

Application Type Renewal  
Facility Type Municipal  
Major / Minor Major

## NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0036293  
APS ID 1092845  
Authorization ID 1447332

### Applicant and Facility Information

Applicant Name <u>Robinson Township Municipal Authority Allegheny County</u>	Facility Name <u>Campbells Run STP</u>
Applicant Address <u>4200 Campbells Run Road</u> <u>Pittsburgh, PA 15205-1306</u>	Facility Address <u>4192 Campbells Run Road</u> <u>Pittsburgh, PA 15205-1304</u>
Applicant Contact <u>Frank Manslow</u>	Facility Contact <u>Frank Manslow</u>
Applicant Phone <u>(412) 923-2333</u>	Facility Phone <u>(412) 923-2333</u>
Client ID <u>74269</u>	Site ID <u>263698</u>
Ch 94 Load Status <u>Not Overloaded</u>	Municipality <u>Robinson Township</u>
Connection Status <u>No Limitations</u>	County <u>Allegheny</u>
Date Application Received <u>July 14, 2023</u>	EPA Waived? <u>No</u>
Date Application Accepted <u>July 17, 2023</u>	If No, Reason <u>Major Facility</u>
Purpose of Application <u>Renewal of Sewage NPDES Major Permit .</u>	

### Summary of Review

Robinson Township Municipal Authority (RTMA) in Allegheny County has applied for renewal of the Campbells Run STP.

Sewage from the plant is treated by comminutor, extended aeration, settling, and chlorine disinfection. The facility adds caustic soda for pH control to reduce formation of Dichlorobromomethane.

The Act 14 Notification was provided in the June 20, 2023 letters to Allegheny County and Robinson Township.



There are several changes to the NPDES Permit for this renewal. The majority of changes are a result of the change in the receiving waters. Outfall 001 of Campbells Run STP discharges to Campbells Run, however previous authorizations have used Chartiers Creek as the point of first use. During review of this NPDES application it was determined that this was no longer appropriate due to Campbells Run having an aquatic life use. The changes to the NPDES Permits include a number of new more stringent limitations for conventional, nonconventional, and toxic parameters.

#### Sludge use and disposal description and location

Sludge is hauled to Allegheny County Sanitary Authority (ALCOSAN).

#### Chapter 94 Status

The most recent Chapter 94 Report shows no existing or projected overloads within the next 5 years. This projection was made for both Organic and Hydraulic loading to the plant.

Approve	Deny	Signatures	Date
x		 Jack Price / Environmental Engineering Specialist	March 24, 2025
x		 Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineering Manager	March 25, 2025

### Summary of Review

#### Industrial Users

The permittee has identified 5 industrial users contributing flow to the STP. None of the industrial contributors have been identified as the source of problems at the treatment plant.

An EPA Approved pretreatment program is not required for this POTW under 5 MGD.

#### WET Testing Summary

RTMA submitted WET Tests with the 16 passing endpoints at the TIWC specified in the previous permit. A new TIWC was determined based on the change to receiving waters. The new TIWC is 98% and will have a dilution series of 25%, 49%, 73%, 98%, 100%.

#### 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)	1.0
Latitude	40° 25' 32.00"	Longitude	-80° 6' 43.00"
Quad Name	Pittsburgh West	Quad Code	40080D1
Wastewater Description:		Sewage Effluent	
Receiving Waters	Campbells Run (WWF)	Stream Code	36786
NHD Com ID	99687232	RMI	1.96
Drainage Area	2.69 mi <sup>2</sup>	Yield (cfs/mi <sup>2</sup> )	0.00989
Q <sub>7-10</sub> Flow (cfs)	0.0266	Q <sub>7-10</sub> Basis	USGS StreamStats
Elevation (ft)	891	Slope (ft/ft)	0.0140
Watershed No.	20-F	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, NUTRIENTS, TOTAL SUSPENDED SOLIDS (TSS)		
Source(s) of Impairment	ACID MINE DRAINAGE, ON-SITE TREATMENT SYSTEMS (SEPTIC SYSTEMS AND SIMILAR DECENTRALIZED SYSTEMS), URBAN RUNOFF/STORM SEWERS		
TMDL Status	Final, Tentative	Name	Cambells Run, Chartiers Creek
Background/Ambient Data		Data Source	
pH (SU)			
Temperature (°F)			
Hardness (mg/L)			
Other:			
Nearest Downstream Public Water Supply Intake	West View Water Authority (PWSID 5020043) 40 MGD		
PWS Waters	Ohio River 32317	Flow at Intake (cfs)	4730 (Source: Army Corps)
PWS RMI	35.37	Distance from Outfall (mi)	5 Linear Miles 12 River Miles

Changes Since Last Permit Issuance:

On November 20, 2012, Biologist Supervisor Rick Spear performed an Instream Comprehensive Evaluation (ICE) on Campbell's Run. He determined that Campbells Run is impaired but does have an aquatic life use. Reports for the point of First Use are included in Attachment 2. Based on the information gathered in 2012, Mr. Spear determined that the point of first use is indeed Campbell's Run and not Chartiers Creek. The previous permit was issued with effluent limitations based on flow at Chartiers Creek. This error has been corrected in this authorization; the correction has resulted in numerous more stringent limits due to the lower assimilative capacity of a much smaller stream. A full discussion of the changes to effluent limitations resulting from this action are described in the Development of Effluent Limitations Section.

Treatment Facility Summary				
<b>Treatment Facility Name:</b> Campbells Run STP				
WQM Permits to Construct and Modify the Campbells Run STP				
<b>WQM Permit No.</b>	<b>Issuance Date</b>	<b>Purpose</b>		
0270464	02/04/1972	Original Construction Permit		
0270464 A-1	10/27/2015	New fine bubble diffusers, new curtain wall in aeration tanks.		
0270464 A-2	09/08/2016	New sludge holding tank, new blowers, new wastewater decant pump.		
0270464 A-3	03/24/2025	New caustic soda feed and storage system.		
 <b>Treatment Description:</b>				
The Campbells Run STP consists of a comminutor for influent to the plant, two parallel extended aeration tanks, two parallel settling tanks, and two parallel chlorine contact tanks. Waste sludge is held in sludge holding tanks for hauling to Alcosan's STP.				
<b>Waste Type</b>	<b>Degree of Treatment</b>	<b>Process Type</b>	<b>Disinfection</b>	<b>Avg Annual Flow (MGD)</b>
Sewage	Tertiary	Extended Aeration With Solids Removal	Gas Chlorine	1.0
<b>Hydraulic Capacity (MGD)</b>	<b>Organic Capacity (lbs/day)</b>	<b>Load Status</b>	<b>Biosolids Treatment</b>	<b>Biosolids Use/Disposal</b>
1.0	1,700	Not Overloaded	Held for hauling to Alcosan STP	

Changes Since Last Permit Issuance:

WQM Permit No. 0270464 A-3 was issued March 24, 2025. The WQM amendment was approved for the construction of a caustic soda feed and storage system to address Dichlorobromomethane effluent exceedances.

**Industrial Users**

The table below summarizes industrial users served by the facility:

User Name	Activity Description	Wastewater Description	SIU/NSCIU	Non-Sanitary Flow	Identified as Source of Issues at Plant?	Notes
Covestro	R&D Lab	NCCW & Nonhazardous lab wash water.	No/No	5,600 GPD	No	None
Deep Valley Coal & Disposal	C&D Landfill	Nonhazardous C&D Landfill.	Yes/No	8,500 GPD	No	Part 445 Category
Vesuvius Crucible	R&D Lab	NCCW & Lab sinks with interceptor equipment.	No/No	265 GPD	No	None
Industrial Scientific	Gas Detector Equipment Manufacturing, R&D Lab	NCCW, Lab equipment wash water	No/No	<1 GPD	No	None
HVL Inc.	Supplement Manufacture	Capsule die wash water	No/No	1,800 GPD	No	None

**Facility:** Campbells Run STP

**NPDES Permit No.:** PA0036293

**Compliance Review Period:** 03/01/2020-03/01/2025

**Inspection Summary:**

INSP ID	INSPECTED DATE	INSP TYPE	INSPECTION RESULT DESC	INSPECTOR
3376584	06/09/2022	Compliance Evaluation	Violation(s) Noted	BUTTACAVOLI, BRIAN
3212016	06/23/2021	Compliance Evaluation	Violation(s) Noted	BUTTACAVOLI, BRIAN
3725723	02/14/2024	Compliance Evaluation	Violation(s) Noted	WATKINS, EDWIN
3548242	04/13/2023	Compliance Evaluation	Violation(s) Noted	WATKINS, EDWIN

**Violation Summary:**

VIOL ID	VIOLATION DATE	VIOLATION TYPE	VIOLATION TYPE DESC	RESOLVED DATE
921709	06/23/2021	92A.44	NPDES - Violation of effluent limits in Part A of permit	08/24/2021
921710	06/23/2021	92A.41(A)5	NPDES - Failure to properly operate and maintain all facilities which are installed or used by the permittee to achieve compliance	08/24/2021
958681	06/09/2022	92A.44	NPDES - Violation of effluent limits in Part A of permit	04/13/2023
993504	04/13/2023	92A.44	NPDES - Violation of effluent limits in Part A of permit	01/26/2024
8178882	02/14/2024	92A.44	NPDES - Violation of effluent limits in Part A of permit	

**Open Violations by Client ID:**

CLIENT ID	INSP ID	VIOLATION ID	VIOLATION DATE	VIOLATION
74269	3725723	8178882	02/14/2024	NPDES - Violation of effluent limits in Part A of permit
74269	3726104	8178977	03/04/2024	NPDES - Violation of effluent limits in Part A of permit

**NPDES Permit Fact Sheet**  
**Campbells Run STP**  
**Enforcement Summary:**

**NPDES Permit No. PA0036293**

ENF ID	ENF TYPE	ENF CREATION DATE	VIOLATIONS	# OF VIOLATIONS	PENALTY AMOUNT	AMOUNT RECEIVED	ENF FINALSTATUS	ENF CLOSED DATE
415425	NOV	05/03/2023	92A.44	1			Administrative Close Out	03/13/2024
426691	NOV	03/11/2024	92A.44	1			Administrative Close Out	09/13/2024

**Compliance Status:**

Other Comments:

The open violation for Dichlorobromomethane (DCBM) has been a recurring issue caused by insufficient pH control provided by manual addition of Soda Ash powder. In April 2024, the authority hired a consultant for assistance. A permit application for a feed and storage system for Caustic Soda solution was submitted to DEP to reduce DCBM concentration. WQM permit No. 0270464 A-3 was issued 03/24/2025.

The open violation for Fecal Coliform instantaneous maximum was stated to be caused by insufficient chemical feed. The feed rate was increased as a corrective action.

A fact sheet addendum will be issued with the final permit to update the final compliance status of the facility with open violations to be closed out.

Compliance History

DMR Data for Outfall 001 (from February 1, 2024 to January 31, 2025)

Parameter	JAN-25	DEC-24	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24
Flow (MGD) Average Monthly	0.5654	0.587	0.5424	0.5324	0.5535	0.5773	0.5757	0.5515	0.6693	0.8274	0.6468	0.6212
Flow (MGD) Daily Maximum	0.7486	0.778	0.6760	0.584	0.776	0.859	0.863	0.696	0.9316	2.078	0.885	0.854
pH (S.U.) Instantaneous Minimum	6.03	6.08	6.48	6.07	6.03	6.06	6.42	6.69	6.53	6.55	6.43	6.24
pH (S.U.) Instantaneous Maximum	7.12	7.02	7.14	7.44	7.03	7.12	7.32	7.39	7.22	7.08	7.2	6.97
DO (mg/L) Instantaneous Minimum	7.0	7.3	7.3	7.0	7.0	6.5	6.5	6.8	7.0	7.0	7.0	7.0
TRC (mg/L) Average Monthly	0.3	0.4	0.3	0.4	0.3	0.3	0.4	0.30	0.4	0.3	0.3	0.4
TRC (mg/L) Instantaneous Maximum	0.55	0.68	0.7	0.59	0.49	0.53	0.84	0.51	0.55	0.46	0.47	0.63
CBOD <sub>5</sub> (lbs/day) Average Monthly	< 14.0	< 23.0	< 14.0	< 13.0	< 15.0	< 16.0	< 23.0	< 34.0	< 18.0	< 20.0	< 17.0	< 16.0
CBOD <sub>5</sub> (lbs/day) Weekly Average	< 39.0	< 27.0	< 15.0	< 14.0	< 18.0	17.0	30.0	45.0	21.0	< 25.0	< 19.0	< 20.0
CBOD <sub>5</sub> (mg/L) Average Monthly	< 3.0	< 4.0	< 3.0	< 3.0	< 3.0	< 3.0	< 5.0	< 7.0	< 3.0	< 3.0	< 3.0	< 3.0
CBOD <sub>5</sub> (mg/L) Weekly Average	< 8.1	< 4.6	< 3.0	< 3.2	< 3.7	4.0	5.6	10.5	4.2	< 3.4	< 3.3	< 3.0
BOD <sub>5</sub> (lbs/day) Raw Sewage Influent Average Monthly	794	1121	729	1008	739	740	448	510	678	773	672	797
BOD <sub>5</sub> (lbs/day) Raw Sewage Influent Daily Maximum	1144	2401	968	1475	1285	1521	586	659	968	1187	845	982
BOD <sub>5</sub> (mg/L) Raw Sewage Influent Average Monthly	173	217	160	229	159	155	92	108	133	129	121	155
TSS (lbs/day) Average Monthly	< 17.2	< 17.2	< 17.9	< 13.7	< 14.2	< 16.9	< 16.9	< 27.9	< 19.0	< 19.4	< 17.2	< 16.4



**NPDES Permit Fact Sheet**  
**Campbells Run STP**

**NPDES Permit No. PA0036293**

TSS (lbs/day) Raw Sewage Influent Average Monthly	787	927	707	711	723	790	747	467	477	729	686	703
TSS (lbs/day) Raw Sewage Influent Daily Maximum	1161	1753	1171	1060	933	1380	1660	728	910	1559	1006	1042
TSS (lbs/day) Weekly Average	22.2	< 20.0	< 25.6	< 15.4	< 15.9	< 21.1	< 19.5	57.9	< 24.4	< 25.1	< 19.2	< 19.7
TSS (mg/L) Average Monthly	< 3.8	< 3.4	< 4.0	< 3.1	< 3.0	< 3.4	< 3.4	< 6.0	< 3.6	< 3.0	< 3.1	< 3.1
TSS (mg/L) Raw Sewage Influent Average Monthly	172	183	156	162	155	161	154	100	92	114	125	137
TSS (mg/L) Weekly Average	4.5	< 3.5	< 6.5	< 3.5	< 3.0	4.0	< 4.5	12.5	< 4.5	< 3.0	< 3.5	< 3.5
Fecal Coliform (No./100 ml) Geometric Mean	< 4	< 3	< 5	14	< 6	< 3	< 2	< 21	< 3	< 24	< 5	< 2
Fecal Coliform (No./100 ml) Instantaneous Maximum	14	78	457	205	111	94	28	2420	27	727	105	96
Total Nitrogen (lbs/day) Average Monthly	157	132	152.0	145	155	151	111	121	92	136	99	104
Total Nitrogen (mg/L) Average Monthly	34.2	26.7	33.3	33	33	31.2	22.7	25.9	17.5	21.33	17.9	20.1
Ammonia- Nitrogen(lbs/day) Average Monthly	< 2.0	< 3.0	< 2.0	< 0.4	< 0.5	< 1.0	61	89	19	< 3	< 9	13
Ammonia- Nitrogen(mg/L) Average Monthly	< 0.4	< 0.51	< 0.36	< 0.1	< 0.1	< 0.23	12.85	19.16	3.69	0.43	< 1.61	2.49
Total Phosphorus (lbs/day) Average Monthly	14	15	18	16	16	20.0	18	13	18	14	14	16
Total Phosphorus (mg/L) Average Monthly	2.97	2.95	3.96	3.65	3.46	3.98	3.48	2.89	3.34	2.29	2.6	3
Total Aluminum (lbs/day) Average Quarterly		< 0.4			< 0.5			< 0.6			< 18	
Total Aluminum (mg/L) Average Quarterly		< 0.1			< 0.1			< 0.1			< 0.1	

**NPDES Permit Fact Sheet  
Campbells Run STP**

**NPDES Permit No. PA0036293**

Total Iron (lbs/day) Average Quarterly		0.2			0.2			0.8			0.2	
Total Iron (mg/L) Average Quarterly		0.04			0.04			0.13			0.04	
Total Manganese (lbs/day) Average Quarterly		0.2			< 0.09			0.5			< 0.1	
Total Manganese (mg/L) Average Quarterly		0.04			< 0.02			0.08			< 0.02	
Dichlorobromo- methane (µg/L) Average Quarterly		1.560			1.500			8.170			4.500	

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

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Fecal Coliform	06/30/24	IMAX	2420	No./100 ml	1000	No./100 ml
Dichlorobromo-methane	12/31/24	Avg Qrtly	1.560	µg/L	1.144	µg/L
Dichlorobromo-methane	09/30/24	Avg Qrtly	1.500	µg/L	1.144	µg/L
Dichlorobromo-methane	03/31/24	Avg Qrtly	4.500	µg/L	1.144	µg/L
Dichlorobromo-methane	06/30/24	Avg Qrtly	8.170	µg/L	1.144	µg/L

**Development of Effluent Limitations**

<b>Outfall No.</b>	001	<b>Design Flow (MGD)</b>	1.0
<b>Latitude</b>	40° 25' 32.00"	<b>Longitude</b>	-80° 6' 43.00"
<b>Wastewater Description:</b> Sewage Effluent			

**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 <sub>5</sub>	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)
<i>E. Coli</i>	Report	Average Monthly	-	92a.61

Comments:

The proposed discharge was evaluated using WQM 7.0 to evaluate CBOD<sub>5</sub>, Ammonia-Nitrogen, and Dissolved Oxygen Parameters; the discharge was also evaluated using TRC\_Calc for Total Residual Chlorine.

The WQM 7.0 model determined that TBELs would be sufficiently protective for CBOD<sub>5</sub>. The model also determined that WQBELs would be required for Ammonia-Nitrogen. A printout of the WQM 7.0 Report for Warm and Cold conditions may be found in Attachment 3.

**Water Quality-Based Limitations**

The following limitations and monitoring requirements were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
Dissolved Oxygen	4.0 (min)	Average Monthly	WQM 7.0 Version 1.1
Ammonia-Nitrogen (Warm Period)	1.95	Average Monthly	WQM 7.0 Version 1.1
Ammonia-Nitrogen (Cold Period)	3.01	Average Monthly	WQM 7.0 Version 1.1
Total Residual Chlorine	0.011	Average Monthly	TRC_Calc
Total Boron (µg/L)	Report	Average Monthly	Toxics Management Spreadsheet 1.4
Total Cadmium (µg/L)	Report	Average Monthly	Toxics Management Spreadsheet 1.4
Total Copper (µg/L)	21.1	Average Monthly	Toxics Management Spreadsheet 1.4
Free Cyanide (µg/L)	4.07	Average Monthly	Toxics Management Spreadsheet 1.4
Dissolved Iron (µg/L)	Report	Average Monthly	Toxics Management Spreadsheet 1.4
Total Lead (µg/L)	Report	Average Monthly	Toxics Management Spreadsheet 1.4
Total Zinc (µg/L)	Report	Average Monthly	Toxics Management Spreadsheet 1.4
Chlorodibromomethane (µg/L)	0.96	Average Monthly	Toxics Management Spreadsheet 1.4
Chloroform (µg/L)	5.8	Average Monthly	Toxics Management Spreadsheet 1.4
Dichlorobromomethane (µg/L)	1.14	Average Monthly	Toxics Management Spreadsheet 1.4

**Comments:**

Analyses for WQBELs were performed using the Q7-10 flow. The flow was obtained via USGS StreamStats. The USGS StreamStats Report is located in Attachment 1.

As discussed in the section on Receiving Waters, Chartiers Creek is no longer considered as the point of first use for the discharge. Water quality models for conventional and toxic parameters were performed for Campbells Run, the actual receiving waters.

WQBELs for Toxic Parameters were determined in a Reasonable Potential (RP) analysis. The RP Analysis is described in detail in the Reasonable Potential Analysis section.

eDMR Data and Renewal Testing indicate that the permittee will not be able to immediately comply reliably with new TRC limits or the new toxics limits. A schedule of compliance is included for the permittee to reach full compliance with final effluent limitations. Per Section IV.G.3 of the SOP for Individual NPDES Sewage Applications the permittee will be given up to three years to reach compliance with final effluent limitations. This period of 3 years includes time to plan and execute modifications to treatment facilities, operations, or other measures, or to conduct source review and control measures.

Dichlorobromomethane limits are already in effect from the previous permit. The Dichlorobromomethane limit will start at the effective date of the permit.

For sampling of VOCs Tables 6-3 and 6-4 of the Permit Writer's Manual specify the following:

Four grab samples should be collected during actual hours of discharge over a 24-hour period and need not be flow proportioned. The four samples will be combined at the laboratory immediately before analysis. Only one analysis is required, not four.

**Reasonable Potential Analysis**

The SOP for Sewage Effluent Limits (DEP Document No. BCW-PMT-033, Revised February 5, 2024), Section II.F. and the SOP for Toxic Pollutants (DEP Document No. BCW-PMT-037) instruct the permit manager to evaluate the reasonable potential for toxic pollutants to cause an excursion above water quality standards based on the available data. The permit application submitted to DEP contained effluent testing data for the facility. The outfall is to Campbells Run. A toxics Reasonable Potential (RP) Analysis was performed in TMS based on the effluent testing submitted in the renewal application and follow up information submitted in the pre-draft survey.

The application instructions for major NPDES permits states that J-values may be used when reporting parameter concentrations in renewal testing. The lab sheets documenting Reporting Limit, Chain of Custody information, J-Values, and other relevant information are included in Attachment 4. Where less than 10 samples were available, the maximum of the reported concentrations was used. The initial TMS analysis recommended new more stringent limits for the following:

- Total Copper
- Free Cyanide
- Chlorodibromomethane
- Chloroform
- Dichlorobromomethane

The applicant was informed of these recommendations and responded to the Pre-Draft Survey with a plan to sample effluent to determine if the long-term average concentration is protective of the most stringent water quality criteria as modeled by TMS. The long-term average of the renewal testing and the additional samples was determined using the ToxConc Spreadsheet. The ToxConc values for long-term average and coefficient of variation were then used in the TMS Model. The long-term average concentrations of these parameters still require establishment of WQBELs. The Pre-Draft Survey response, summarized results from additional testing, and the ToxConc report are included in Attachment 5. The TMS Report is included in Attachment 6.

In addition to effluent limitations, TMS recommended monitor and report requirements for the following:

- Total Boron
- Total Cadmium
- Dissolved Iron
- Total Lead
- Total Zinc

According to the SOP for WQBELs, monitoring is required when the concentration detected is between 10% and 50% of the WQBELs. Monitoring frequency is determined from Table 6-3 of the PADEP's Permit Writer's Manual and the SOP for Individual Sewage. Quarterly monitoring is established to provide sufficient data for determining the long-term average of these parameters.

The monitoring requirement may be revisited if the record of effluent data demonstrates the concentration of these parameters is no longer within this range without treatment. Proposed relaxation of monitoring requirements must fall under the backsliding exceptions under Section 402(o) of the Clean Water Act.

### **Chartiers Watershed TMDL-Acid Mine Drainage**

Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency's Water Quality Planning and Management Regulation (codified at Title 40 of the Code of Federal Regulations Part 130) requires states to develop a TMDL for impaired water quality criteria for the pollutant. TMDLs also provide a scientific basis for States to establish water-quality based controls for reducing pollution to 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 Chartiers Watershed, are included in the state's 1996 and 1998 Section 303(d) lists because of pH and metal impairments including aluminum, iron, and manganese. The summary from the TMDL is included in Attachment 10.

This facility discharges into the Chartiers Watershed, for which a TMDL was finalized in April 2003. The TMDL addresses aluminum, iron, and manganese impairment due to acid mine drainage.

The previous permit imposed monitoring for aluminum, iron, and manganese. The maximum reported value for the last 5 years of eDMR data is reported below along with the in-stream water quality criteria for each pollutant of concern.

Parameter	Highest Reported Value (mg/l)	Criteria (mg/L)
Aluminum, Total	<0.1	0.75
Iron, Total	0.13	1.5
Manganese, Total	0.08	1.0

In accordance with 25 PA Code §92a.61, a quarterly monitoring requirement for iron, manganese, and aluminum will again be imposed in the permit to assure that this sewage discharge is not contributing to stream impairment.

### **Chartiers Creek TMDL-PCBs and Chlordane**

Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency's Water Quality Planning and Management Regulation (codified at Title 40 of the Code of Federal Regulations Part 130) requires states to develop a TMDL for impaired water quality criteria for the pollutant. TMDLs also provide a scientific basis for States to establish water-quality based controls for reducing pollution to both point and non-point sources in order to restore and maintain the quality of the state's water resources (USEPA 1991a). Chartiers Creek was included in the state's 1996 Section 303(d) list because of Polychlorinated Biphenyls (PCBs) and Chlordane which are anticipated to be legacy contaminants as well as a current Industrial Discharger. The summary from the TMDL is included in Attachment 11.

In accordance with 40 CFR § 122.44(d)(1)(vii)(B), when developing WQBELs, the permitting authority shall ensure that effluent limits developed to protect a narrative water quality criterion, a numeric water quality criterion, or both, are consistent with the assumptions and requirements of any available wasteload allocation (WLA) for the discharge prepared by the State and approved by the EPA pursuant to 40 CFR § 130.7.

This facility discharges to Campbells Run upstream of Chartiers Creek for which a TMDL, Total Maximum Daily Load – PCB and Chlordane – Chartiers Creek, was finalized on March 8, 2001. According to the TMDL, the use of both PCB and Chlordane has been banned in the United States, so there will be no new point sources to which controls can be applied.

PCB and Chlordane present in the main stem of Chartiers Creek are believed to reside primarily in the sediment due to historical use and improper disposal practices. Long-term natural attenuation coupled with the implementation on the existing source identified in the TMDL is expected to reduce PCB and Chlordane contamination from the Chartiers Creek sediments over time. Due to this and the fact that the TMDL is currently monitoring the levels of PCBs and chlordane in fish, this facility will not be assigned wasteload allocations. No monitoring of PCBs and Chlordane will also be applied.

### **Best Professional Judgment (BPJ) Limitations**

Comments: N/A

### **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. 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.

*(40 CFR 122.44 (l)(2) Establishing limitations, standards, and other permit conditions., 40 CFR Ch. I (7-1-21 Edition))*

No permits limits have been made less stringent in the renewal draft permit.

### **Chlorine Disinfection**

Disinfection at this facility is provided by gaseous chlorine in two chlorine contact tanks. Per the SOP for effluent limitations and the recommendations from the TRC\_Calc Model, a monthly limit of 0.011 mg/L and an instantaneous maximum of 0.037 mg/L is established. The TRC\_Calc Report is included in Attachment 7.

This new chlorine limit is more stringent than the limit in the existing permit. The eDMR records do not indicate that the permittee can immediately comply with the new limit. A schedule of compliance will therefore be included with the permit.

*(Section I.A, Note 3, SOP for Clean Water Program, Establishing Effluent Limitations for Individual Sewage Permits, Final November 9, 2012, Revised March 24, 2021, Version 1.9 and 25 PA Code 92a.61(b).)*

### **Mass Loadings**

Mass loading limits are applicable for publicly owned treatment works. Current policy requires average monthly mass loading limits be established for CBOD<sub>5</sub>, TSS, and NH<sub>3</sub>-N and average weekly mass loading limits be established for CBOD<sub>5</sub> and TSS. Mass loading for toxic pollutants with concentration limits are established based on Table 5-3 of the Permit Writer's Manual.

Average monthly mass loading limits (lbs./day) are based on the formula: design flow (MGD) x concentration limit (mg/L) x conversion factor (8.34).

*(Section IV, SOP for Clean Water Program, Establishing Effluent Limitations for Individual Sewage Permits, Final November 9, 2012, Revised March 24, 2021, Version 1.9)*

### **Influent Monitoring**

For POTWs with design flows greater than 2,000 GPD, influent BOD<sub>5</sub> and TSS monitoring must be established in the permit, and the monitoring should be consistent with the same frequency and sample type as is used for other effluent parameters. BOD<sub>5</sub> and TSS influent loads will once again be reported for monthly average and daily maximum values in lbs/day and monthly average concentrations in mg/L.

*(Section IV.E.8. SOP – New and Reissuance Individual Sewage NPDES Permits Final November 9, 2012, Revised February 3, 2022, Version 2.0.)*

### Additional Considerations

Monitoring frequencies are generally determined using Table 6-3 of the Permit Writer's Manual, however there are exceptions to this guidance. For new parameters introduced into renewed permits, in which the application manager desires for the permittee to collect data to verify reasonable potential for the subsequent permit application review, the application manager may select any reasonable monitoring frequency that is greater than or equal to once per year.

A monitoring frequency of 1/quarter has been selected for these parameters.

(Section IV.E.5. SOP – New and Reissuance Individual Sewage NPDES Permits Final November 9, 2012, Revised February 3, 2022, Version 2.0.)

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  $\geq$  1MGD.

(Note 12 SOP-Establishing Effluent Limitations for Individual Sewage Permits Final November 9, 2012, Revised February 5, 2024, Version 2.0. and 25 PA Code 92a.61(b).)

Nutrient monitoring is required by the SOP for Effluent Limitations for Individual Sewage Permits. Monitoring is included 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 receiving stream is not listed as impaired for nutrients, therefore at the discretion of the application manager, a monitoring frequency less than the equivalent of conventional pollutants in Table 6-3 of the Permit Writer's Manual has been selected.

(Section I.A, Note 7 & 8, SOP for Clean Water Program, Establishing Effluent Limitations for Individual Sewage Permits, Final November 9, 2012, Revised March 24, 2021, Version 1.9 and 25 PA Code 92a.61(b).)

Annual monitoring for PFAS-related compounds (i.e., PFOA, PFOS, HFPO-DA or PFBS) has been imposed at Outfall 001 to determine if PFAS will be a pollutant of concern. The following footnote is added to Part A Effluent Limitations.

*The permittee may discontinue monitoring for PFOA, PFOS, HFPO-DA, and PFBS if the results in 4 consecutive monitoring periods indicate non-detect results 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 must enter a No Discharge Indicator (NODI) Code of "GG" on DMRs.*

(Section II.G. SOP for Clean Water Program, Establishing Effluent Limitations for Individual Sewage Permits, Final November 9, 2012, Revised February 5, 2024, Version 2.0 and 25 PA Code 92a.61(b).)

Rounding-Off Mathematical Values. Section 5 C.2. of the Permit Writers Manual contains general guidelines for rounding conventional and toxic pollutants, with instructions to round down to the nearest decimal place indicated. Nonconventional pollutants are rounded according to other guidance where applicable.

<u>General Magnitude</u>	<u>Conventional Pollutants</u>	<u>Toxic Pollutants</u>
<0.01	to nearest 0.001	to nearest 0.001
0.01 - 0.1	to nearest 0.01	to nearest 0.01
0.1 - 1.0	to nearest 0.1	to nearest 0.01
1.0 - 10.0	to nearest 0.5	to nearest 0.01
10.0 - 60.0	to nearest 1.0	to nearest 0.01
60.0 or greater	to nearest 5.0	to nearest 0.10

(Department Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits, Updated June 28, 2023 (Document No. 362-0400-001))

Section 2.C of the Permit Writers Manual contains the procedure for converting average monthly effluent limitations to average weekly, maximum daily, and instantaneous maximum effluent limitations. The average monthly limit is multiplied according to the following chart:

<u>Discharge Solution</u>	<u>Parameters</u>	<u>Average Weekly</u>	<u>Maximum Daily</u>	<u>Instantaneous Maximum Multiplier</u>
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Sewage	All	1.5		2.0
Industrial	All		2.0	2.5*

*(Department Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits, Updated June 28, 2023 (Document No. 362-0400-001))*

**Table 5-3: Methods of Expressing Effluent Limits for Sewage Discharges**

Discharge Situation	Mass Loadings (lbs/day)			Concentrations (mg/L)				Limit On Flow <sup>6</sup>
	Average Monthly	Average Weekly <sup>3</sup>	Maximum Daily	Average Monthly	Average Weekly	Maximum Daily	Instant Maximum <sup>4</sup>	
A. <u>POTW DISCHARGES:</u>								
1. Technology Based concentration limits	x	x <sup>3</sup>		x	x <sup>3</sup>		x	Yes
2. Water Quality Based limits	x	x <sup>3</sup>		x	x <sup>3</sup>		x	Yes
3. Water Quality Based limits (Toxics)	x		x	x		x		
B. <u>NON-POTW DISCHARGES:</u>								
1. Technology Based concentration limits	x <sup>5</sup>			x			x	Yes
2. Water Quality based limits	x <sup>5</sup>			x			x	Yes

1. This table is for all pollutants, conventional, non-conventional, toxic and all other pollutants that may be regulated by the permit. (Also refer to the toxics management strategy when specifying toxic WQBELs.)
2. X indicates need for an effluent limitation.
3. Only CBOD and TSS limitation.
4. Only include Instantaneous maximum limitations on the DMR forms if grab a sample is specified in the permit, otherwise do not include instantaneous maximum limitations on the DMR.

Also, the permit page could include the following language for when composite samples are required  
 "Instantaneous maximum limitations are imposed to allow for a grab sample to be collected by the appropriate regulatory agency to determine compliance. The permittee does not have to monitor for the instantaneous maximum limitations, however, if grab samples are collected by the permittee, the results must be reported."

5. This is for all sewage permits with design flow greater than 100,000 gpd since 25 Pa. Code § 94.13 requires flow monitoring.
6. The maximum monthly average flow limitation is the permitted flow that is to be placed in the NPDES permit. Generally, the annual average flow (AAF) is to be used for water quality modeling and to be used to determine the allowable mass loading in NPDES permits (i.e.,  $AAF \times 8.34 \times \text{mg/l} = \text{\#}/\text{day}$ ) (Refer to the Domestic Wastewater Facilities Manual).

(Department Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits, Updated June 28, 2023 (Document No. 362-0400-001))

Monitoring frequency for the proposed effluent limits are based upon Table 6-3, Self-Monitoring Requirements for Sewage Dischargers.

Table 6-3 – Self-Monitoring Requirements for SEWAGE Discharges

Plant Design Flow (MGD)	Flow Monitoring	C-BOD <sub>5</sub> or BOD <sub>5</sub>	Suspended Solids	pH	Fecal Coliform	Chlorine Residual	NH <sub>3</sub> -N	Phosphorus	DO	Toxics
Single Residence (Individual Permit)	2/year by estimate	2/year*	2/year*	1/month*	2/year*	1/month*	2/year*	2/year*	2/year*	N/A
.0005 to .002	weekly, using average pump rate or weir (a)	1/month*	1/month*	daily*	1/month*	daily*	1/month*	1/month*	daily*	N/A
.002 to .01	weekly, using average pump rate or weir (a)	2/month*	2/month*	daily*	2/month*	daily*	2/month*	2/month*	daily*	N/A
0.01 to 0.1	weekly, using average pump rate or weir (a)	2/month*	2/month*	daily*	2/month*	daily*	2/month*	2/month*	Daily*	1/week*
0.1 to 1.0	meter	1/week**	1/week**	daily*	1/week*	daily*	1/week**	1/week**	daily*	1/week****
<b>1.0 to 5.0</b>	<b>meter</b>	<b>2/week***</b>	<b>2/week***</b>	<b>daily*</b>	<b>2/week*</b>	<b>daily*</b>	<b>2/week***</b>	<b>2/week***</b>	<b>daily*</b>	<b>1/week****</b>
5.0 to 25.0	meter	daily***	daily***	daily*	daily*	1/shift*	daily***	daily***	daily*	1/week****
over 25.0	meter	daily***	daily***	1/shift*	daily*	1/shift*	1/shift***	1/shift***	1/shift*	1/week****

\* Grab sample-these should be most representative of the effluent and are to be taken at a time when the normal daily maximum flow would reach the sampling point.

\*\* 8-hour composite sample.

\*\*\* 24-hour composite sample.

\*\*\*\* Same sample type as for Industrial Process Wastewater (See Table 6-4).

**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%, 58%, 15%, 8%, and 4%.

The Target Instream Waste Concentration (TIWC) to be used for analysis of the results is: 15%.

**Summary of Four Most Recent Test Results**

NOEC/LC50 Data Analysis

Test Date	Ceriodaphnia Results (% Effluent)			Pimephales Results (% Effluent)			Pass? *
	NOEC Survival	NOEC Reproduction	LC50	NOEC Survival	NOEC Growth	LC50	
12/27/2022	15	15	15	100	100	100	P/P
01/31/2023	100	100	100	100	100	100	P/P
03/26/2023	100	100	100	100	100	100	P/P
05/02/2023	100	58	100	100	100	100	P/P

\* A "passing" result is that which is greater than or equal to the TIWC 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:** WET Testing was performed according to the TIWC for the previous permit. All 16 endpoints for survival and growth/reproduction of each species were met on the four most recent tests. Please see Attachment 8 for the WET Testing Results signed and certified by the laboratory conducting the test.

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

Acute Partial Mix Factor (PMFa): 1

Chronic Partial Mix Factor (PMFc): 1

**1. Determine IWC – Acute (IWCa):**

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

$$[(1 \text{ MGD} \times 1.547) / ((0.0266 \text{ cfs} \times 1) + (1 \text{ MGD} \times 1.547))] \times 100 = 98.31\%$$

Is IWCa < 1%? ☐ YES ☒ NO (NO, Therefore Chronic Tests Required)

If the discharge is to the tidal portion of the Delaware River, indicate how the type of test was determined:

N/A

Type of Test for Permit Renewal: **Chronic**

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

$$\text{TIWCa} = 98.31\% / 0.3 = 327.70\% \quad \text{Acute TIWC is Not Applicable to the facility at this time.}$$

**2b. Determine Target IWCC (If Chronic Tests Required)**

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

$$[(1 \text{ MGD} \times 1.547) / ((0.0266 \text{ cfs} \times 1) + (1 \text{ MGD} \times 1.547))] \times 100 = \mathbf{98.31\%}$$

### 3. Determine Dilution Series

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

**TWIC=98.31%, Therefore Dilution Series = 25%, 49%, 73%, 98%, 100%.**

### WET Limits

Has reasonable potential been determined? ☐ YES ☒ NO

Will WET limits be established in the permit? ☐ YES ☒ NO

**Changes to Effluent Limitations**

The following changes have been made to the final discharge limitations.

	Parameter Statistical Basis	Proposed Change	Previous Permit	New Permit	Reason for Change
Dichlorobromomethane	Dichlorobromomethane (µg/L)* Average Monthly	More stringent (lower effluent limitation).	1.144	1.14	TMS Report
	Dichlorobromomethane (µg/L) Weekly Average	Statistical Basis Added	-	1.73	TMS Report
	Dichlorobromomethane (µg/L) Instantaneous Maximum	Statistical Basis Added	-	2.85	TMS Report
	Dichlorobromomethane Mass Loading (lbs/day) Average Monthly	Mass Loading/Stat Basis Added	-	0.01	TMS Report
	Dichlorobromomethane Mass Loading (lbs/day) Weekly Average	Statistical Basis Added	-	0.014	TMS Report
	Dichlorobromomethane Monitoring Frequency	Monitoring Frequency Increased	Quarterly	Weekly	BCW-PMT-002 & Permit Writer's Manual Table 6-3
Ammonia-Nitrogen	Summer Ammonia Nitrogen (mg/L) Average Monthly	More stringent (lower effluent limitation).	Report	1.95	WQM 7.0 Report
	Summer Ammonia Nitrogen (mg/L) Weekly Average	Statistical Basis Added	-	2.92	2.C Permit Writer's Manual
	Summer Ammonia Nitrogen (mg/L) Instantaneous Maximum	Statistical Basis Added	-	3.9	WQM 7.0 Report
	Summer Ammonia Nitrogen (lbs/day) Average Monthly	Mass Loading/Stat Basis Added	-	16.26	BCW-PMT-002 IV.B
	Summer Ammonia Nitrogen (lbs/day) Weekly Average	Statistical Basis Added	-	24.35	BPJ
	Winter Ammonia Nitrogen (mg/L) Average Monthly	More stringent (lower effluent limitation).	Report	3.01	WQM 7.0 Report
	Winter Ammonia Nitrogen (mg/L) Weekly Average	Statistical Basis Added	-	4.51	2.C Permit Writer's Manual
	Winter Ammonia Nitrogen (mg/L) Instantaneous Maximum	Statistical Basis Added	-	6.02	WQM 7.0 Report
	Winter Ammonia Nitrogen (lbs/day) Average Monthly	Mass Loading/Stat Basis Added	-	25.10	BCW-PMT-002 IV.B
	Winter Ammonia Nitrogen (lbs/day) Weekly Average	Statistical Basis Added	-	37.61	BPJ

\*Additional Comments: DCBM statistical base changed from Average Quarterly to Average Monthly. Concentration AML rounded according to Permit Writers Manual.

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	Parameter Statistical Basis	Proposed Change	Previous Permit	New Permit	Reason for Change
TRC	TRC (mg/L) Average Monthly	More stringent (lower effluent limitation).	0.5	0.011	TRC_Calc Report.
	TRC (mg/L) Instantaneous Maximum	More stringent (lower effluent limitation).	1.3	0.037	TRC_Calc Report
	TRC Monitoring	Monitoring Frequency Increased	Weekdays	Daily	BCW-PMT-002 & Permit Writer's Manual Table 6-3
	Dissolved Oxygen (mg/L) Minimum	DO sampling rate increased	Weekdays	Daily	Permit Writer's Manual Table 6-3
	pH	pH sampling rate increased	Weekdays	Daily	Permit Writer's Manual Table 6-3
	<i>E. Coli</i> (No./100 mL) Daily Max	New Monitoring.	-	Report	BCW-PMT-033 Table I.A.
	Total Boron (µg/L) Average Quarterly	New Monitoring.	-	Report	TMS Report
	Total Cadmium (µg/L) Average Quarterly	New Monitoring.	-	Report	TMS Report
	Dissolved Iron (µg/L) Average Quarterly	New Monitoring.	-	Report	TMS Report
	Total Lead (µg/L) Average Quarterly	New Monitoring.	-	Report	TMS Report
	Total Zinc (µg/L) Average Quarterly	New Monitoring.	-	Report	TMS Report
	Total Copper (µg/L) Average Monthly	New Limit	-	21.1	TMS Report
	Free Cyanide (µg/L) Average Monthly	New Limit	-	4.07	TMS Report
	Chlorodibromo-methane (µg/L) Average Monthly	New Limit	-	0.96	TMS Report
	Chloroform (µg/L) Average Monthly	New Limit	-	5.8	TMS Report

**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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> 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 Inst Min	XXX	XXX	XXX	1/day	Grab
CBOD5	208.0	312.0	XXX	25.0	37.5	50	2/week	24-Hr Composite
BOD5	Report	Report Daily Max	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	XXX	2/week	24-Hr Composite
TSS	250.0	375.0	XXX	30.0	45.0	60	2/week	24-Hr Composite
TSS Raw Sewage Influent	Report	Report Daily Max	XXX	Report	XXX	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	Report	XXX	XXX	1/month	Grab
Total Nitrogen	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Total Aluminum (µg/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Boron (µg/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Cadmium (µg/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite



## Campbells Run STP

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Dissolved Iron (µg/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Iron (µg/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Lead (µg/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Manganese (µg/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Total Zinc (µg/L)	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Dichlorobromo-methane (µg/L)	0.01	0.014	XXX	1.14	1.73	2.85	1/week	4 Grabs/24 Hours
PFOA* (ng/L)	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	Grab
PFOS* (ng/L)	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	Grab
HFPO-DA* (ng/L)	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	Grab
PFBS* (ng/L)	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	Grab

\* The permittee may discontinue monitoring for PFOA, PFOS, HFPO-DA, and PFBS if the results in 4 consecutive monitoring periods indicate non-detect results 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 must enter a No Discharge Indicator (NODI) Code of "GG" on DMRs.

Compliance Sampling Location: Outfall 001

**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 3 Years After Permit Effective Date.**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
TRC	XXX	XXX	XXX	0.5	XXX	1.3	1/day	Grab
Ammonia	Report	XXX	XXX	Report	XXX	XXX	2/week	24-Hr Composite
Total Copper (µg/L)	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
Free Cyanide (µg/L)	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
Chlorodibromo-methane (µg/L)	Report	XXX	XXX	Report	XXX	XXX	1/week	4 Grabs/24 Hours
Chloroform (µg/L)	Report	XXX	XXX	Report	XXX	XXX	1/week	4 Grabs/24 Hours

Compliance Sampling Location: Outfall 001

**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: 3 Years After Permit Effective Date through Permit Expiration.**

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
TRC	XXX	XXX	XXX	0.011	XXX	0.037	1/day	Grab
Ammonia Nov 1 - Apr 30	25.10	37.61	XXX	3.01	4.51	6.02	2/week	24-Hr Composite
Ammonia May 1 - Oct 31	16.26	24.35	XXX	1.95	2.92	3.9	2/week	24-Hr Composite
Total Copper (µg/L)	0.18	0.27	XXX	21.1	32.8	52.9	1/week	24-Hr Composite
Free Cyanide (µg/L)	0.034	0.056	XXX	4.07	6.74	10.2	1/week	24-Hr Composite
Chlorodibromo-methane (µg/L)	0.008	0.013	XXX	0.96	1.59	2.4	1/week	4 Grabs/24 Hours
Chloroform (µg/L)	0.048	0.073	XXX	5.8	8.72	14.5	1/week	4 Grabs/24 Hours

Compliance Sampling Location: Outfall 001



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HEET\_ATTACHMENTS

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