pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0025755**
Facility Type	**Municipal**	APS ID	**1009475**
Major / Minor	**Minor**	Authorization ID	**1302001**

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Applicant and Facility Information

Applicant Name	**Freeport Borough**	Facility Name	**Freeport Borough STP**
Applicant Address	414 Market Street	Facility Address	Lower Market Street
	Freeport, PA 16229		Freeport, PA 16229
Applicant Contact	Ken Boroski	Facility Contact	Ken Boroski
Applicant Phone	(724) 295-2251	Facility Phone	(724) 295-2251
Client ID	8099	Site ID	261800
Ch 94 Load Status	Existing Hydraulic Overload	Municipality	Freeport Borough
Connection Status	No Limitations	County	Armstrong County
Date Application Received	January 6, 2020	EPA Waived?	No
Date Application Accepted	January 16, 2020	If No, Reason	CSO

Purpose of Application: Renewal of an NPDES Permit for an existing discharge of treated sanitary wastewater from a municipal sewer system.

Summary of Review

Act 14 - Proof of Notification was submitted and received.

A Part II Water Quality Management permit is not required at this time.

The applicant should be able to continue to meet the limits of this permit, which will continue to protect the uses of the receiving stream.

I. OTHER REQUIREMENTS:

A. Stormwater into Sewers
B. Right of Way
C. Solids Handling
D. Effluent Chlorine Optimization and Minimization

SPECIAL CONDITIONS:

II. Maximizing Treatment at the Existing POTW
III. Combined Sewer Overflows
IV. Compliance Schedule for Dissolved Oxygen (DO)
V. Compliance Schedule for Total Residual Chlorine (TRC)
VI. Solids Management

There are no open violations in efacts associated with the subject Client ID (8099) as of 12/24/2020.

Approve	Deny	Signatures	Date
X		Stephen A. McCauley Stephen A. McCauley, E.I.T. / Environmental Engineering Specialist	12/24/2020
X		Justin C. Dickey Justin C. Dickey, P.E. / Environmental Engineer Manager	12/28/2020

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.35
Latitude	40º 40' 18.00"	Longitude	-79º 41' 34.00"
Quad Name	-	Quad Code	-
Wastewater Description:	Sewage Effluent		
Receiving Waters	Buffalo Creek (TSF)	Stream Code	42557
NHD Com ID	123971883	RMI	0.09
Drainage Area	170	Yield (cfs/mi^2)	0.047
Q_{7-10} Flow (cfs)	7.99	Q_{7-10} Basis	calculated
Elevation (ft)	745	Slope (ft/ft)	0.00218
Watershed No.	18-F	Chapter 93 Class.	TSF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired*		
Cause(s) of Impairment	Cause Unknown		
Source(s) of Impairment	Source Unknown		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	Harrison Township Water Authority		
PWS Waters	Allegheny River	Flow at Intake (cfs)	998
PWS RMI	24.2	Distance from Outfall (mi)	4.4

* - This discharge is not expected to produce any pollutants in a quantity sufficient to impair the receiving stream.

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.

Narrative: This Fact Sheet details the determination of draft NPDES permit limits for an existing discharge of 0.35 MGD of treated sewage from a Publicly Owned Treatment Works (POTW) in Freeport Borough, Armstrong County. See Attachment 5 for a Topographical Map with the Outfalls all labelled.

Treatment permitted under WQM Permit 0371404 consists of: Primary clarification, trickling filtration, final clarification, and chlorination. Sludge is processed with an anaerobic digestor and sand drying beds.

1. Streamflow: Buffalo Creek at Freeport, PA (1976-1996):

Drainage Area:	137	sq. mi.	(USGS StreamStats)
Q_{7-10}:	6.37	cfs	(USGS StreamStats)
Yieldrate:	0.047	cfsm	(calculated)

Buffalo Creek @ Outfall 001:

Drainage Area:	170	sq. mi.	(USGS StreamStats)
Yieldrate:	0.047	cfsm	(from above)
Q_{7-10}:	7.99	cfs	(calculated)

% of stream allocated: 100% Basis: No nearby discharges

2. Wasteflow:

Permitted discharge: 0.35 MGD = 0.54 cfs

Runoff flow period: 24 hours Basis: Runoff flow for a Municipal STP

There is greater than 3 parts stream flow (Q7-10) to 1 part effluent flow (design).

In accordance with the SOP, the treatment requirements in document number 391-2000-014, titled, “Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers”, dated April 12, 2008 do not need to be evaluated.

Flow will be required to be monitored as authorized under Chapter 92a.61, and as recommended in the SOP.

3. Parameters:

The following parameters were evaluated: pH, Total Suspended Solids, Fecal Coliform, Phosphorus, NH_3-N, $CBOD_5$, Dissolved Oxygen, and Total Residual Chlorine. NH_3-N, $CBOD_5$, and Dissolved Oxygen were evaluated using WQM 7.0 at the discharge point.

a. pH

Between 6.0 and 9.0 at all times

Basis: Application of Chapter 93.7 technology-based limits.

b. Total Suspended Solids

Limits will remain as 30 mg/l as a monthly average and 60 mg/l as an instantaneous maximum.

Basis: Application of Chapter 92a47 technology-based limits

c. Fecal Coliform

05/01 - 09/30:	200/100ml	(monthly average geometric mean)
	1,000/100ml	(instantaneous maximum)

10/01 - 04/30: 2,000/100ml (monthly average geometric mean)
10,000/100ml (instantaneous maximum)

Basis: Application of Chapter 92a47 technology-based limits.

d. Phosphorus

☐ Limit necessary due to:

☐ Discharge to lake, pond, or impoundment
☐ Discharge to stream

Basis: N/A

☒ Limit not necessary

Basis: The previous monitoring for Total Phosphorus will remain in accordance with the SOP, based on Chapter 92a.61.

e. Total Nitrogen

The previous monitoring for Total Nitrogen will remain in accordance with the SOP, based on Chapter 92a.61.

f. Ammonia-Nitrogen (NH_3-N)

Median discharge pH to be used: 6.9 Standard Units (S.U.)
Basis: eDMR data
Discharge temperature: 25°C (default value used in the absence of data)
Median stream pH to be used: 7.0 Standard Units (S.U.)
Basis: (default value used in the absence of data)
Stream Temperature: 25˚C (default value used for TSF modeling)
Background NH_3-N concentration: 0.0 mg/l
Basis: Default value.
Calculated NH_3-N Summer limits: 25.0 mg/l (monthly average)
50.0 mg/l (instantaneous maximum)
Calculated NH_3-N Winter limits: 25.0 mg/l (monthly average)
50.0 mg/l (instantaneous maximum)

Result: WQ modeling resulted in the calculated summer limits above (see Attachment 1), which are the same as the previous NPDES Permit. The winter limits are calculated as three times the summer limits, but since the technology-based limits are more protective, they will be used. However, since the previous winter limits for NH3-N were monitor only, that requirement will be retained with this renewal in accordance with the SOP.

g. $CBOD_5$

Median discharge pH to be used: 6.9 Standard Units (S.U.)
Basis: eDMR data
Discharge temperature: 25°C (default value used in the absence of data)
Median stream pH to be used: 7.0 Standard Units (S.U.)

Basis: (default value used in the absence of data)

Stream Temperature: 25˚C (default value used for WWF modeling)

Background $CBOD_5$ concentration: 2.0 mg/l

Basis: Default value

$CBOD_5$ Summer limits: 25.0 mg/l (monthly average)
50.0 mg/l (instantaneous maximum)

$CBOD_5$ Winter limits: 25.0 mg/l (monthly average)
50.0 mg/l (instantaneous maximum)

Result: WQ modeling resulted in the calculated summer limits above (see Attachment 1), which are the same as the previous NPDES Permit. The winter limits are calculated as three times the summer limits, but since the technology-based limits are more protective, they will be used.

h. Dissolved Oxygen (DO)

- ☒ 4.0 mg/l - minimum desired in effluent to protect all aquatic life
- ☐ 5.0 mg/l - desired in effluent for CWF, WWF, or TSF
- ☐ 6.0 mg/l - minimum required due to discharge falling under guidance document 391-2000-014
- ☐ 8.0 mg/l - required due to discharge going to a naturally reproducing salmonid stream

Discussion: The Dissolved Oxygen minimum of 4.0 mg/l will be retained with this renewal. The technology-based minimum of 4.0 mg/l is recommended by the WQ Model (see Attachment 4) and the SOP based on Chapter 93.7, under the authority of Chapter 92a.61.

The previous permit required only monitoring for Dissolved Oxygen rather than a minimum limit since the STP is an attached growth non-aeration type system (trickling filtration) versus a suspended growth aeration type system. However, with this renewal, the minimum limit of 4.0 mg/l will be set to comply with the current SOP. Based on eDMR data, the new minimum limit may not be attainable at permit issuance, so a one-year compliance schedule will be added to provide time for the new limit to be attained.

i. Total Residual Chlorine (TRC)

- ☐ No limit necessary
- ☒ TRC limits: 0.5 mg/l (monthly average)
  1.6 mg/l (instantaneous maximum)

Basis: The TRC limits above are technology-based using the TRC_Calc Spreadsheet (see Attachment 2). The calculated monthly average limit of 0.5 mg/l is half of the previous limit of 1.0 mg/l. Based on eDMR data, the new limit may not be attainable at permit issuance, so a one-year compliance schedule will be added to provide time for the new limit to be attained.

j. Influent Total Suspended Solids and BOD_5

Monitoring for these two parameters will be retained as recommended in the SOP for POTWs, and as authorized under Chapter 92a.61.

k. Anti-Backsliding

Since all the permit limits in this renewal are the same or more restrictive than the previous NPDES Permit, anti-backsliding is not applicable.

4. Reasonable Potential Analysis:

A Reasonable Potential Analysis was performed in accordance with State practices for Outfall 001 by first using the Toxics Screening Analysis Spreadsheet (see Attachment 3) to determine which parameters should be modeled. The following parameters were modeled for Outfall 001 using the PentoxSD program (see Attachment 4):

Total Copper

Median stream pH to be used:	7.0	Standard Units (S.U.)
Stream hardness to be used:	100	mg/l
	Basis:	Default values in the absence of data
Median discharge pH to be used:	6.9	Standard Units (S.U.)
Discharge hardness to be used:	100	mg/l
	Basis:	eDMR data (pH) and default values (hardness)

Result: Based on the Toxics Screening Analysis Spreadsheet (see Attachment 3), and the Pentox program (see Attachment 4), no new limits are required for Total Copper with this renewal permit.

5. Reasonable Potential for Downstream Public Water Supply (PWS):

The Toxics Screening Analysis Spreadsheet (see Attachment 6) did not recommend monitoring for Chlorides, Bromide, or Sulfates. However, since the sample data was provided, mass-balance calculations were performed (see below).

Bromide has been linked to the formation of disinfection byproducts at increased levels in public water systems. Where the concentration of Bromide in a discharge exceeds 1 mg/L, and the discharge flow exceeds 0.1 MGD, Part A of the permit should include monitor and report for bromide. The permitted discharge is greater than 0.1 MGD (0.35 MGD), but since the maximum reported sample data for Bromide was 0.16 mg/l, and the dilution ratio of the Allegheny River to this discharge being over 1,800:1 at the nearest downstream PWS (see below), monitoring will not be added to this renewal permit.

Nearest Downstream potable water supply (PWS): Harrison Township Water Authority
Distance downstream from the point of discharge: 4.4 miles (approximate)

PWS Evaluation:

Stream flow (sf) at the potable water supply intake = 998 cfs
Waste flow (wf) from the STP = 0.35 MGD = 0.54 cfs
Total flow = 998.54 cfs
Background Concentrations: No data available (assumed zero)

Mass balance for Chlorides at the potable water supply intake:

(sf @ PWS)(bkrd. conc.) + (wf)(x) = (tot. flow)(criteria)
(998 cfs)(0 mg/l) + (0.54 cfs)(x) = (998.54 cfs)(250 mg/l)

x = 462,287 mg/l (renewal application maximum was 99.6 mg/l - ok)

Mass balance for Bromide at the potable water supply intake:

(sf @ PWS)(bkrd. conc.) + (wf)(x) = (tot. flow)(criteria)
(998 cfs)(0 mg/l) + (0.54 cfs)(x) = (998.54 cfs)(1 mg/l)

x = 1,849 mg/l (renewal application maximum was 0.16 mg/l - ok)

Mass balance for Sulfates at the potable water supply intake:

(sf @ PWS)(bkrd. conc.) + (wf)(x) = (tot. flow)(criteria)

(998 cfs)(0 mg/l) + (0.54 cfs)(x) = (998.54 cfs)(250 mg/l)

x = 462,287 mg/l (renewal application maximum was 52.2 mg/l - ok)

6. Flow Information:

The Freeport Borough STP receives 90% of its flow from the Freeport Borough sewers. The remaining 10% of flow comes from Laneville.

All the sewers in the Freeport Borough system are combined sewers. All the sewers in the Laneville system are separate sewers.

Attachment List:

Attachment 1 - WQ Modeling Printouts

Attachment 2 - TRC_Calc Spreadsheet

Attachment 3 - Toxics Screening Analysis Spreadsheet

Attachment 4 - Pentox Modeling Printouts

Attachment 5 - Topographical Map and Outfall Layout

If viewing this electronically, please refer to the following PDF to view the above Attachments:

Adobe Acrobat Document

Compliance History

DMR Data for Outfall 001 (from November 1, 2019 to October 31, 2020)

Parameter	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19
Flow (MGD) Average Monthly	0.16	0.121	0.114	0.114	0.147	0.272	0.433	0.531	0.515	0.448	0.375	0.303
Flow (MGD) Daily Maximum	0.455	0.197	0.402	0.232	314	0.477	0.632	0.899	0.934	0.786	0.537	0.614
pH (S.U.) Minimum	6.8	6.7	6.8	6.8	6.6	6.7	6.8	6.8	6.8	6.7	6.7	6.8
pH (S.U.) Maximum	7.2	7.2	7.1	7.2	6.8	7.1	7.1	7.1	7.1	7.1	7.1	7.1
DO (mg/L) Minimum	4.24	4.29	4.06	1.97	2.36	2.06	1.76	2.14	2.73	3.02	3.12	3.06
TRC (mg/L) Average Monthly	1.0	1.1	1.1	1.1	1.2	1.1	0.9	0.8	0.8	0.9	0.9	0.9
TRC (mg/L) Instantaneous Maximum	1.5	1.5	1.5	1.5	1.5	1.6	1.2	1.2	1.1	1.2	1.3	1.3
CBOD5 (lbs/day) Average Monthly	20.5	16.4	19.9	27.9	29.9	15.3	18.3	20.5	16.8	9.9	24.5	11.0
CBOD5 (lbs/day) Weekly Average	33.3	29.8	31.0	34.8	43.3	19.6	34.4	27.7	22.0	30.9	24.5	17.0
CBOD5 (mg/L) Average Monthly	16	15	27	34	22	8	5	5	4.0	6.0	7	4
CBOD5 (mg/L) Weekly Average	29.7	25.7	40.8	39.0	29.7	12.5	7.2	6.1	4.8	10.0	9.5	5.0
BOD5 (lbs/day) Raw Sewage Influent Average Monthly	156	86	64	68	126	103	139	146	188.0	150	230	143
BOD5 (lbs/day) Raw Sewage Influent Daily Maximum	257	123	102	102	213	152	185	173	235.0	213	453	261
BOD5 (mg/L) Raw Sewage Influent Average Monthly	117	87	85	85	100	49	41	35	50.0	42	68	58.5
TSS (lbs/day) Average Monthly	20.0	22.7	18.1	19.3	20.5	30.2	52.0	55.3	43.0	36.7	39.0	32.6
TSS (lbs/day) Raw Sewage Influent Average Monthly	233	111	62	60	106	82	218	193	176.0	111.0	242	154

TSS (lbs/day) Raw Sewage Influent Daily Maximum	494	123	108	96	193	89	428	323	273.0	149.0	559	330
TSS (lbs/day) Weekly Average	33.8	30.2	18.0	23.2	26.9	42.9	58.3	85.1	91.2	52.8	59.2	72.3
TSS (mg/L) Average Monthly	15.0	22	24	24	16	19	16	12	10.0	10.0	11	12
TSS (mg/L) Raw Sewage Influent Average Monthly	163	113	82	72	85	40.0	59	46	44.0	31.0	71	65
TSS (mg/L) Weekly Average	17.0	29	28	31	18	20	20.0	15	17.0	13.0	16	21
Fecal Coliform (CFU/100 ml) Geometric Mean	10	10	7	7	16	56	223	18	14	21	34	49
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	10	10	10	10	98	9932	6488	187	41	31	62	933
Total Nitrogen (mg/L) Daily Maximum											4.09	
Ammonia (lbs/day) Average Monthly	11.0	11.0	10.0	9.0	15.0	17.0	11	8	6.0	9.0	10	9
Ammonia (lbs/day) Weekly Average	21.0	16.0	14.0	14.0	22.0	24.0	12	11	8.0	11.0	16	11
Ammonia (mg/L) Average Monthly	8.41	10.29	13.4	12.0	11.8	8.89	3.35	2.07	1.78	2.52	3.18	3.99
Ammonia (mg/L) Weekly Average	9.74	13.8	17.9	17.2	18.0	15.3	4.8	3.43	2.54	3.24	4.78	5.52
Total Phosphorus (mg/L) Daily Maximum											0.83	

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" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through February 28, 2022.

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	Report Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	1.0	XXX	1.6	1/day	Grab
CBOD5	73.0	109.5	XXX	25	37.5	50	1/week	8-Hr Composite
TSS	87.6	131.4	XXX	30	45	60	1/week	8-Hr Composite
BOD5 Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	Report	Report	XXX	Report	Report	XXX	1/week	8-Hr Composite
Ammonia-Nitrogen May 1 - Oct 31	35.0	52.5	XXX	12.0	18.0	24	1/week	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	8-Hr Composite

Outfall 001, Continued (from Permit Effective Date through February 28, 2022)

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2)	Required
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum	Measurement Frequency	Sample Type
Total Phosphorus	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	8-Hr Composite

Compliance Sampling Location: at Outfall 001, after disinfection.

Flow and Dissolved Oxygen are monitor only based on Chapter 92a.61. The limits for pH are technology-based on Chapter 93.7. The limits for Total Residual Chlorine (TRC) are technology-based on Chapter 92a.47. The limits for $CBOD_5$, Total Suspended Solids, and Fecal Coliforms are technology-based on Chapter 92a.47. Monitoring for influent BOD5 and Total Suspended Solids is based on Chapter 92a.61. The limits for Ammonia-Nitrogen are water quality-based on Chapter 93.7. Monitoring for Total Nitrogen and Total Phosphorus is based on Chapter 92a.61.

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" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: March 1, 2022 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 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	73.0	109.5	XXX	25	37.5	50	1/week	8-Hr Composite
TSS	87.6	131.4	XXX	30	45	60	1/week	8-Hr Composite
BOD5 Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/week	8-Hr Composite
TSS Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	1/week	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	Report	Report	XXX	Report	Report	XXX	1/week	8-Hr Composite
Ammonia-Nitrogen May 1 - Oct 31	35.0	52.5	XXX	12.0	18.0	24	1/week	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	8-Hr Composite

Outfall 001, Continued (from March 1, 2022 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		
Total Phosphorus	XXX	XXX	XXX	Report Daily Max	XXX	XXX	1/year	8-Hr Composite

Compliance Sampling Location: at Outfall 001, after disinfection.

Flow is monitor only based on Chapter 92a.61. The limits for pH and Dissolved Oxygen are technology-based on Chapter 93.7. The limits for Total Residual Chlorine (TRC) are technology-based on Chapter 92a.47. The limits for $CBOD_5$, Total Suspended Solids, and Fecal Coliforms are technology-based on Chapter 92a.47. Monitoring for influent BOD5 and Total Suspended Solids is based on Chapter 92a.61. The limits for Ammonia-Nitrogen are water quality-based on Chapter 93.7. Monitoring for Total Nitrogen and Total Phosphorus is based on Chapter 92a.61.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0.00
Latitude	40º 40' 13.00"	Longitude	-79º 41' 25.00"
Quad Name	-	Quad Code	-
Wastewater Description:	Combined Sewer Overflow		

Receiving Waters	Allegheny River (WWF)	Stream Code	42122
NHD Com ID	123971897	RMI	0.09
Drainage Area	-	Yield (cfs/mi^2)	-
Q_{7-10} Flow (cfs)	-	Q_{7-10} Basis	-
Elevation (ft)	-	Slope (ft/ft)	-
Watershed No.	18-F	Chapter 93 Class.	WWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Not Assessed		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	Harrison Township Water Authority		
PWS Waters	Allegheny River	Flow at Intake (cfs)	998
PWS RMI	24.2	Distance from Outfall (mi)	4.4

Changes Since Last Permit Issuance: None.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	003	Design Flow (MGD)	0.00
Latitude	40º 40' 15.70"	Longitude	-79º 41' 32.60”
Quad Name	-	Quad Code	-
Wastewater Description:	Combined Sewer Overflow		
Receiving Waters	Buffalo Creek (TSF)	Stream Code	42557
NHD Com ID	123971883	RMI	0.06
Drainage Area	-	Yield (cfs/mi^2)	-
Q_{7-10} Flow (cfs)	-	Q_{7-10} Basis	-
Elevation (ft)	-	Slope (ft/ft)	-
Watershed No.	18-F	Chapter 93 Class.	TSF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired*		
Cause(s) of Impairment	Cause Unknown		
Source(s) of Impairment	Source Unknown		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	Harrison Township Water Authority		
PWS Waters	Allegheny River	Flow at Intake (cfs)	998
PWS RMI	24.2	Distance from Outfall (mi)	4.4

* - This discharge is not expected to produce any pollutants in a quantity sufficient to impair the receiving stream.

Changes Since Last Permit Issuance: None.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	004	Design Flow (MGD)	0.00
Latitude	40º 40' 16.00"	Longitude	-79º 41' 10.00"
Quad Name	-	Quad Code	-
Wastewater Description:	Combined Sewer Overflow		

Receiving Waters	Allegheny River (WWF)	Stream Code	42122
NHD Com ID	123971897	RMI	29.0
Drainage Area	-	Yield (cfs/mi^2)	-
Q_{7-10} Flow (cfs)	-	Q_{7-10} Basis	-
Elevation (ft)	-	Slope (ft/ft)	-
Watershed No.	18-F	Chapter 93 Class.	WWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Not Assessed		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	Harrison Township Water Authority		
PWS Waters	Allegheny River	Flow at Intake (cfs)	998
PWS RMI	24.2	Distance from Outfall (mi)	4.7

Changes Since Last Permit Issuance: None.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	005	Design Flow (MGD)	0.00
Latitude	40º 40' 16.00"	Longitude	-79º 41' 5.00"
Quad Name	-	Quad Code	-
Wastewater Description:	Combined Sewer Overflow		

Receiving Waters	Allegheny River (WWF)	Stream Code	42122
NHD Com ID	123971897	RMI	30.0
Drainage Area	-	Yield (cfs/mi^2)	-
Q_{7-10} Flow (cfs)	-	Q_{7-10} Basis	-
Elevation (ft)	-	Slope (ft/ft)	-
Watershed No.	18-F	Chapter 93 Class.	WWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Not Assessed		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	Harrison Township Water Authority		
PWS Waters	Allegheny River	Flow at Intake (cfs)	998
PWS RMI	24.2	Distance from Outfall (mi)	4.8

Changes Since Last Permit Issuance: None.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	006	Design Flow (MGD)	0.00
Latitude	40º 40' 34.00"	Longitude	-79º 41' 26.00"
Quad Name	-	Quad Code	-
Wastewater Description:	Combined Sewer Overflow		
Receiving Waters	Buffalo Creek (TSF)	Stream Code	42557
NHD Com ID	123971883	RMI	0.48
Drainage Area	-	Yield (cfs/mi^2)	-
Q_{7-10} Flow (cfs)	-	Q_{7-10} Basis	-
Elevation (ft)	-	Slope (ft/ft)	-
Watershed No.	18-F	Chapter 93 Class.	TSF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired*		
Cause(s) of Impairment	Cause Unknown		
Source(s) of Impairment	Source Unknown		
TMDL Status	-	Name	-

Background/Ambient Data		Data Source
pH (SU)	-	-
Temperature (°F)	-	-
Hardness (mg/L)	-	-
Other:	-	-

Nearest Downstream Public Water Supply Intake	Harrison Township Water Authority		
PWS Waters	Allegheny River	Flow at Intake (cfs)	998
PWS RMI	24.2	Distance from Outfall (mi)	4.8

* - This discharge is not expected to produce any pollutants in a quantity sufficient to impair the receiving stream.

Changes Since Last Permit Issuance: None.