pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northwest Regional Office
CLEAN WATER PROGRAM

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

Application Type	**Renewal**	Application No.	**PA0103811**
Facility Type	**Industrial**	APS ID	**967301**
Major / Minor	**Minor**	Authorization ID	**1227026**

Applicant and Facility Information

Applicant Name	**Waste Management Disposal Service of PA, Inc.**	Facility Name	**Northwest Sanitary Landfill**
Applicant Address	1436 West Sunbury Road West Sunbury, PA 16061	Facility Address	1436 West Sunbury Road West Sunbury, PA 16061
Applicant Contact	Keith Doverspike, District Engineer	Facility Contact	Keith Doverspike, District Engineer
Applicant Phone	(814) 824-7808	Facility Phone	(814) 824-7808
Client ID	62425	Site ID	243068
SIC Code	4953	Municipality	Cherry Township
SIC Description	Trans. & Utilities - Refuse Systems	County	Butler County
Date Application Received	May 3, 2018	EPA Waived?	Yes
Date Application Accepted	May 4, 2018	If No, Reason	-
Purpose of Application	Renewal of an existing NPDES Permit for a discharge of IW process Effluent with an ELG, and stormwater.		

Summary of Review

Act 14 - Proof of Notification was submitted and received.

This facility is subject to the ELGs under §445.00 Subpart B - RCRA Subtitle D Non-Hazardous Waste Landfill

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 protect the uses of the receiving stream.

I. OTHER REQUIREMENTS:

A. Right of Way
B. Solids Handling
C. NPDES Permit Supersedes WQM Permits
D. Modification or Revocation for Changes to BAT or BCT

SPECIAL CONDITIONS:

II. Requirements Applicable to Stormwater Outfalls
III. Chemical Additives

There are 25 open violations in efacts associated with the subject Client ID (62425) as of 10/16/2019 (see attached).

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

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.042*
Latitude	41º 1' 48.00"	Longitude	-79º 55' 13.00"
Quad Name	-	Quad Code	-
Wastewater Description:	IW Process Effluent with ELG		
Receiving Waters	Findlay Run (CWF)	Stream Code	34585
NHD Com ID	126223104	RMI	2.08
Drainage Area	3.34	Yield (cfs/mi^2)	0.0845
Q_{7-10} Flow (cfs)	0.282	Q_{7-10} Basis	calculated
Elevation (ft)	1215	Slope (ft/ft)	0.00204
Watershed No.	20-C	Chapter 93 Class.	CWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Impaired**		
Cause(s) of Impairment	Siltation and Turbidity		
Source(s) of Impairment	Crop Production (Crop Land or Dry Land) and Grazing in Riparian or Shoreline Zones		
TMDL Status	-	Name	-

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

Nearest Downstream Public Water Supply Intake	Pennsylvania American Water Company - Ellwood City		
PWS Waters	Slippery Rock Creek	Flow at Intake (cfs)	53.1
PWS RMI	0.1	Distance from Outfall (mi)	32.0 (approximate)

* - The permitted flow is 0.042 MGD, but the flow used in modelling is the average flow during production of 0.017 MGD that was reported in the renewal application, per the SOP.

** - This facility is not expected to be a source of the impairments listed.

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 0.042 MGD of treated Industrial Waste from an existing landfill discharge in Cherry Township, Butler County.

Facility Area: See the topographical map (Attachment 1) and the aerial map (Attachment 2)

1. Streamflow: Slippery Rock Creek @ Boyers, PA

Drainage Area:	28.4	sq. mi.	(USGS StreamStats)
Q_{7-10}:	2.4	cfs	
Yieldrate:	0.0845	cfsm	(calculated)

Findlay Run @ Outfall 001

Yieldrate:	0.0845	cfsm	(calculated above)
Drainage Area:	3.34	sq. mi.	(USGS StreamStats)
% of stream allocated:	100%	Basis:	No nearby discharges
Q_{7-10}:	0.282	cfs	

2. Wasteflow: Outfall 001

Maximum discharge*: 0.017 MGD = 0.026 cfs (*monthly average flow per SOP)

Runoff flow period: 24 hours Basis: Runoff flow for a landfill with flow equalization

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

The calculated stream flow is greater than 3 parts to the discharge flow. In accordance with the SOP, since this is an existing discharge, and there is more than 3 parts stream flow (Q7-10) to 1 part effluent (design flow), no treatment requirements will be required from 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.

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.

NO_2-NO_3, Fluoride, Phenolics, Sulfates, and Chlorides can be evaluated using PentoxSD at the nearest downstream potable water supply (PWS). Since there is significant dilution available, no modeling was performed for this facility.

a. pH

Between 6.0 and 9.0 at all times

Basis: Application of technology-based limits set in §445.00 Subpart B - RCRA Subtitle D Non-Hazardous Waste Landfill.

b. Total Suspended Solids

Limits are 27 mg/l as a monthly average and 88 mg/l as a daily maximum.

Basis: Application of technology-based limits set in §445.00 Subpart B - RCRA Subtitle D Non-Hazardous Waste Landfill.

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

☒ Limit not necessary

Basis: Chapter 96.5 does not apply.

e. NO_2-NO_3, Fluoride, Phenolics, Sulfates, Chlorides, and TDS

Nearest Downstream potable water supply (PWS): Pennsylvania American Water Company - Ellwood City

Distance downstream from the point of discharge: 32.0 miles (approximate)

☒ No limits necessary
☐ Limits needed

Basis: Significant dilution available (see below).

PWS Evaluation:

Stream flow (sf) at the potable water supply intake = 408 mi^2 x 0.131 cfsm = 53.4 cfs
Waste flow (wf) from the landfill = 0.017 MGD = 0.026 cfs

Background Concentrations: from Slippery Rock Creek @ Camp Allegheny (1/95 – 12/98)

NO_2-NO_3 = 0.59 mg/l
Fluoride = no data
Phenolics = no data
Sulfates = 104 mg/l
Chlorides = no data
TDS = no data

Mass balance for Nitrate-Nitrite (NO_2-NO_3) at the potable water supply intake:
(sf @ PWS)(bkrd. conc.) + (wf)(x) = (tot. flow)(criteria)
(53.4 cfs)(0.59 mg/l) + (0.026 cfs)(x) = (53.42 cfs)(10 mg/l)

x = 19,334 mg/l (renewal application maximum was 230 mg/l - ok)

Mass balance for Fluoride at the potable water supply intake:
(sf @ PWS)(bkrd. conc.) + (wf)(x) = (tot. flow)(criteria)
(53.4 cfs)(0 mg/l) + (0.026 cfs)(x) = (53.42 cfs)(2 mg/l)

x = 4,109 mg/l (renewal application maximum was 1.0 mg/l - ok)

Mass balance for Phenolics at the potable water supply intake:
(sf @ PWS)(bkrd. conc.) + (wf)(x) = (tot. flow)(criteria)
(53.4 cfs)(0 mg/l) + (0.026 cfs)(x) = (53.42 cfs)(250 mg/l)

x = 513,653 mg/l (renewal application maximum was 13.0 mg/l - ok)

Mass balance for Sulfates at the potable water supply intake:

(sf @ PWS)(bkrd. conc.) + (wf)(x) = (tot. flow)(criteria)
(53.4 cfs)(104 mg/l) + (0.026 cfs)(x) = (53.42 cfs)(250 mg/l)

x = 300,053 mg/l (renewal application maximum was 18,400 mg/l - ok)

Mass balance for Chlorides at the potable water supply intake:

(sf @ PWS)(bkrd. conc.) + (wf)(x) = (tot. flow)(criteria)
(53.4 cfs)(0 mg/l) + (0.026 cfs)(x) = (53.42 cfs)(250 mg/l)

x = 513,653 mg/l (renewal application maximum was 2,510 mg/l - ok)

Mass balance for TDS at the potable water supply intake:

(sf @ PWS)(bkrd. conc.) + (wf)(x) = (tot. flow)(criteria)
(53.4 cfs)(0 mg/l) + (0.026 cfs)(x) = (53.42 cfs)(500 mg/l)

x = 1,027,307 mg/l (renewal application maximum was 10,300 mg/l - ok)

f. Ammonia-Nitrogen (NH_3-N)

Median discharge pH to be used: 7.7 Standard Units (S.U.)

Basis: Average pH value from DMR summary

Discharge temperature: 25°C (default value used in the absence of data)

Median stream pH to be used: 7.45 Standard Units (S.U.)

Basis: Value used in previous renewals

Stream Temperature: 20˚C (default value used for CWF modeling)

Background NH_3-N concentration: 0.1 mg/l

Basis: Default value.

Calculated NH_3-N limits: 4.9 mg/l (monthly average)
10.0 mg/l (instantaneous maximum)

Result: WQ modeling confirmed that the above technology-based limits for landfill leachate are protective (see Attachment 5). The limits are the same as the previous NPDES Permit and will be retained.

g. BOD

Median discharge pH to be used: 7.7 Standard Units (S.U.)

Basis: Average pH value from DMR summary

Discharge temperature: 25°C (default value used in the absence of data)

Median stream pH to be used: 7.45 Standard Units (S.U.)

Basis: Value used in previous renewals

Stream Temperature: 20˚C (default value used for CWF modeling)

Background BOD concentration: 2.0 mg/l

Basis: Default value

BOD limits: 37 mg/l (monthly average)
140 mg/l (instantaneous maximum)

Result: WQ modeling confirmed that the above technology-based limits for landfill leachate are protective (see Attachment 5). The limits are the same as the previous NPDES Permit and will be retained.

h. 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 using the PentoxSD program (see Attachment 4). The following parameters were modeled for Outfall 001:

Total Dissolved Solids, Chloride, Sulfate, Fluoride, Total Aluminum, Total Antimony, Total Arsenic, Total Boron, Total Cobalt, Dissolved Iron, Total Nickel, Total Phenols (Phenolics), Acrylamide, Chlorodibromomethane, 1,1,2-Trichloroethane, Pentachlorophenol, Aldrin, alpha-BHC, beta-BHC, gamma-BHC, Chlordane, 4,4-DDT, 4,4-DDE, 4,4-DDD, Dieldrin, alpha-Endosulfan, beta-Endosulfan, Endrin, Heptachlor, Heptachlor Epoxide, and Toxaphene.

Median stream pH to be used: 7.45 Standard Units (S.U.)
Stream hardness to be used: 62.6 mg/l

Basis: Value used in previous renewals (pH) and renewal application sampling (hardness)

Median discharge pH to be used: 7.7 Standard Units (S.U.)
Discharge hardness to be used: 553 mg/l

Basis: eDMR and Renewal application sampling

Result: A survey and additional sampling letter was mailed on May 1, 2019 (see Attachment 8). Based on the PentoxSD program (see Attachment 4), resampling at the recommended QLs could result in the reduction or elimination of limits/monitoring for Total Antimony, Total Arsenic, 4,4-DDD, 4,4-DDT, 4,4-DDE, Acrylamide, Aldrin, Chlordane, Dieldrin, Heptachlor, Heptachlor Epoxide, and Toxaphene. A response was received on September 27, 2019 (see Attachment 8) with resample results at the MDLs of the laboratory for Acrylamide, 4,4-DDD, 4,4-DDT, 4,4-DDE, Aldrin, Chlordane, Dieldrin, Heptachlor, Heptachlor Epoxide, and Toxaphene. A second Toxics Screening Analysis Spreadsheet (see Attachment 6) was created which recommends modeling for Total Dissolved Solids, Chloride, Sulfate, Total Aluminum, Total Antimony, Total Arsenic, Total Boron, Total Cobalt, Total Phenols (Phenolics), 1,1,2-Trichloroethane, Pentachlorophenol, alpha-BHC, beta-BHC, alpha-Endosulfan, beta-Endosulfan, and Endrin. Based on the PentoxSD program (see Attachment 7), the WQBELs calculated for all of the parameters except for Total Antimony and Total Arsenic were all greater than twice the input concentrations, so monitoring will not be required. Since the sampling data for Total Antimony and Total Arsenic shows the limits are attainable, they will be added with this renewal NPDES Permit. Since the limits for Total Antimony and Total Arsenic are water quality-based, mass loading limits were also added with this renewal.

The limits for a-Terpineol, Benzoic Acid, p-Cresol, Phenol, and Total Zinc, which are technology-based on §445.00 Subpart B - RCRA Subtitle D Non-Hazardous Waste Landfill, will be retained with this renewal NPDES Permit.

5. Approved Chemical Additives:

Discharge Location	Chemical Name	Purpose	Maximum Usage Rate (gph)
001	AQ-901 (Aluminum Hydroxychloride)	Coagulant for water clarification	0.16
001	AQ-109 (100%)	Anionic flocculent	0.11
001	AQ-197 (Aluminum Based)	High-charge cationic organic coagulant	0.2
001	AQ-SI (Hydroxyethylidene diphosphonic acid, 2-phosphonobutane-1,2,4-tricarboxylic acid, Polyacrylate)	Post-precipitation prevention	0.48

6. Attachment List:

Attachment 1 - Topographical Map of the Facility Area
Attachment 2 - Aerial Map of the STP
Attachment 3 - Toxics Screening Analysis Spreadsheet (Pre-Survey Letter)
Attachment 4 - Pentox Modeling Printouts (Pre-Survey Letter)
Attachment 5 - WQ Modeling Printouts
Attachment 6 - Toxics Screening Analysis Spreadsheet (Post-Survey Letter)
Attachment 7 - PentoxSD Modeling Printouts (Post-Survey Letter)
Attachment 8 - Survey Letter and Response

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 September 1, 2018 to August 31, 2019)

Parameter	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18	SEP-18
Flow (MGD) Average Monthly	0.0209	0.0270	0.0255	0.0242	0.01977	0.02157	0.02276	0.0198	0.01988	0.02317	0.02336	0.0152
Flow (MGD) Daily Maximum	0.0299	0.0314	0.0335	0.0288	0.02619	0.02929	0.03046	0.0287	0.03134	0.03221	0.03393	0.0339
pH (S.U.) Minimum	7.45	7.21	7.29	7.67	7.25	7.6	7.27	7.38	7.72	7.88	8.23	7.19
pH (S.U.) Maximum	8.43	7.88	8.09	8.19	8.22	7.9	7.80	8.09	8.31	8.57	8.71	8.73
BOD5 (mg/L) Average Monthly	7.5	2.0	6.0	4.0	4.0	5	3.5	2.5	4.5	4.0	4.0	3.5
BOD5 (mg/L) Daily Maximum	9.0	2.0	7.0	5.0	4.0	6	4.0	3.0	5.0	4.0	4.0	4.0
TSS (mg/L) Average Monthly	5	11	10	4	4	9	7	8	13	17	32	27
TSS (mg/L) Daily Maximum	6	16	12	4	5	9	9	11	22	20	38	29
Oil and Grease (mg/L) Average Monthly			< 5			5			5			5
Oil and Grease (mg/L) Instantaneous Maximum			< 5			5			5			5
Fecal Coliform (CFU/100 ml) Geometric Mean	2	2	2	3	3	9	5	1	3	9	22	4
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	3	4	3	3	6	23	8	1	6	17	30	14
Ammonia (mg/L) Average Monthly	0.68	0.84	0.42	0.53	0.52	0.71	0.66	1.05	0.48	0.30	0.27	0.27
Ammonia (mg/L) Daily Maximum	0.81	1.07	0.58	0.57	0.62	0.80	0.79	1.17	0.56	0.31	0.31	0.31
Total Zinc (mg/L) Average Monthly			0.055			0.065			0.08			0.06
Total Zinc (mg/L) Daily Maximum			0.06			0.07			0.08			0.06
Phenol (mg/L) Average Monthly			0.010			0.010			0.010			0.010
Phenol (mg/L) Daily Maximum			0.010			0.010			0.010			0.010
a-Terpineol (mg/L) Average Monthly			0.010			0.010			0.010			0.010

a-Terpineol (mg/L) Daily Maximum			0.010			0.010			0.010			0.010
Benzoic Acid (mg/L) Average Monthly			0.020			0.020			0.020			0.0205
Benzoic Acid (mg/L) Daily Maximum			0.020			0.020			0.020			0.021
p-Cresol (mg/L) Average Monthly			0.010			0.010			0.010			0.010
p-Cresol (mg/L) Daily Maximum			0.010			0.010			0.010			0.010

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 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	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	2/day	Grab
BOD5	XXX	XXX	XXX	37.0	140.0	140	2/month	24-Hr Composite
TSS	XXX	XXX	XXX	27.0	88.0	88	2/month	24-Hr Composite
Oil and Grease	XXX	XXX	XXX	15.0 Avg Qrtly	XXX	30.0	2/quarter**	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	4.9	10.0	12	2/month	24-Hr Composite
Total Antimony	0.009	0.018 Daily Max	XXX	0.065	0.131	0.164	2/month	24-Hr Composite
Total Arsenic	0.016	0.033 Daily Max	XXX	0.117	0.234	0.293	2/month	24-Hr Composite
Total Zinc	XXX	XXX	XXX	0.11 Avg Qrtly	0.2	0.28	2/quarter**	24-Hr Composite
Phenol	XXX	XXX	XXX	0.015 Avg Qrtly	0.026	0.038	2/quarter**	24-Hr Composite
a-Terpineol	XXX	XXX	XXX	0.016 Avg Qrtly	0.033	0.04	2/quarter**	24-Hr Composite
Benzoic Acid	XXX	XXX	XXX	0.071 Avg Qrtly	0.12	0.18	2/quarter**	24-Hr Composite

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	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
p-Cresol	XXX	XXX	XXX	0.014 Avg Qrtly	0.025	0.035	2/quarter**	24-Hr Composite

** - The two quarterly samples shall be collected within the same calendar month

Samples taken at the following location: Outfall 001, prior to mixing with any other wastewaters.

Flow is monitor only based on Chapter 92a.61. The limits for Oil and Grease are technology-based on Chapter 95.2. The limits for Fecal Coliforms are technology-based on Chapter 92a.47. The limits for Total Antimony and Total Arsenic are water quality-based on Chapter 16. The limits for pH, BOD, TSS, Ammonia-Nitrogen, a-Terpineol, Benzoic Acid, p-Cresol, Phenol, and Total Zinc are technology-based on §445.00 Subpart B - RCRA Subtitle D Non-Hazardous Waste Landfill.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0.00
Latitude	41º 1' 11.00"	Longitude	-79º 53' 56.00"
Quad Name	-	Quad Code	-
Wastewater Description:	Stormwater (Pond A)		
Receiving Waters	Unnamed Tributary to South Branch Slippery Rock Creek (CWF)	Stream Code	N/A
NHD Com ID	126223115	RMI	N/A
Drainage Area	-	Yield (cfs/mi^2)	-
Q_{7-10} Flow (cfs)	-	Q_{7-10} Basis	-
Elevation (ft)	-	Slope (ft/ft)	-
Watershed No.	20-C	Chapter 93 Class.	CWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-

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

Nearest Downstream Public Water Supply Intake	Pennsylvania American Water Company - Ellwood City		
PWS Waters	Slippery Rock Creek	Flow at Intake (cfs)	53.1
PWS RMI	0.1	Distance from Outfall (mi)	32.0 (approximate)

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 002, 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	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Samples taken at the following location: Outfall 002, prior to mixing with any other wastewaters.

Monitoring for pH, Total Suspended Solids (TSS), Chemical Oxygen Demand (COD), Ammonia-Nitrogen, and Total Iron is based on the stormwater monitoring requirements for Appendix C facilities from the PAG-03 General Permit.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	003	Design Flow (MGD)	0.00
Latitude	41º 0' 52.00"	Longitude	-79º 53' 41.00"
Quad Name	-	Quad Code	-
Wastewater Description:	Stormwater from Pond B		
Receiving Waters	Unnamed Tributary of South Branch Slippery Rock Creek (CWF)	Stream Code	N/A
NHD Com ID	126223136	RMI	N/A
Drainage Area	-	Yield (cfs/mi^2)	-
Q_{7-10} Flow (cfs)	-	Q_{7-10} Basis	-
Elevation (ft)	-	Slope (ft/ft)	-
Watershed No.	20-C	Chapter 93 Class.	CWF
Existing Use	-	Existing Use Qualifier	-
Exceptions to Use	-	Exceptions to Criteria	-
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	-		
Source(s) of Impairment	-		
TMDL Status	-	Name	-

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

Nearest Downstream Public Water Supply Intake	Pennsylvania American Water Company - Ellwood City		
PWS Waters	Slippery Rock Creek	Flow at Intake (cfs)	53.1
PWS RMI	0.1	Distance from Outfall (mi)	32.0 (approximate)

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 003, 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	Average Weekly	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
pH (S.U.)	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
COD	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
TSS	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Ammonia-Nitrogen	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab
Total Iron	XXX	XXX	XXX	XXX	Report	XXX	1/6 months	Grab

Samples taken at the following location: Outfall 003, prior to mixing with any other wastewaters.

Monitoring for pH, Total Suspended Solids (TSS), Chemical Oxygen Demand (COD), Ammonia-Nitrogen, and Total Iron is based on the stormwater monitoring requirements for Appendix C facilities from the PAG-03 General Permit.