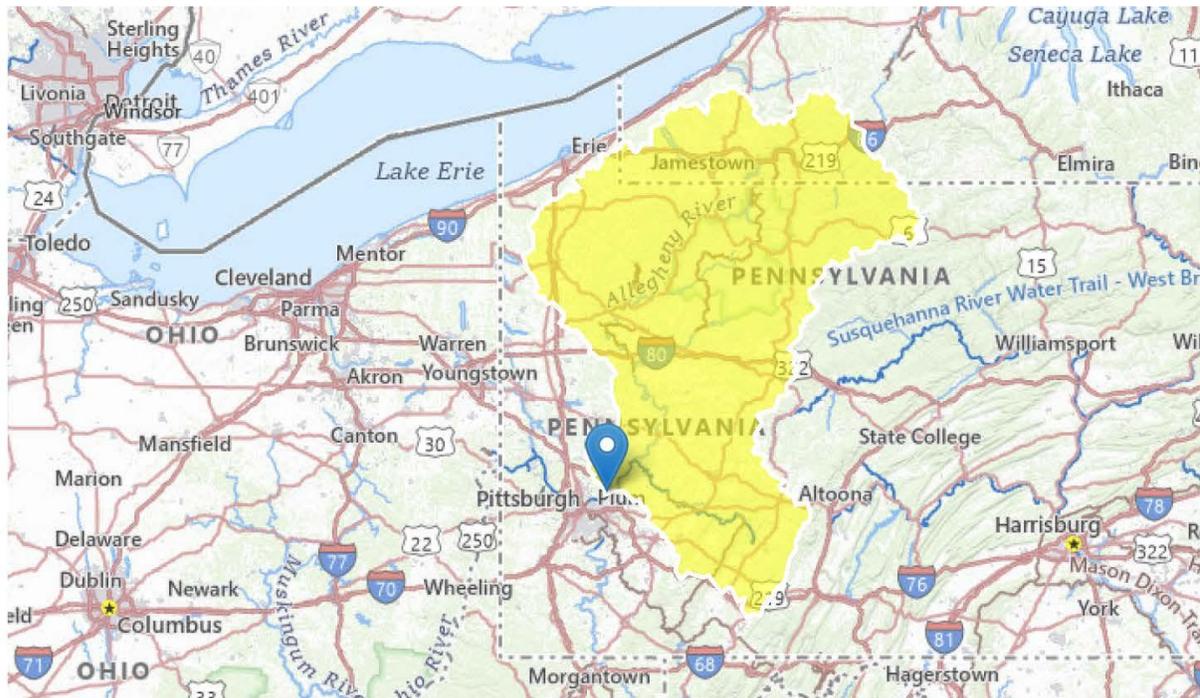
USGS StreamStats Report

StreamStats Report

Region ID: PA

Clicked Point (Latitude, Longitude): 40.52161, -79.84977

Time: 2026-03-06 10:30:12 -0500



StreamStats Update

Starting with version 4.30.0, the StreamStats application uses services that were redeveloped with open-source software components. Users may observe minor variations in computed results when compared to those from previous versions. These differences are expected and do not reflect errors in the underlying data or analytical methods. Users are advised to consider these potential variations when interpreting or comparing results generated across different versions of StreamStats. Please email streamstats@usgs.gov with any questions or concerns. A full list of changes can be found at <https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release> (<https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release>).

 Collapse All

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	11585	square miles
ELEV	Mean Basin Elevation	1595.7	feet

➤ Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	11585	square miles	2.26	1400
ELEV	Mean Basin Elevation	1595.7	feet	1050	2580

Low-Flow Statistics Disclaimers [Low Flow Region 4]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	1520	ft ³ /s
30 Day 2 Year Low Flow	1930	ft ³ /s
7 Day 10 Year Low Flow	992	ft ³ /s
30 Day 10 Year Low Flow	1080	ft ³ /s
90 Day 10 Year Low Flow	1490	ft ³ /s

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/>)

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey

(USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

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USGS Product Names Disclaimer: Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

Application Version: 4.31.1

SSHydro Services Version: 1.1.1

SSDelineate Services Version: 1.0.1

NSS Services Version: 2.2.1

GageStats Services Version: 1.2.1

Pourpoint Services Version: 1.2.0

Batch Processor Version: 1.6.1

Attachment 2

WQM 7.0 Version 1.1 – Summer Period

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
18A	42122	ALLEGHENY RIVER	12.850	721.00	11585.00	0.00100	0.00	<input checked="" type="checkbox"/>

Stream Data

Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	Tributary Temp	Tributary pH	Stream Temp	Stream pH
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C)		(°C)	
Q7-10	0.206	0.00	0.00	0.000	0.000	0.0	971.00	7.50	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
Oakmont Borough	PA0026841	1.6300	1.6300	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	25.00	2.00	0.00	1.50
Dissolved Oxygen	3.00	8.38	0.00	0.00
NH3-N	25.00	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
18A	42122	ALLEGHENY RIVER	8.780	720.80	11615.00	0.00100	66.00	<input checked="" type="checkbox"/>

Stream Data

Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	Tributary Temp	Tributary pH	Stream Temp	Stream pH
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C)		(°C)	
Q7-10	0.206	0.00	0.00	0.000	0.000	0.0	955.00	7.50	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
		0.0000	0.0000	0.0000	0.000	25.00	7.00

Parameter Data

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	3.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

WQM 7.0 Hydrodynamic Outputs

<u>SWP Basin</u>		<u>Stream Code</u>				<u>Stream Name</u>						
18A		42122				ALLEGHENY 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												
12.850	2386.51	0.00	2386.51	2.5216	0.00100	7.5	971	129.47	0.33	0.758	24.99	7.00
Q1-10 Flow												
12.850	1527.37	0.00	1527.37	2.5216	0.00100	NA	NA	NA	0.21	1.184	24.99	7.00
Q30-10 Flow												
12.850	3245.65	0.00	3245.65	2.5216	0.00100	NA	NA	NA	0.45	0.558	25.00	7.00

WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	<input checked="" type="checkbox"/>
WLA Method	EMPR	Use Inputted W/D Ratio	<input type="checkbox"/>
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	<input type="checkbox"/>
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	<input checked="" type="checkbox"/>
D.O. Saturation	90.00%	Use Balanced Technology	<input checked="" type="checkbox"/>
D.O. Goal	5		

WQM 7.0 Wasteload Allocations

SWP Basin **Stream Code** **Stream Name**
18A 42122 ALLEGHENY 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
12.850	Oakmont Boroug	11.08	50	11.08	50	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
12.850	Oakmont Boroug	1.37	25	1.37	25	0	0

Dissolved Oxygen Allocations

RMI	Discharge Name	<u>CBOD5</u>		<u>NH3-N</u>		<u>Dissolved Oxygen</u>		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
12.85	Oakmont Borough	25	25	25	25	3	3	0	0

WQM 7.0 D.O.Simulation

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>		
18A	42122	ALLEGHENY RIVER		
<u>RMI</u>	<u>Total Discharge Flow (mgd)</u>	<u>Analysis Temperature (°C)</u>	<u>Analysis pH</u>	
12.850	1.630	24.995	7.000	
<u>Reach Width (ft)</u>	<u>Reach Depth (ft)</u>	<u>Reach WDRatio</u>	<u>Reach Velocity (fps)</u>	
971.000	7.500	129.467	0.328	
<u>Reach CBOD5 (mg/L)</u>	<u>Reach Kc (1/days)</u>	<u>Reach NH3-N (mg/L)</u>	<u>Reach Kn (1/days)</u>	
2.02	0.010	0.03	1.028	
<u>Reach DO (mg/L)</u>	<u>Reach Kr (1/days)</u>	<u>Kr Equation</u>	<u>Reach DO Goal (mg/L)</u>	
8.374	0.405	O'Connor	5	
<u>Reach Travel Time (days)</u>	Subreach Results			
0.758	<u>TravTime (days)</u>	<u>CBOD5 (mg/L)</u>	<u>NH3-N (mg/L)</u>	<u>D.O. (mg/L)</u>
	0.076	2.02	0.02	7.54
	0.152	2.02	0.02	7.54
	0.227	2.02	0.02	7.54
	0.303	2.02	0.02	7.54
	0.379	2.01	0.02	7.54
	0.455	2.01	0.02	7.54
	0.531	2.01	0.02	7.54
	0.607	2.01	0.01	7.54
	0.682	2.01	0.01	7.54
	0.758	2.00	0.01	7.54

WQM 7.0 Effluent Limits

<u>SWP Basin</u>		<u>Stream Code</u>	<u>Stream Name</u>				
18A		42122	ALLEGHENY 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)
12.850	Oakmont Borough	PA0026841	1.630	CBOD5	25		
				NH3-N	25	50	
				Dissolved Oxygen			3

Attachment 3

DEP Toxics Management Spreadsheet **Version 1.4**



Discharge Information

Instructions **Discharge** Stream

Facility: Oakmont Borough WWTP NPDES Permit No.: PA0026841 Outfall No.: 001

Evaluation Type Major Sewage / Industrial Waste Wastewater Description: Treated Sewage

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
1.63	135.43	7.15	0.087	0.602				

Discharge Pollutant	Units	Max Discharge Conc	0 if left blank		0.5 if left blank		0 if left blank			1 if left blank	
			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	340.49								
	Chloride (PWS)	mg/L	118.51								
	Bromide	mg/L	0.16								
	Sulfate (PWS)	mg/L	69.24								
	Fluoride (PWS)	mg/L									
Group 2	Total Aluminum	µg/L	32.4								
	Total Antimony	µg/L	< 2								
	Total Arsenic	µg/L	< 2								
	Total Barium	µg/L	35.3								
	Total Beryllium	µg/L	< 1								
	Total Boron	µg/L	170								
	Total Cadmium	µg/L	< 2								
	Total Chromium (III)	µg/L	< 2								
	Hexavalent Chromium	µg/L	< 5								
	Total Cobalt	µg/L	< 1								
	Total Copper	µg/L	< 5								
	Free Cyanide	µg/L	14								
	Total Cyanide	µg/L	15								
	Dissolved Iron	µg/L	50								
	Total Iron	µg/L	70								
	Total Lead	µg/L	< 1								
	Total Manganese	µg/L	125								
	Total Mercury	µg/L	< 0.2								
	Total Nickel	µg/L	2.93								
	Total Phenols (Phenolics) (PWS)	µg/L	< 30								
Total Selenium	µg/L	< 5									
Total Silver	µg/L	< 0.4									
Total Thallium	µg/L	< 2									
Total Zinc	µg/L	59.9									
Total Molybdenum	µg/L	4.22									
Acrolein	µg/L	< 1									
Acrylamide	µg/L										
Acrylonitrile	µg/L	< 0.5									
Benzene	µg/L	< 0.5									
Bromoform	µg/L	< 0.5									
Carbon Tetrachloride	µg/L	< 0.5									
Chlorobenzene	µg/L	< 0.5									
Chlorodibromomethane	µg/L	1									
Chloroethane	µg/L	< 0.5									
2-Chloroethyl Vinyl Ether	µg/L	< 1									



Stream / Surface Water Information

Oakmont Borough WWTP, NPDES Permit No. PA0026841, Outfall 001

Instructions Discharge **Stream**

Receiving Surface Water Name: Allegheny 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	042122	12.85	721	11585	0.001		Yes
End of Reach 1	042122	8.78	720.8	11615	0.001	66	Yes

Q₇₋₁₀

Location	RMI	LFY (cfs/mi ²)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness*	pH*	Hardness	pH
Point of Discharge	12.85	0.206				971	7.5					100	7		
End of Reach 1	8.78	0.206				955	7.5								

Q_h

Location	RMI	LFY (cfs/mi ²)*	Flow (cfs)		W/D Ratio	Width (ft)	Depth (ft)	Velocity (fps)	Travel Time	Tributary		Stream		Analysis	
			Stream	Tributary						Hardness	pH	Hardness	pH	Hardness	pH
Point of Discharge	12.85														
End of Reach 1	8.78														



Model Results

Oakmont Borough WWTP, NPDES Permit No. PA0026841, Outfall 001

Instructions

Results

RETURN TO INPUTS

SAVE AS PDF

PRINT

All

Inputs

Results

Limits

Hydrodynamics

Q₇₋₁₀

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	Complete Mix Time (min)
12.85	2386.51		2386.51	2.522	0.001	7.5	971.	129.467	0.328	0.758	1985.441
8.78	2392.69	102.102	2290.588								

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	Complete Mix Time (min)
12.85	6655.09		6655.09	2.522	0.001	11.773	971.	82.474	0.582	0.427	1010.838
8.78	6670.149	102.102	6568.05								

Wasteload Allocations

AFC

CCT (min):

PMF:

Analysis Hardness (mg/l):

Analysis pH:

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	
Total Aluminum	0	0		0	750	750	62,504	
Total Antimony	0	0		0	1,100	1,100	91,673	
Total Arsenic	0	0		0	340	340	28,335	Chem Translator of 1 applied
Total Barium	0	0		0	21,000	21,000	1,750,115	
Total Boron	0	0		0	8,100	8,100	675,044	
Total Cadmium	0	0		0	2.022	2.14	179	Chem Translator of 0.944 applied
Total Chromium (III)	0	0		0	571.747	1,809	150,787	Chem Translator of 0.316 applied
Hexavalent Chromium	0	0		0	16	16.3	1,358	Chem Translator of 0.982 applied
Total Cobalt	0	0		0	95	95.0	7,917	
Total Copper	0	0		0	13.493	14.1	1,171	Chem Translator of 0.96 applied
Free Cyanide	0	0		0	22	22.0	1,833	
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	64.880	82.1	6,841	Chem Translator of 0.79 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	1.400	1.65	137	Chem Translator of 0.85 applied
Total Nickel	0	0		0	469.919	471	39,241	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	3.240	3.81	318	Chem Translator of 0.85 applied
Total Thallium	0	0		0	65	65.0	5,417	
Total Zinc	0	0		0	117.602	120	10,021	Chem Translator of 0.978 applied
Acrolein	0	0		0	3	3.0	250	
Acrylonitrile	0	0		0	650	650	54,170	
Benzene	0	0		0	640	640	53,337	
Bromoform	0	0		0	1,800	1,800	150,010	
Carbon Tetrachloride	0	0		0	2,800	2,800	233,349	
Chlorobenzene	0	0		0	1,200	1,200	100,007	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	18,000	18,000	1,500,099	
Chloroform	0	0		0	1,900	1,900	158,344	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	15,000	15,000	1,250,082	
1,1-Dichloroethylene	0	0		0	7,500	7,500	625,041	
1,2-Dichloropropane	0	0		0	11,000	11,000	916,727	
Ethylbenzene	0	0		0	2,900	2,900	241,683	
Methyl Bromide	0	0		0	550	550	45,836	
Methyl Chloride	0	0		0	28,000	28,000	2,333,487	
Methylene Chloride	0	0		0	12,000	12,000	1,000,066	
1,1,2,2-Tetrachloroethane	0	0		0	1,000	1,000	83,339	
Tetrachloroethylene	0	0		0	700	700	58,337	
Toluene	0	0		0	1,700	1,700	141,676	
1,2-trans-Dichloroethylene	0	0		0	6,800	6,800	566,704	
1,1,1-Trichloroethane	0	0		0	3,000	3,000	250,016	
1,1,2-Trichloroethane	0	0		0	3,400	3,400	283,352	
Trichloroethylene	0	0		0	2,300	2,300	191,679	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	560	560	46,670	
2,4-Dichlorophenol	0	0		0	1,700	1,700	141,676	
2,4-Dimethylphenol	0	0		0	660	660	55,004	
4,6-Dinitro-o-Cresol	0	0		0	80	80.0	6,667	
2,4-Dinitrophenol	0	0		0	660	660	55,004	
2-Nitrophenol	0	0		0	8,000	8,000	666,710	
4-Nitrophenol	0	0		0	2,300	2,300	191,679	
p-Chloro-m-Cresol	0	0		0	160	160	13,334	
Pentachlorophenol	0	0		0	8.737	8.74	728	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	460	460	38,336	
Acenaphthene	0	0		0	83	83.0	6,917	
Anthracene	0	0		0	N/A	N/A	N/A	

Benzidine	0	0		0	300	300	25,002	
Benzo(a)Anthracene	0	0		0	0.5	0.5	41.7	
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	2,500,164	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	4,500	4,500	375,025	
4-Bromophenyl Phenyl Ether	0	0		0	270	270	22,501	
Butyl Benzyl Phthalate	0	0		0	140	140	11,667	
2-Chloronaphthalene	0	0		0	N/A	N/A	N/A	
Chrysene	0	0		0	N/A	N/A	N/A	
Dibenzo(a,h)Anthracene	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	820	820	68,338	
1,3-Dichlorobenzene	0	0		0	350	350	29,169	
1,4-Dichlorobenzene	0	0		0	730	730	60,837	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	4,000	4,000	333,355	
Dimethyl Phthalate	0	0		0	2,500	2,500	208,347	
Di-n-Butyl Phthalate	0	0		0	110	110	9,167	
2,4-Dinitrotoluene	0	0		0	1,600	1,600	133,342	
2,6-Dinitrotoluene	0	0		0	990	990	82,505	
1,2-Diphenylhydrazine	0	0		0	15	15.0	1,250	
Fluoranthene	0	0		0	200	200	16,668	
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	833	
Hexachlorocyclopentadiene	0	0		0	5	5.0	417	
Hexachloroethane	0	0		0	60	60.0	5,000	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	10,000	10,000	833,388	
Naphthalene	0	0		0	140	140	11,667	
Nitrobenzene	0	0		0	4,000	4,000	333,355	
n-Nitrosodimethylamine	0	0		0	17,000	17,000	1,416,760	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	300	300	25,002	
Phenanthrene	0	0		0	5	5.0	417	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	130	130	10,834	

CFC

CCT (min):

PMF:

Analysis Hardness (mg/l):

Analysis pH:

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	
Total Aluminum	0	0		0	N/A	N/A	N/A	

Total Antimony	0	0		0	220	220	125,564	
Total Arsenic	0	0		0	150	150	85,612	Chem Translator of 1 applied
Total Barium	0	0		0	4,100	4,100	2,340,062	
Total Boron	0	0		0	1,600	1,600	913,195	
Total Cadmium	0	0		0	0.246	0.27	155	Chem Translator of 0.909 applied
Total Chromium (III)	0	0		0	74.152	86.2	49,212	Chem Translator of 0.86 applied
Hexavalent Chromium	0	0		0	10	10.4	5,933	Chem Translator of 0.962 applied
Total Cobalt	0	0		0	19	19.0	10,844	
Total Copper	0	0		0	8.961	9.33	5,327	Chem Translator of 0.96 applied
Free Cyanide	0	0		0	5.2	5.2	2,968	
Dissolved Iron	0	0		0	N/A	N/A	N/A	
Total Iron	0	0		0	1,500	1,500	1,421,135	WQC = 30 day average; PMF = 1
Total Lead	0	0		0	2.518	3.18	1,817	Chem Translator of 0.791 applied
Total Manganese	0	0		0	N/A	N/A	N/A	
Total Mercury	0	0		0	0.770	0.91	517	Chem Translator of 0.85 applied
Total Nickel	0	0		0	52.034	52.2	29,788	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	2,848	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	7,420	
Total Zinc	0	0		0	118.201	120	68,421	Chem Translator of 0.986 applied
Acrolein	0	0		0	3	3.0	1,712	
Acrylonitrile	0	0		0	130	130	74,197	
Benzene	0	0		0	130	130	74,197	
Bromoform	0	0		0	370	370	211,176	
Carbon Tetrachloride	0	0		0	560	560	319,618	
Chlorobenzene	0	0		0	240	240	136,979	
Chlorodibromomethane	0	0		0	N/A	N/A	N/A	
2-Chloroethyl Vinyl Ether	0	0		0	3,500	3,500	1,997,614	
Chloroform	0	0		0	390	390	222,591	
Dichlorobromomethane	0	0		0	N/A	N/A	N/A	
1,2-Dichloroethane	0	0		0	3,100	3,100	1,769,315	
1,1-Dichloroethylene	0	0		0	1,500	1,500	856,120	
1,2-Dichloropropane	0	0		0	2,200	2,200	1,255,643	
Ethylbenzene	0	0		0	580	580	331,033	
Methyl Bromide	0	0		0	110	110	62,782	
Methyl Chloride	0	0		0	5,500	5,500	3,139,107	
Methylene Chloride	0	0		0	2,400	2,400	1,369,792	
1,1,2,2-Tetrachloroethane	0	0		0	210	210	119,857	
Tetrachloroethylene	0	0		0	140	140	79,905	
Toluene	0	0		0	330	330	188,346	
1,2-trans-Dichloroethylene	0	0		0	1,400	1,400	799,045	
1,1,1-Trichloroethane	0	0		0	610	610	348,155	
1,1,2-Trichloroethane	0	0		0	680	680	388,108	
Trichloroethylene	0	0		0	450	450	256,836	
Vinyl Chloride	0	0		0	N/A	N/A	N/A	
2-Chlorophenol	0	0		0	110	110	62,782	
2,4-Dichlorophenol	0	0		0	340	340	194,054	
2,4-Dimethylphenol	0	0		0	130	130	74,197	

4,6-Dinitro-o-Cresol	0	0		0	16	16.0	9,132	
2,4-Dinitrophenol	0	0		0	130	130	74,197	
2-Nitrophenol	0	0		0	1,600	1,600	913,195	
4-Nitrophenol	0	0		0	470	470	268,251	
p-Chloro-m-Cresol	0	0		0	500	500	285,373	
Pentachlorophenol	0	0		0	6.703	6.7	3,826	
Phenol	0	0		0	N/A	N/A	N/A	
2,4,6-Trichlorophenol	0	0		0	91	91.0	51,938	
Acenaphthene	0	0		0	17	17.0	9,703	
Anthracene	0	0		0	N/A	N/A	N/A	
Benidine	0	0		0	59	59.0	33,674	
Benzo(a)Anthracene	0	0		0	0.1	0.1	57.1	
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	3,424,480	
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A	
Bis(2-Ethylhexyl)Phthalate	0	0		0	910	910	519,380	
4-Bromophenyl Phenyl Ether	0	0		0	54	54.0	30,820	
Butyl Benzyl Phthalate	0	0		0	35	35.0	19,976	
2-Chloronaphthalene	0	0		0	N/A	N/A	N/A	
Chrysene	0	0		0	N/A	N/A	N/A	
Dibenzo(a,h)Anthracene	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	160	160	91,319	
1,3-Dichlorobenzene	0	0		0	69	69.0	39,382	
1,4-Dichlorobenzene	0	0		0	150	150	85,612	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	800	800	456,597	
Dimethyl Phthalate	0	0		0	500	500	285,373	
Di-n-Butyl Phthalate	0	0		0	21	21.0	11,986	
2,4-Dinitrotoluene	0	0		0	320	320	182,639	
2,6-Dinitrotoluene	0	0		0	200	200	114,149	
1,2-Diphenylhydrazine	0	0		0	3	3.0	1,712	
Fluoranthene	0	0		0	40	40.0	22,830	
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	1,141	
Hexachlorocyclopentadiene	0	0		0	1	1.0	571	
Hexachloroethane	0	0		0	12	12.0	6,849	
Indeno(1,2,3-cd)Pyrene	0	0		0	N/A	N/A	N/A	
Isophorone	0	0		0	2,100	2,100	1,198,568	
Naphthalene	0	0		0	43	43.0	24,542	
Nitrobenzene	0	0		0	810	810	462,305	
n-Nitrosodimethylamine	0	0		0	3,400	3,400	1,940,539	
n-Nitrosodi-n-Propylamine	0	0		0	N/A	N/A	N/A	
n-Nitrosodiphenylamine	0	0		0	59	59.0	33,674	
Phenanthrene	0	0		0	1	1.0	571	
Pyrene	0	0		0	N/A	N/A	N/A	
1,2,4-Trichlorobenzene	0	0		0	26	26.0	14,839	

THH CCT (min): THH PMF: Analysis Hardness (mg/l): Analysis pH: PWS PMF:

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	500,000	500,000	#####	WQC applied at RMI 8.78 with a design stream flow of 2392.69
Chloride (PWS)	0	0		0	250,000	250,000	#####	WQC applied at RMI 8.78 with a design stream flow of 2392.69
Sulfate (PWS)	0	0		0	250,000	250,000	#####	WQC applied at RMI 8.78 with a design stream flow of 2392.69
Total Aluminum	0	0		0	N/A	N/A	N/A	
Total Antimony	0	0		0	5.6	5.6	3,197	
Total Arsenic	0	0		0	10	10.0	5,709	
Total Barium	0	0		0	2,400	2,400	1,370,237	
Total Boron	0	0		0	3,100	3,100	1,769,890	
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	
Free Cyanide	0	0		0	4	4.0	2,284	
Dissolved Iron	0	0		0	300	300	171,280	
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	570,932	
Total Mercury	0	0		0	0.050	0.05	28.5	
Total Nickel	0	0		0	610	610	348,269	
Total Phenols (Phenolics) (PWS)	0	0		0	5	5.0	3,523	WQC applied at RMI 8.78 with a design stream flow of 2392.69
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	137	
Total Zinc	0	0		0	N/A	N/A	N/A	
Acrolein	0	0		0	3	3.0	1,713	
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	57,093	
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	3,254	
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	18,841	
1,2-Dichloropropane	0	0		0	N/A	N/A	N/A	
Ethylbenzene	0	0		0	68	68.0	38,823	
Methyl Bromide	0	0		0	100	100.0	57,093	
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	32,543	
1,2-trans-Dichloroethylene	0	0		0	100	100.0	57,093	
1,1,1-Trichloroethane	0	0		0	10,000	10,000	5,709,321	
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	17,128	
2,4-Dichlorophenol	0	0		0	10	10.0	5,709	
2,4-Dimethylphenol	0	0		0	100	100.0	57,093	
4,6-Dinitro-o-Cresol	0	0		0	2	2.0	1,142	
2,4-Dinitrophenol	0	0		0	10	10.0	5,709	
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	2,283,729	
2,4,6-Trichlorophenol	0	0		0	N/A	N/A	N/A	
Acenaphthene	0	0		0	70	70.0	39,965	
Anthracene	0	0		0	300	300	171,280	
Benzdine	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	114,186	
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	57.1	
2-Chloronaphthalene	0	0		0	800	800	456,746	
Chrysene	0	0		0	N/A	N/A	N/A	
Dibenzo(a,h)Anthracene	0	0		0	N/A	N/A	N/A	
1,2-Dichlorobenzene	0	0		0	1,000	1,000	570,932	
1,3-Dichlorobenzene	0	0		0	7	7.0	3,997	
1,4-Dichlorobenzene	0	0		0	300	300	171,280	
3,3-Dichlorobenzidine	0	0		0	N/A	N/A	N/A	
Diethyl Phthalate	0	0		0	600	600	342,559	
Dimethyl Phthalate	0	0		0	2,000	2,000	1,141,864	
Di-n-Butyl Phthalate	0	0		0	20	20.0	11,419	
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	11,419	
Fluorene	0	0		0	50	50.0	28,547	
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	2,284	
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	19,412
Naphthalene	0	0		0	N/A	N/A	N/A
Nitrobenzene	0	0		0	10	10.0	5,709
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	11,419
1,2,4-Trichlorobenzene	0	0		0	0.07	0.07	40.0

CRL

CCT (min):

PMF:

Analysis Hardness (mg/l):

Analysis pH:

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	
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	
Free Cyanide	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	
Acrylonitrile	0	0		0	0.06	0.06	134	
Benzene	0	0		0	0.58	0.58	1,292	
Bromoform	0	0		0	7	7.0	15,599	
Carbon Tetrachloride	0	0		0	0.4	0.4	891	
Chlorobenzene	0	0		0	N/A	N/A	N/A	
Chlorodibromomethane	0	0		0	0.8	0.8	1,783	
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	2,117	

1,2-Dichloroethane	0	0		0	9.9	9.9	22,061
1,1-Dichloroethylene	0	0		0	N/A	N/A	N/A
1,2-Dichloropropane	0	0		0	0.9	0.9	2,006
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	44,568
1,1,2,2-Tetrachloroethane	0	0		0	0.2	0.2	446
Tetrachloroethylene	0	0		0	10	10.0	22,284
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	1,226
Trichloroethylene	0	0		0	0.6	0.6	1,337
Vinyl Chloride	0	0		0	0.02	0.02	44.6
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	66.9
Phenol	0	0		0	N/A	N/A	N/A
2,4,6-Trichlorophenol	0	0		0	1.5	1.5	3,343
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	0.22
Benzo(a)Anthracene	0	0		0	0.001	0.001	2.23
Benzo(a)Pyrene	0	0		0	0.0001	0.0001	0.22
3,4-Benzofluoranthene	0	0		0	0.001	0.001	2.23
Benzo(k)Fluoranthene	0	0		0	0.01	0.01	22.3
Bis(2-Chloroethyl)Ether	0	0		0	0.03	0.03	66.9
Bis(2-Chloroisopropyl)Ether	0	0		0	N/A	N/A	N/A
Bis(2-Ethylhexyl)Phthalate	0	0		0	0.32	0.32	713
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	267
Dibenzo(a,h)Anthracene	0	0		0	0.0001	0.0001	0.22
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	111
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	111

2,6-Dinitrotoluene	0	0		0	0.05	0.05	111	
1,2-Diphenylhydrazine	0	0		0	0.03	0.03	66.9	
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	0.18	
Hexachlorobutadiene	0	0		0	0.01	0.01	22.3	
Hexachlorocyclopentadiene	0	0		0	N/A	N/A	N/A	
Hexachloroethane	0	0		0	0.1	0.1	223	
Indeno(1,2,3-cd)Pyrene	0	0		0	0.001	0.001	2.23	
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	1.56	
n-Nitrosodi-n-Propylamine	0	0		0	0.005	0.005	11.1	
n-Nitrosodiphenylamine	0	0		0	3.3	3.3	7,354	
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	

Recommended WQBELs & Monitoring Requirements

No. Samples/Month: 4

Pollutants	Mass Limits		Concentration Limits				Governing WQBEL	WQBEL Basis	Comments
	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units			

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)	352,318	mg/L	Discharge Conc ≤ 10% WQBEL
Chloride (PWS)	176,159	mg/L	Discharge Conc ≤ 10% WQBEL
Bromide	N/A	N/A	No WQS
Sulfate (PWS)	176,159	mg/L	Discharge Conc ≤ 10% WQBEL
Total Aluminum	40,063	µg/L	Discharge Conc ≤ 10% WQBEL
Total Antimony	N/A	N/A	Discharge Conc < TQL
Total Arsenic	N/A	N/A	Discharge Conc < TQL
Total Barium	1,121,753	µg/L	Discharge Conc ≤ 10% WQBEL
Total Beryllium	N/A	N/A	No WQS
Total Boron	432,676	µg/L	Discharge Conc ≤ 10% WQBEL
Total Cadmium	114	µg/L	Discharge Conc ≤ 10% WQBEL
Total Chromium (III)	49,212	µg/L	Discharge Conc < TQL
Hexavalent Chromium	870	µg/L	Discharge Conc ≤ 10% WQBEL
Total Cobalt	5,075	µg/L	Discharge Conc < TQL

Total Copper	751	µg/L	Discharge Conc ≤ 10% WQBEL
Free Cyanide	1,175	µg/L	Discharge Conc ≤ 25% WQBEL
Total Cyanide	N/A	N/A	No WQS
Dissolved Iron	171,280	µg/L	Discharge Conc ≤ 10% WQBEL
Total Iron	1,421,135	µg/L	Discharge Conc ≤ 10% WQBEL
Total Lead	1,817	µg/L	Discharge Conc < TQL
Total Manganese	570,932	µg/L	Discharge Conc ≤ 10% WQBEL
Total Mercury	28.5	µg/L	Discharge Conc < TQL
Total Nickel	25,152	µg/L	Discharge Conc ≤ 10% WQBEL
Total Phenols (Phenolics) (PWS)	3,523	µg/L	Discharge Conc ≤ 10% WQBEL
Total Selenium	2,848	µg/L	Discharge Conc < TQL
Total Silver	204	µg/L	Discharge Conc < TQL
Total Thallium	137	µg/L	Discharge Conc < TQL
Total Zinc	6,423	µg/L	Discharge Conc ≤ 10% WQBEL
Total Molybdenum	N/A	N/A	No WQS
Acrolein	160	µg/L	Discharge Conc < TQL
Acrylonitrile	134	µg/L	Discharge Conc < TQL
Benzene	1,292	µg/L	Discharge Conc < TQL
Bromoform	15,599	µg/L	Discharge Conc < TQL
Carbon Tetrachloride	891	µg/L	Discharge Conc < TQL
Chlorobenzene	57,093	µg/L	Discharge Conc < TQL
Chlorodibromomethane	1,783	µg/L	Discharge Conc ≤ 25% WQBEL
Chloroethane	N/A	N/A	No WQS
2-Chloroethyl Vinyl Ether	961,503	µg/L	Discharge Conc < TQL
Chloroform	3,254	µg/L	Discharge Conc ≤ 25% WQBEL
Dichlorobromomethane	2,117	µg/L	Discharge Conc ≤ 25% WQBEL
1,1-Dichloroethane	N/A	N/A	No WQS
1,2-Dichloroethane	22,061	µg/L	Discharge Conc < TQL
1,1-Dichloroethylene	18,841	µg/L	Discharge Conc < TQL
1,2-Dichloropropane	2,006	µg/L	Discharge Conc < TQL
1,4-Dioxane	N/A	N/A	No WQS
Ethylbenzene	38,823	µg/L	Discharge Conc < TQL
Methyl Bromide	29,379	µg/L	Discharge Conc < TQL
Methyl Chloride	1,495,671	µg/L	Discharge Conc ≤ 25% WQBEL
Methylene Chloride	44,568	µg/L	Discharge Conc < TQL
1,1,2,2-Tetrachloroethane	446	µg/L	Discharge Conc < TQL
Tetrachloroethylene	22,284	µg/L	Discharge Conc < TQL
Toluene	32,543	µg/L	Discharge Conc < TQL
1,2-trans-Dichloroethylene	57,093	µg/L	Discharge Conc < TQL
1,1,1-Trichloroethane	160,250	µg/L	Discharge Conc < TQL
1,1,2-Trichloroethane	1,226	µg/L	Discharge Conc < TQL
Trichloroethylene	1,337	µg/L	Discharge Conc < TQL
Vinyl Chloride	44.6	µg/L	Discharge Conc < TQL
2-Chlorophenol	17,128	µg/L	Discharge Conc < TQL
2,4-Dichlorophenol	5,709	µg/L	Discharge Conc < TQL
2,4-Dimethylphenol	35,255	µg/L	Discharge Conc < TQL
4,6-Dinitro-o-Cresol	1,142	µg/L	Discharge Conc < TQL
2,4-Dinitrophenol	5,709	µg/L	Discharge Conc < TQL
2-Nitrophenol	427,335	µg/L	Discharge Conc < TQL

4-Nitrophenol	122,859	µg/L	Discharge Conc < TQL
p-Chloro-m-Cresol	8,547	µg/L	Discharge Conc < TQL
Pentachlorophenol	66.9	µg/L	Discharge Conc < TQL
Phenol	2,283,729	µg/L	Discharge Conc < TQL
2,4,6-Trichlorophenol	3,343	µg/L	Discharge Conc < TQL
Acenaphthene	4,434	µg/L	Discharge Conc < TQL
Acenaphthylene	N/A	N/A	No WQS
Anthracene	171,280	µg/L	Discharge Conc < TQL
Benzdine	0.22	µg/L	Discharge Conc < TQL
Benzo(a)Anthracene	2.23	µg/L	Discharge Conc < TQL
Benzo(a)Pyrene	0.22	µg/L	Discharge Conc < TQL
3,4-Benzofluoranthene	2.23	µg/L	Discharge Conc < TQL
Benzo(ghi)Perylene	N/A	N/A	No WQS
Benzo(k)Fluoranthene	22.3	µg/L	Discharge Conc < TQL
Bis(2-Chloroethoxy)Methane	N/A	N/A	No WQS
Bis(2-Chloroethyl)Ether	66.9	µg/L	Discharge Conc < TQL
Bis(2-Chloroisopropyl)Ether	114,186	µg/L	Discharge Conc < TQL
Bis(2-Ethylhexyl)Phthalate	713	µg/L	Discharge Conc ≤ 25% WQBEL
4-Bromophenyl Phenyl Ether	14,423	µg/L	Discharge Conc < TQL
Butyl Benzyl Phthalate	57.1	µg/L	Discharge Conc < TQL
2-Chloronaphthalene	456,746	µg/L	Discharge Conc < TQL
4-Chlorophenyl Phenyl Ether	N/A	N/A	No WQS
Chrysene	267	µg/L	Discharge Conc < TQL
Dibenzo(a, h)Anthracene	0.22	µg/L	Discharge Conc < TQL
1,2-Dichlorobenzene	43,802	µg/L	Discharge Conc < TQL
1,3-Dichlorobenzene	3,997	µg/L	Discharge Conc < TQL
1,4-Dichlorobenzene	38,994	µg/L	Discharge Conc < TQL
3,3-Dichlorobenzidine	111	µg/L	Discharge Conc < TQL
Diethyl Phthalate	213,667	µg/L	Discharge Conc < TQL
Dimethyl Phthalate	133,542	µg/L	Discharge Conc < TQL
Di-n-Butyl Phthalate	5,876	µg/L	Discharge Conc < TQL
2,4-Dinitrotoluene	111	µg/L	Discharge Conc < TQL
2,6-Dinitrotoluene	111	µg/L	Discharge Conc < TQL
Di-n-Octyl Phthalate	N/A	N/A	No WQS
1,2-Diphenylhydrazine	66.9	µg/L	Discharge Conc < TQL
Fluoranthene	10,683	µg/L	Discharge Conc < TQL
Fluorene	28,547	µg/L	Discharge Conc < TQL
Hexachlorobenzene	0.18	µg/L	Discharge Conc < TQL
Hexachlorobutadiene	22.3	µg/L	Discharge Conc < TQL
Hexachlorocyclopentadiene	267	µg/L	Discharge Conc < TQL
Hexachloroethane	223	µg/L	Discharge Conc < TQL
Indeno(1,2,3-cd)Pyrene	2.23	µg/L	Discharge Conc < TQL
Isophorone	19,412	µg/L	Discharge Conc < TQL
Naphthalene	7,478	µg/L	Discharge Conc < TQL
Nitrobenzene	5,709	µg/L	Discharge Conc < TQL
n-Nitrosodimethylamine	1.56	µg/L	Discharge Conc < TQL
n-Nitrosodi-n-Propylamine	11.1	µg/L	Discharge Conc < TQL
n-Nitrosodiphenylamine	7,354	µg/L	Discharge Conc < TQL
Phenanthrene	267	µg/L	Discharge Conc < TQL

Pyrene	11,419	µg/L	Discharge Conc < TQL
1,2,4-Trichlorobenzene	40.0	µg/L	Discharge Conc < TQL

Attachment 4
DEP TRC CALC

TRC_CALC

TRC EVALUATION					
Input appropriate values in A3:A9 and D3:D9					
2390	= Q stream (cfs)		0.5	= CV Daily	
1.63	= Q discharge (MGD)		0.5	= CV Hourly	
30	= no. samples		1	= 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)	
0	= % Factor of Safety (FOS)			= Decay Coefficient (K)	
Source	Reference	AFC Calculations		Reference	CFC Calculations
TRC	1.3.2.iii	WLA_afc = 302.369		1.3.2.iii	WLA_cfc = 294.779
PENTOXSD TRG	5.1a	LTAMULT_afc = 0.373		5.1c	LTAMULT_cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc = 112.670		5.1d	LTA_cfc = 171.371
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	$(.019/e^{-k \cdot AFC_tc}) + [(AFC_Yc \cdot Qs \cdot .019 / Qd \cdot e^{-k \cdot AFC_tc}) \dots + Xd + (AFC_Yc \cdot Qs \cdot Xs / Qd)] \cdot (1 - FOS / 100)$				
LTAMULT_afc	$EXP((0.5 \cdot LN(cvh^2 + 1)) - 2.326 \cdot LN(cvh^2 + 1)^{0.5})$				
LTA_afc	$wla_afc \cdot LTAMULT_afc$				
WLA_cfc	$(.011/e^{-k \cdot CFC_tc}) + [(CFC_Yc \cdot Qs \cdot .011 / Qd \cdot e^{-k \cdot CFC_tc}) \dots + Xd + (CFC_Yc \cdot Qs \cdot Xs / Qd)] \cdot (1 - FOS / 100)$				
LTAMULT_cfc	$EXP((0.5 \cdot LN(cvd^2 / no_samples + 1)) - 2.326 \cdot LN(cvd^2 / no_samples + 1)^{0.5})$				
LTA_cfc	$wla_cfc \cdot LTAMULT_cfc$				
AML_MULT	$EXP(2.326 \cdot LN((cvd^2 / no_samples + 1)^{0.5}) - 0.5 \cdot LN(cvd^2 / no_samples + 1))$				
AVG MON LIMIT	$MIN(BAT_BPJ, MIN(LTA_afc, LTA_cfc) \cdot AML_MULT)$				
INST MAX LIMIT	$1.5 \cdot ((av_mon_limit / AML_MULT) / LTAMULT_afc)$				

Attachment

DEP WET Analysis Spreadsheet

DEP Whole Effluent Toxicity (WET) Analysis Spreadsheet					
Type of Test	Chronic		Facility Name		
Species Tested	Ceriodaphnia		Oakmont Borough WWTP		
Endpoint	1.63				
TIWC (decimal)	0.02		Permit No.		
No. Per Replicate	1		PA0026841		
TST b value	0.75				
TST alpha value	0.2				
Test Completion Date			Test Completion Date		
Replicate	6/28/2021		Replicate	9/5/2022	
No.	Control	TIWC	No.	Control	TIWC
1	1	1	1	1	1
2	1	1	2	1	1
3	1	1	3	1	1
4	1	1	4	1	1
5	1	1	5	1	1
6	1	1	6	1	1
7	1	1	7	1	1
8	1	1	8	1	1
9	1	1	9	1	1
10	1	1	10	1	1
11			11		
12			12		
13			13		
14			14		
15			15		
Mean	1.000	1.000	Mean	1.000	1.000
Std Dev.	0.000	0.000	Std Dev.	0.000	0.000
# Replicates	10	10	# Replicates	10	10
T-Test Result			T-Test Result		
Deg. of Freedom			Deg. of Freedom		
Critical T Value			Critical T Value		
Pass or Fail	PASS		Pass or Fail	PASS	
Test Completion Date			Test Completion Date		
Replicate	10/2/2023		Replicate	7/1/2024	
No.	Control	TIWC	No.	Control	TIWC
1	1	1	1	1	1
2	1	1	2	1	1
3	1	1	3	1	1
4	1	1	4	1	1
5	1	1	5	1	1
6	1	1	6	1	1
7	1	1	7	1	1
8	1	1	8	1	1
9	1	1	9	1	1
10	1	1	10	1	1
11			11		
12			12		
13			13		
14			14		
15			15		
Mean	1.000	1.000	Mean	1.000	1.000
Std Dev.	0.000	0.000	Std Dev.	0.000	0.000
# Replicates	10	10	# Replicates	10	10
T-Test Result			T-Test Result		
Deg. of Freedom			Deg. of Freedom		
Critical T Value			Critical T Value		
Pass or Fail	PASS		Pass or Fail	PASS	

DEP Whole Effluent Toxicity (WET) Analysis Spreadsheet					
Type of Test	Chronic		Facility Name		
Species Tested	Ceriodaphnia		Oakmont Borough WWTP		
Endpoint	1.63		Permit No.		
TIWC (decimal)	0.02		PA0026841		
No. Per Replicate	1				
TST b value	0.75				
TST alpha value	0.2				
Test Completion Date: 6/28/2021					
Replicate No.	Control	TIWC	Replicate No.	Control	TIWC
1	23	28	1	24	32
2	23	25	2	26	33
3	25	25	3	24	35
4	28	25	4	20	14
5	20	29	5	21	26
6	23	24	6	16	28
7	22	31	7	27	28
8	26	33	8	14	27
9	29	31	9	26	33
10	24	21	10	25	27
11			11		
12			12		
13			13		
14			14		
15			15		
Mean	24.300	27.200	Mean	22.300	28.300
Std Dev.	2.751	3.795	Std Dev.	4.448	5.926
# Replicates	10	10	# Replicates	10	10
T-Test Result	6.5709		T-Test Result	5.3821	
Deg. of Freedom	15		Deg. of Freedom	15	
Critical T Value	0.8662		Critical T Value	0.8662	
Pass or Fail	PASS		Pass or Fail	PASS	
Test Completion Date: 10/2/2023					
Replicate No.	Control	TIWC	Replicate No.	Control	TIWC
1	31	25	1	18	26
2	23	19	2	24	30
3	25	16	3	20	20
4	19	29	4	18	19
5	22	18	5	21	16
6	18	15	6	21	26
7	24	21	7	26	22
8	21	26	8	18	21
9	20	15	9	20	24
10	26	23	10	20	18
11			11		
12			12		
13			13		
14			14		
15			15		
Mean	22.900	20.700	Mean	20.600	22.200
Std Dev.	3.843	4.923	Std Dev.	2.633	4.290
# Replicates	10	10	# Replicates	10	10
T-Test Result	1.9541		T-Test Result	4.5201	
Deg. of Freedom	15		Deg. of Freedom	14	
Critical T Value	0.8662		Critical T Value	0.8681	
Pass or Fail	PASS		Pass or Fail	PASS	
Test Completion Date: 7/1/2024					
Replicate No.	Control	TIWC	Replicate No.	Control	TIWC
1			1		
2			2		
3			3		
4			4		
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
11			11		
12			12		
13			13		
14			14		
15			15		

DEP Whole Effluent Toxicity (WET) Analysis Spreadsheet					
Type of Test	Chronic		Facility Name		
Species Tested	Pimephales		Oakmont Borough WWTP		
Endpoint	1.63				
TIWC (decimal)	0.02		Permit No.		
No. Per Replicate	10		PA0026841		
TST b value	0.75				
TST alpha value	0.25				
Test Completion Date					
Replicate	6/29/2021		Replicate	9/6/2022	
No.	Control	TIWC	No.	Control	TIWC
1	0.7	1	1	1	1
2	0.9	0.8	2	1	1
3	0.9	1	3	1	1
4	1	1	4	1	1
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
11			11		
12			12		
13			13		
14			14		
15			15		
Mean	0.875	0.950	Mean	1.000	1.000
Std Dev.	0.126	0.100	Std Dev.	0.000	0.000
# Replicates	4	4	# Replicates	4	4
T-Test Result	4.2727		T-Test Result		
Deg. of Freedom	5		Deg. of Freedom		
Critical T Value	0.7267		Critical T Value		
Pass or Fail	PASS		Pass or Fail	PASS	
Test Completion Date					
Replicate	10/3/2023		Replicate	7/2/2024	
No.	Control	TIWC	No.	Control	TIWC
1	1	1	1	1	1
2	1	1	2	1	1
3	0.9	1	3	1	1
4	1	1	4	1	1
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
11			11		
12			12		
13			13		
14			14		
15			15		
Mean	0.975	1.000	Mean	1.000	1.000
Std Dev.	0.050	0.000	Std Dev.	0.000	0.000
# Replicates	4	4	# Replicates	4	4
T-Test Result	14.3333		T-Test Result		
Deg. of Freedom	3		Deg. of Freedom		
Critical T Value	0.7649		Critical T Value		
Pass or Fail	PASS		Pass or Fail	PASS	

DEP Whole Effluent Toxicity (WET) Analysis Spreadsheet					
Type of Test	Chronic		Facility Name		
Species Tested	Pimephales		Oakmont Borough WWTP		
Endpoint	1.63		Permit No.		
TIWC (decimal)	0.02		PA0026841		
No. Per Replicate	10				
TST b value	0.75				
TST alpha value	0.25				
Test Completion Date			Test Completion Date		
Replicate	6/29/2021		Replicate	9/5/2022	
No.	Control	TIWC	No.	Control	TIWC
1	0.286	0.422	1	0.368	0.431
2	0.308	0.325	2	0.335	0.393
3	0.339	0.459	3	0.384	0.363
4	0.377	0.47	4	0.408	0.378
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
11			11		
12			12		
13			13		
14			14		
15			15		
Mean	0.328	0.419	Mean	0.374	0.391
Std Dev.	0.040	0.066	Std Dev.	0.031	0.029
# Replicates	4	4	# Replicates	4	4
T-Test Result	4.7961		T-Test Result	5.9735	
Deg. of Freedom	4		Deg. of Freedom	5	
Critical T Value	0.7407		Critical T Value	0.7267	
Pass or Fail	PASS		Pass or Fail	PASS	
Test Completion Date			Test Completion Date		
Replicate	10/3/2023		Replicate	7/2/2024	
No.	Control	TIWC	No.	Control	TIWC
1	0.382	0.42	1	0.378	0.403
2	0.365	0.411	2	0.412	0.409
3	0.366	0.377	3	0.424	0.42
4	0.421	0.469	4	0.346	0.391
5			5		
6			6		
7			7		
8			8		
9			9		
10			10		
11			11		
12			12		
13			13		
14			14		
15			15		
Mean	0.384	0.419	Mean	0.390	0.406
Std Dev.	0.026	0.038	Std Dev.	0.035	0.012
# Replicates	4	4	# Replicates	4	4
T-Test Result	6.1561		T-Test Result	7.7976	
Deg. of Freedom	5		Deg. of Freedom	5	
Critical T Value	0.7267		Critical T Value	0.7267	
Pass or Fail	PASS		Pass or Fail	PASS	

WET Summary and Evaluation

Facility Name	Oakmont Borough WWTP
Permit No.	PA0026841
Design Flow (MGD)	1.63
Q₇₋₁₀ Flow (cfs)	2390
PMF_a	0.087
PMF_c	0.602

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Ceriodaphnia	1.63	6/28/21	9/5/22	10/2/23	7/1/24
		PASS	PASS	PASS	PASS

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Ceriodaphnia	1.63	6/28/21	9/5/22	10/2/23	7/1/24
		PASS	PASS	PASS	PASS

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Pimephales	1.63	6/29/21	9/6/22	10/3/23	7/2/24
		PASS	PASS	PASS	PASS

Species	Endpoint	Test Results (Pass/Fail)			
		Test Date	Test Date	Test Date	Test Date
Pimephales	1.63	6/29/21	9/5/22	10/3/23	7/2/24
		PASS	PASS	PASS	PASS

Reasonable Potential? NO

Permit Recommendations

Test Type **Chronic**
 TIWC **1** % Effluent
 Dilution Series **1, 2, 30, 60, 100** % Effluent
 Permit Limit **None**
 Permit Limit Species