Pennsylvania Department of Environmental Protection

Northcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0111431**
Facility Type	**Industrial**	APS ID	**1090903**
Major / Minor	**Minor**	Authorization ID	**1444075**

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

Applicant and Facility Information

Applicant Name	**H H Knoebel Sons Inc.**	Facility Name	**Knoebels Grove Park**
Applicant Address	PO Box 317 391 Knoebels Boulevard	Facility Address	391 Knoebels Boulevard
	Elysburg, PA 17824-0317		Elysburg, PA 17824-7127
Applicant Contact	Richard Knoebel	Facility Contact	Richard Knoebel
Applicant Phone	(570) 672-2572	Facility Phone	(570) 672-2572
Client ID	29104	Site ID	254796
SIC Code	7996	Municipality	Cleveland Township
SIC Description	Amusement Parks	County	Columbia
Date Application Received	June 13, 2023	EPA Waived?	Yes
Date Application Accepted	June 27, 2023	If No, Reason	

Purpose of Application: Application for the renewal of an existing individual industrial waste NPDES permit.

Summary of Review

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.

It is noted that these are seasonal discharges that only occur when Knoebel's Amusement Park is open, typically from May until Labor Day when the pool and water rides close. Outfalls 001, 002, 003, and 005 seldom discharge since the water is reused within the pool complex.

Approve	Deny	Signatures	Date
X		Jonathan P. Peterman / Project Manager	January 16, 2025
X		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	January 17, 2025

The following is a summary of the 6 existing discharges:

#	Location (Lat/Long)	Source	Treatment Provided	Average Flow (MGD)	Receiving Stream, Chapter 93 Protected Use
001	40° 52' 47"/ -76° 30' 15"	Crystal pool sand filter backwash	Settling tank/de-chlorination	0.144	South Branch Roaring Creek, HQ-CWF
002	40° 52' 42"/ -76° 30' 13"	Crystal pool overflow	De-chlorination	0.002	Mugser Run, HQ-CWF
003	40° 52' 42"/ -76° 30' 13"	Wading pool overflow	De-chlorination	0.036	Mugser Run, HQ-CWF
004	40° 52' 40"/ -76° 30' 12"	Waterslide sand filter backwash	Settling tank/de-chlorination	0.0144	Mugser Run, HQ-CWF
005	40° 52' 40"/ -76° 30' 10"	Slide plunge overflow	De-chlorination	0.005	Mugser Run, HQ-CWF
006	40° 52' 51"/ -76° 30' 15"	Motor boat ride stormwater	Settling and Oil & water separation	0.053	South Branch Roaring Creek, HQ-CWF

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002, 003, 004, and 005	Design Flow (MGD)	See Above
Latitude	See Above	Longitude	See Above
Quad Name	Danville	Quad Code	1133
Wastewater Description:	IW Process Effluent without ELG		
Receiving Waters	Mugser Run (HQ-CWF)	Stream Code	27467
NHD Com ID	65643069	RMI	<0.5
Drainage Area	11.8 mi^2	Yield (cfs/mi^2)	0.025
Q_{7-10} Flow (cfs)	0.3	Q_{7-10} Basis	Previous stream delineation
Elevation (ft)	600	Slope (ft/ft)	N/A
Watershed No.	5-E	Chapter 93 Class.	HQ-CWF
Existing Use	HQ-CWF	Existing Use Qualifier	N/A
Exceptions to Use	None	Exceptions to Criteria	None
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	N/A		
Source(s) of Impairment	N/A		
TMDL Status	N/A	Name	N/A
Nearest Downstream Public Water Supply Intake	Danville Municipal Water Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	1120
PWS RMI	138.06	Distance from Outfall (mi)	15

Changes Since Last Permit Issuance: None.
Other Comments: None.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001 and 006	Design Flow (MGD)	See Above
Latitude	See Above	Longitude	See Above
Quad Name	Danville	Quad Code	1133
Wastewater Description:	IW Process Effluent without ELG		
Receiving Waters	South Branch Roaring Creek (HQ-CWF)	Stream Code	27462
NHD Com ID	65643049	RMI	2.1 (001) 1.86 (006)
Drainage Area	n/a, no modeling performed	Yield (cfs/mi^2)	0.7
Q_{7-10} Flow (cfs)	0.7	Q_{7-10} Basis	Previous stream delineation
Elevation (ft)	600	Slope (ft/ft)	n/a
Watershed No.	5-E	Chapter 93 Class.	HQ-CWF
Existing Use	None	Existing Use Qualifier	
Exceptions to Use	None	Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	PATHOGENS		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status		Name	
Nearest Downstream Public Water Supply Intake	Danville Municipal Water Authority		
PWS Waters	Susquehanna River	Flow at Intake (cfs)	1120
PWS RMI	138.06	Distance from Outfall (mi)	15

Changes Since Last Permit Issuance: None.
Other Comments: None.

Existing Effluent Limitations and Monitoring Requirements

Existing Limits – Outfall 001

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	1/day	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	XXX	XXX	0.05	1/day	Grab
Total Suspended Solids	XXX	XXX	XXX	30	60	75	2/month	Grab

*The existing effluent limits for Outfall 001 were based on a design flow of 0.144 MGD.

Existing Limits – Outfall 002

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/day	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	XXX	XXX	0.05	1/day	Grab

*The existing effluent limits for Outfall 001 were based on a design flow of 0.002 MGD.

Existing Limits – Outfall 003

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/day	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	XXX	XXX	0.05	1/day	Grab

*The existing effluent limits for Outfall 001 were based on a design flow of 0.036 MGD.

Existing Limits – Outfall 004

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	1/day	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	XXX	XXX	0.05	1/day	Grab
Total Suspended Solids	XXX	XXX	XXX	30	60	75	2/month	Grab

*The existing effluent limits for Outfall 001 were based on a design flow of 0.0144 MGD.

Existing Limits – Outfall 005

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/day	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	XXX	XXX	0.05	1/day	Grab

*The existing effluent limits for Outfall 001 were based on a design flow of 0.0005 MGD.

Existing Limits – Outfall 006

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	1/day	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/day	Grab
Total Suspended Solids	XXX	XXX	XXX	30	60	75	2/month	Grab
Oil and Grease	XXX	XXX	XXX	15	XXX	30	2/month	Grab

*The existing effluent limits for Outfall 001 were based on a design flow of 0.053 MGD.

Development of Effluent Limitations

Outfall No. 005 **Design Flow (MGD)** .005
Latitude 40º 52' 39.70" **Longitude** -76º 30' 9.52"
Wastewater Description: IW Process Effluent without ELG

Outfall No. 004 **Design Flow (MGD)** .0004
Latitude 40º 52' 39.95" **Longitude** -76º 30' 11.66"
Wastewater Description: IW Process Effluent without ELG

Outfall No. 001 **Design Flow (MGD)** .0241
Latitude 40º 52' 46.52" **Longitude** -76º 30' 15.18"
Wastewater Description: IW Process Effluent without ELG

Outfall No. 003 **Design Flow (MGD)** .036
Latitude 40º 52' 41.83" **Longitude** -76º 30' 13.32"
Wastewater Description: IW Process Effluent without ELG

Outfall No. 002 **Design Flow (MGD)** .002
Latitude 40º 52' 41.83" **Longitude** -76º 30' 13.32"
Wastewater Description: IW Process Effluent without ELG

Outfall No. 006 **Design Flow (MGD)** .053
Latitude 40º 52' 51.20" **Longitude** -76º 30' 15.05"
Wastewater Description: IW Process Effluent without ELG

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

Parameter	Limit (mg/l) (Average Monthly)	Limit (mg/l) (Daily Maximum)	Federal Regulation	State Regulation
pH	6-9 at all times	-	§133.102(c)	§95.2
TRC	0.5	-	-	§92a.48
Oil & Grease	15	-	-	§95.2(2)(ii)

Parameter	Limit (mg/l) (Average Monthly)	Limit (mg/l) (Daily Maximum)	Basis
TSS	30	60	These limits are derived from Guidance Document (392-2183-003) *Technology-Based Control Requirements for Water Treatment Plant.*

Water Quality-Based Limitations
To establish whether or not water-quality based effluent limitations (WQBELs) are required, the Department models in-stream conditions. In order to determine limitations for toxics, the Department utilizes the Toxics Management Spreadsheet (TMS). The use of a WQM7.0 or TMS analysis is not required for this discharge.

Best Professional Judgment (BPJ) Limitations
None.

Anti-Backsliding

In accordance with 40 CFR 122.44(l)(1) and (2), this permit does not contain effluent limitations, standards, or conditions that are less stringent than the previous permit.

Chesapeake Bay

In accordance with the Phase III WIP Chesapeake Bay Strategy this facility has been identified previously by DEP as "insignificant dischargers" by virtue of having gross effluent discharges that do not exceed 75 lbs/day of TN or 25 lbs/day

of TP. For these non-significant IW facilities, monitoring and reporting of TN and TP will be required throughout the permit term in renewed or amended permits anytime the facility has the potential to introduce a net TN or TP increase to the load contained within the intake water used in processing. No nutrient monitoring is required for this facility.

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 the abovementioned 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) and/or BPJ.

Proposed Limits - 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	1/day	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	XXX	XXX	0.02	1/day	Grab
Total Suspended Solids	XXX	XXX	XXX	30	60	75	2/month	Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.0241 MGD.

Proposed Limits - 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	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/day	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	XXX	XXX	0.02	1/day	Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.002 MGD.

Proposed Limits - 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	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/day	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	XXX	XXX	0.02	1/day	Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.036 MGD.

Proposed Limits - Outfall 004, 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	1/day	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	XXX	XXX	0.02	1/day	Grab
Total Suspended Solids	XXX	XXX	XXX	30	60	75	2/month	Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.0004 MGD.

Proposed Limits - Outfall 005, 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	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	1/day	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0 Daily Max	XXX	1/day	Grab
Total Residual Chlorine (TRC)	XXX	XXX	XXX	XXX	XXX	0.02	1/day	Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.0005 MGD.

Proposed Limits - Outfall 006, 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	1/day	Estimate
pH (S.U.)	XXX	XXX	6.0 Daily Min	XXX	9.0	XXX	1/day	Grab
Total Suspended Solids	XXX	XXX	XXX	30	60	75	2/month	Grab
Oil and Grease	XXX	XXX	XXX	15	XXX	30	2/month	Grab

*The proposed effluent limits for Outfall 001 were based on a design flow of 0.053 MGD.

The existing monitoring frequencies and sample types for the abovementioned parameters are consistent with water treatment plant wastewater discharges and the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-4. The existing requirements will remain.

Flow
The existing reporting of average monthly and daily max flows is consistent with similar facilities and will remain.

pH
CFR Title 40 §133.102(c) and 25 PA Code §95.2(1) provide the basis of effluent limitations for pH.

Total Suspended Solids (TSS)
The existing technology-based effluent limits for these parameters have been implemented in accordance with DEP Guidance Document (392-2183-003) *Technology-Based Control Requirements for Water Treatment Plants* and shall remain.

Oil and Grease
The 25 PA Code §95.2(2)(ii) provides the basis of effluent limitations for oil and grease. The oil and grease standards only apply to outfall 006 since it is the only outfall anticipated to have any contact with oil and grease.

Total Residual Chlorine (TRC)
Under the authority of 25 Pa. Code § 93.4c, the use of chlorine for disinfection will generally not be authorized special protection watersheds. Given that the use of chlorine is approved, the effluent limitation will be set to 0.02 mg/l ("non-detect") and the associated Part C language will be used. The previous permit established an IMAX non-detect limit of 0.05 mg/l. However, current policy dictates that the average monthly MDL in NPDES permits for TRC should be specified as 0.02 mg/L, which is believed to be reasonable for standardized TRC methods. The permittee is not authorized to discharge chlorine in detectable quantities, therefore, no compliance schedule is required. Note: the previous fact sheet indicated that the effluent limit would be set to 0.02 mg/l, but the permit was issued with 0.05 mg/l.

Outfall 006 is not subject to the TRC de-chlorination standards since chlorine is not present in the boat canal water or stormwater.

Compliance History

Summary of Inspections -The last inspection of the facility was conducted on 9/21/24 by the Department which reveals that there were no issues and the facility was operating normally. Only late DMR submissions were noted.

WMS Query Summary - A WMS Query was run at *Reports - Violations & Enforcements – Open Violations for Client Report* to determine whether there are any unresolved violations associated with the client that will affect issuance of the permit (per CSL Section 609). This query revealed the following open violation for this client. The SDW program will contacted regarding this open violation, but it should not affect the issuance of the permit.

CLIENT ID	CLIENT	PF ID	FACILITY	PF KIND	INSP PROGRAM	VIOLATION ID	VIOLATION DATE	VIOLATION CODE	VIOLATION	INSP REGION
29104	H H KNOEBEL SONS INC	266484	KNOEBELS GROVE PARK	NonTransient NonCommunity	Safe Drinking Water	8206939	10/24/2024	B5C	FAILURE OF A NONCOMMUNITY WATER SYSTEM TO OBTAIN A PERMIT OR APPROVAL	NCRO

Compliance History

DMR Data for Outfall 001 (from December 1, 2023 to November 30, 2024)

Parameter	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23
Flow (MGD) Average Monthly							0.40					
Flow (MGD) Daily Maximum							0.40					
pH (S.U.) Daily Minimum							7.5					
pH (S.U.) Daily Maximum							7.5					
TRC (mg/L) Instantaneous Maximum							0.05					
TSS (mg/L) Average Monthly							4.0					
TSS (mg/L) Daily Maximum							4.0					

DMR Data for Outfall 006 (from December 1, 2023 to November 30, 2024)

Parameter	NOV-24	OCT-24	SEP-24	AUG-24	JUL-24	JUN-24	MAY-24	APR-24	MAR-24	FEB-24	JAN-24	DEC-23
Flow (MGD) Average Monthly				0.63	0.0687	0.066	0.0687					
Flow (MGD) Daily Maximum				0.08	0.080	0.08	0.080					
pH (S.U.) Daily Minimum				6.6	6.6	6.8	6.6					
pH (S.U.) Daily Maximum				7.1	7.0	7.2	7.0					
TSS (mg/L) Average Monthly				14.0	5.25	13.0	2.5					
TSS (mg/L) Daily Maximum				16.0	5.5	22.0	4.0					
Oil and Grease (mg/L) Average Monthly				5.9	4.0	5.0	5.0					

Compliance History

Effluent Violations for Outfall 001, from: January 1, 2024 To: November 30, 2024

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	10/31/24	Daily Min	0.1	S.U.	6.0	S.U.

Effluent Violations for Outfall 002, from: January 1, 2024 To: November 30, 2024

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	10/31/24	Daily Min	0.01	S.U.	6.0	S.U.

Effluent Violations for Outfall 003, from: January 1, 2024 To: November 30, 2024

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	10/31/24	Daily Min	0.01	S.U.	6.0	S.U.

Effluent Violations for Outfall 004, from: January 1, 2024 To: November 30, 2024

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	10/31/24	Daily Min	0.01	S.U.	6.0	S.U.

Effluent Violations for Outfall 005, from: January 1, 2024 To: November 30, 2024

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	10/31/24	Daily Min	0.01	S.U.	6.0	S.U.

Effluent Violations for Outfall 006, from: January 1, 2024 To: November 30, 2024

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
pH	09/30/24	Daily Min	0.10	S.U.	6.0	S.U.
pH	10/31/24	Daily Min	0.01	S.U.	6.0	S.U.

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