pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0001571**
Facility Type	**Storm Water**	APS ID	**1078076**
Major / Minor	**Minor**	Authorization ID	**1421797**

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

Applicant and Facility Information

Applicant Name	**Trogon Development LLC**	Facility Name	**Retired Elrama Generating Station**
Applicant Address	PO Box 1636	Facility Address	30 Duquesne Light Drive
	Canovanas, PR 00729		Elrama, PA 15038-1007
Applicant Contact	Jesse Froh	Facility Contact	Linda Denison
Applicant Phone	(314) 580-6736	Facility Phone	(614) 565-2297
Client ID	361817	Site ID	237511
SIC Code	4911	Municipality	Union Township
SIC Description	Trans. & Utilities - Electric Services	County	Washington
Date Application Received	December 26, 2022	EPA Waived?	Yes
Date Application Accepted	December 29, 2022	If No, Reason	

Purpose of Application: NPDES permit renewal for stormwater discharge from site of former coal-fired power plant

Summary of Review

DEP received an application submitted by Trogon Development LLC on December 26, 2022 to renew NPDES Permit PA0001571 for stormwater discharges from the former site of the retired Elrama Generating Station, a coal-fired power plant that was located along the Monongahela River in Elrama southwest of Elizabeth Borough that has since been entirely demolished. It began operation in the 1950s, last operated on 9/23/2012, and was retired on 11/4/2013. The prior NPDES permit was issued on June 1, 2018 with an effective date of July 1, 2018 and an expiration date of June 30, 2023. NPDES permit coverage with existing limits has been extended since the expiration date.

The facility now only consists of former treatment ponds, access roads, a storeroom building with no significant materials, a river access truck unloading ramp, a large lime pile, and some miscellaneous piles of dirt & rubble. Significant points of interest are marked on satellite imagery in Figure 1. The leftover lime (pulverized limestone) pile lacks any sort of containment. The lime pile was originally contained in a silo to serve the power plant operations. Supporting images of current site conditions can be found in Attachment B. **If the lime pile is removed prior to issuance of the renewed permit, NPDES permit coverage will no longer be required as this is the last significant remnant of the former industrial activity.**

The prior permit has two internal monitoring points (IMPs) called IMP 101 & IMP 501 which coalesced along with general industrial stormwater collected in catch basins to a final outfall called Outfall 001 which discharges to the Monongahela River. IMP 101 was stormwater runoff from the former ash settling and ash polishing ponds. IMP 501 was stormwater runoff from the former coal pile runoff pond. Outfall 002 collected general industrial stormwater from the east storm sewer, former bottom ash overflow sump, and former scrubber area stormwater. At the facility outfalls, the Monongahela River has a 25 PA Code Chapter 93 Warm Water Fishes designated use and is considered impaired for fish consumption due to polychlorinated biphenyls (PCBs) from an unknown source.

Approve	Deny	Signatures	Date
X		Jace William Marsh / Environmental Engineering Specialist	June 7, 2024
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	June 28, 2024

Summary of Review

No discharge has been reported at IMP 101 or IMP 501 for at least the past two years. WQM # 6377210 for the coal pile runoff pond and WQM # 6373209 for the ash settling & polishing ponds have both been terminated. The coal pile has been removed and no significant amount of coal remnants remain. The ash ponds have been scraped clean. All ponds now contain only stormwater. All other WQM permits associated with the facility have been terminated. Outfall 001 now only receives stormwater from catch basins on the eastern side of the demolished plant site and Duquesne Light Drive while Outfall 002 receives stormwater from catch basins along the former stretch of Duquesne Light Drive in the southern side of the demolished plant site. Catch basin connections are shown in Figure 2 which shows the layout of the facility when it was in operation.

The permittee has an open violation at the Beagle Club Ash Disposal Site NPDES Permit # PA00010782 in the DEP South Central Region, but none at this facility. The last compliance evaluation inspection on record occurred on 9/30/2022 by Howard Dunn with no violations noted. A site visit was conducted on 4/24/2024 by Howard Dunn, Amanda Illar, and Jace Marsh (reviewer) to assess current site conditions for NPDES permit renewal with the permittee represented by Linda Denison, CHMM, Gemini Engineering LLC.

IMP 101 and IMP 501 will be eliminated with this renewal, and effluent limits at Outfall 001 and Outfall 002 will only be monitoring requirements based on Appendix J benchmarks of the 2022 PAG-03 General Industrial Stormwater Permit. A Corrective Action Plan will be required following two consecutive exceedances of benchmarks. Since access to the actual discharge points has proven hazardous in the past, the representative sampling locations for Outfall 001 and Outfall 002 are functioning catch basins that remain. These catch basins can be seen in Attachment B.

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.

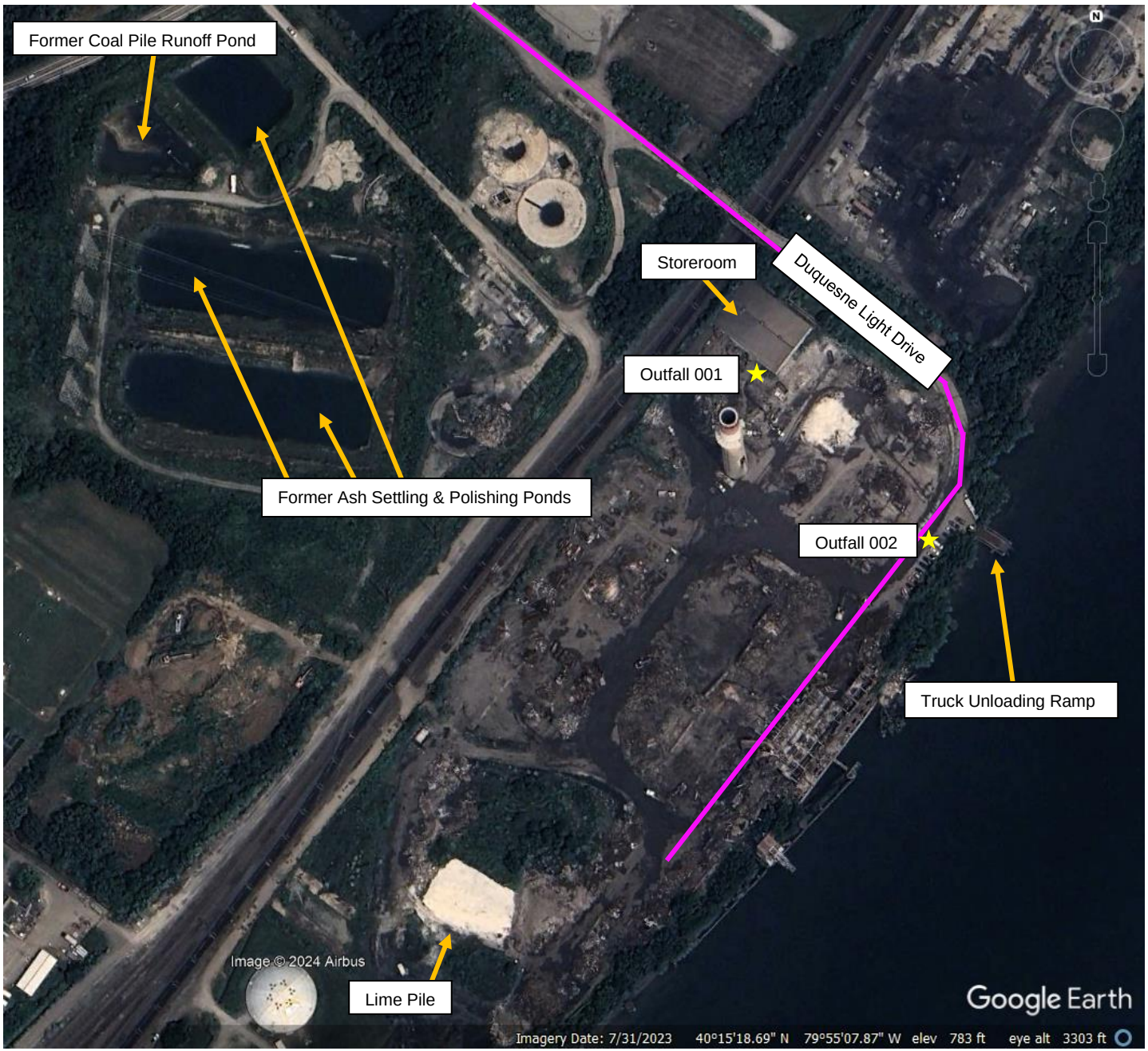

Figure 1. Current points of interest shown on outdated satellite imagery of partially demolished power plant

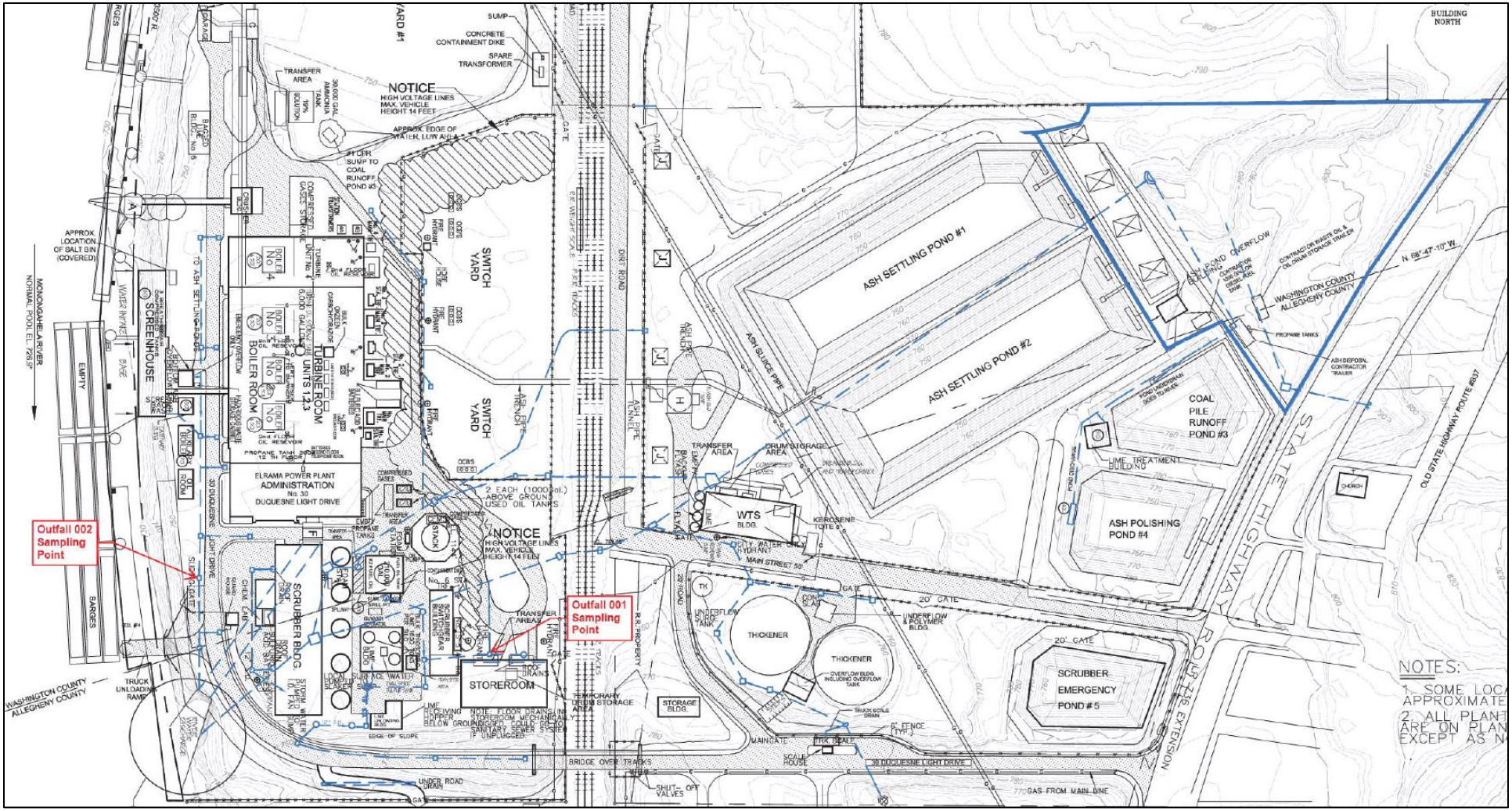

Figure 2. Former layout of active facility showing current representative stormwater sampling locations

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0
Latitude	40º 15' 12.69"	Longitude	-79º 55' 2.29"
Quad Name	Glassport	Quad Code	1606
Wastewater Description:	Stormwater runoff from demolished plant site and access road		
Receiving Waters	Monongahela River	Stream Code	82261
NHD Com ID	134839807	RMI	24.97
Drainage Area	5330 mi^2	Yield (cfs/mi^2)	0.103
Q_{7-10} Flow (cfs)	550	Q_{7-10} Basis	USACE
Elevation (ft)	730	Slope (ft/ft)	0.0001
Watershed No.	19-C	Chapter 93 Class.	Warm Water Fishes
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	Polychlorinated Biphenyls (PCBs)		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	Monongahela River TMDL
Nearest Downstream Public Water Supply Intake	Pennsylvania American Water Company—Pittsburgh		
PWS Waters	Monongahela River	Flow at Intake (cfs)	1230
PWS RMI	4.62	Distance from Outfall (mi)	20.6

Changes Since Last Permit Issuance: Outfall 001 is now stormwater from the demolished plant site only

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0
Latitude	40º 15' 9.34"	Longitude	-79º 54' 58.76"
Quad Name	Glassport	Quad Code	1606
Wastewater Description:	Stormwater runoff from demolished plant site and pulverized limestone pile		
Receiving Waters	Monongahela River	Stream Code	82261
NHD Com ID	134839807	RMI	24.97
Drainage Area	5330 mi^2	Yield (cfs/mi^2)	0.103
Q_{7-10} Flow (cfs)	550	Q_{7-10} Basis	USACE
Elevation (ft)	730	Slope (ft/ft)	0.0001
Watershed No.	19-C	Chapter 93 Class.	Warm Water Fishes
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	None
Assessment Status	Impaired		
Cause(s) of Impairment	Polychlorinated Biphenyls (PCBs)		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	Monongahela River TMDL
Nearest Downstream Public Water Supply Intake	Pennsylvania American Water Company—Pittsburgh		
PWS Waters	Monongahela River	Flow at Intake (cfs)	1230
PWS RMI	4.62	Distance from Outfall (mi)	20.6

Changes Since Last Permit Issuance: no significant changes

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0
Latitude 40º 15' 12.69" **Longitude** -79º 55' 2.29"
Wastewater Description: Stormwater runoff from demolished power plant site and access road

001.A. Technology-Based Limitations

Outfall 001 will be subject to 2022 PAG-03 General Industrial Stormwater Permit conditions as a minimum requirement. The SIC code provided for the facility is 1799—Special Trade Contractors, Not Elsewhere Classified. Since that SIC code does not apply to any specific PAG-03 Appendix, it will be classified as Appendix J—Additional Facilities. The monitoring requirements applicable to Appendix J stormwater discharges are shown in Table 1.1 below.

A Part C condition is included in the Draft Permit requiring a Corrective Action Plan to evaluate site stormwater controls and best management practices (BMPs) when there are two consecutive exceedances of benchmark values, which are also included in the Part C condition. Benchmark monitoring is a feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of stormwater controls and BMPs. An exceedance of the benchmark provides permittees with an indication that the facility's controls may not be sufficiently controlling pollutants in stormwater.

Table 1.1. PAG-03 Appendix J 2022 monitoring requirements

Parameter	Benchmark Value (mg/L)	Measurement Frequency	Sample Type
Total Nitrogen	XXX	1/6 Months	Grab
Total Phosphorus	XXX	1/6 Months	Grab
Total Suspended Solids (TSS)	100	1/6 Months	Grab
Oil & Grease	30	1/6 Months	Grab
pH (S.U.)	9.0	1/6 Months	Grab
Chemical Oxygen Demand (COD)	120	1/6 Months	Grab

001.B. Water Quality-Based Limitations

Stormwater WQBELs

Water quality analyses are typically performed under low-flow (Q7-10) stream conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharge from Outfall 001 is composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations are not proposed.

001.C. Anti-Backsliding

Previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l). Shown in Table 1.2 are the previous permit limits.

Table 1.2. Previous permit limits

Parameter	Minimum	Daily Maximum	Measurement Frequency	Sample Type
Total Suspended Solids (TSS)	XXX	100.0	1/6 Months	Grab
Oil & Grease	XXX	Report	1/6 Months	Grab
Total Iron	XXX	Report	1/6 Months	Grab
pH (S.U.)	6.0	9.0	1/6 Months	Grab

001.D. Proposed Effluent Limitations

The proposed monitoring requirements for Outfall 001, drawn from 2022 PAG-03 General Industrial Stormwater Permit Appendix J, are displayed in Table 1.3.

Table 1.3. Proposed monitoring requirements

Parameter	Benchmark Value (mg/L)	Measurement Frequency	Sample Type
Total Nitrogen	XXX	1/6 Months	Grab
Total Phosphorus	XXX	1/6 Months	Grab
Total Suspended Solids (TSS)	100	1/6 Months	Grab
Oil & Grease	30	1/6 Months	Grab
pH (S.U.)	9.0	1/6 Months	Grab
Chemical Oxygen Demand (COD)	120	1/6 Months	Grab

Development of Effluent Limitations

Outfall No. 002 **Design Flow (MGD)** 0
Latitude 40º 15' 9.34" **Longitude** -79º 54' 58.76"
Wastewater Description: Stormwater runoff from demolished power plant site and pulverized limestone "lime" pile

002.A. Technology-Based Limitations

Outfall 002 will be subject to 2022 PAG-03 General Industrial Stormwater permit conditions as a minimum requirement. The SIC code provided for the facility is 1799—Special Trade Contractors, Not Elsewhere Classified. Since that SIC code does not apply to any specific PAG-03 Appendix, it will be classified as Appendix J—Additional Facilities. The monitoring requirements applicable to Appendix J stormwater discharges are shown in Table 2.1 below. TSS and pH parameters should capture any influence on stormwater quality from the lime pile in this portion of the facility. Benchmark values are explained in 001.A.

Table 2.1. PAG-03 Appendix J 2022 monitoring requirements

Parameter	Benchmark Value (mg/L)	Measurement Frequency	Sample Type
Total Nitrogen	XXX	1/6 Months	Grab
Total Phosphorus	XXX	1/6 Months	Grab
Total Suspended Solids (TSS)	100	1/6 Months	Grab
Oil & Grease	30	1/6 Months	Grab
pH (S.U.)	9.0	1/6 Months	Grab
Chemical Oxygen Demand (COD)	120	1/6 Months	Grab

002.B. Water Quality-Based Limitations

Stormwater WQBELs

Water quality analyses are typically performed under low-flow (Q7-10) stream conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharge from Outfall 002 is composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations are not proposed.

002.C. Anti-Backsliding

Previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l). Shown in Table 2.2 are the previous permit limits.

Table 2.2. Previous permit limits

Parameter	Minimum	Daily Maximum	Measurement Frequency	Sample Type
Total Suspended Solids (TSS)	XXX	100.0	1/6 Months	Grab
Oil & Grease	XXX	Report	1/6 Months	Grab
Total Iron	XXX	Report	1/6 Months	Grab
pH (S.U.)	6.0	9.0	1/6 Months	Grab

002.D. Proposed Effluent Limitations

The proposed monitoring requirements for Outfall 002, drawn from 2022 PAG-03 General Industrial Stormwater Permit Appendix J, are displayed in Table 2.3.

Table 2.3. Proposed monitoring requirements

Parameter	Benchmark Value (mg/L)	Measurement Frequency	Sample Type
Total Nitrogen	XXX	1/6 Months	Grab
Total Phosphorus	XXX	1/6 Months	Grab
Total Suspended Solids (TSS)	100	1/6 Months	Grab
Oil & Grease	30	1/6 Months	Grab
pH (S.U.)	9.0	1/6 Months	Grab
Chemical Oxygen Demand (COD)	120	1/6 Months	Grab

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: SOP No. BCW-PMT-001
☐	Other: USGS StreamStats Report (see Attachment A)

Attachment A
USGS StreamStats

Monongahela River StreamStats Report–Retired Elrama Generating Station

Region ID: PA
Workspace ID: PA20240328125723795000
Clicked Point (Latitude, Longitude): 40.25271, -79.91499
Time: 2024-03-28 08:57:51 -0400

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	11.8475	degrees
DRNAREA	Area that drains to a point on a stream	5330	square miles
ELEV	Mean Basin Elevation	1825	feet

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	5330	square miles	2.26	1400
ELEV	Mean Basin Elevation	1825	feet	1050	2580

Low-Flow Statistics Disclaimers [Low Flow Region 4]

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

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

Statistic	Value	Unit
7 Day 2 Year Low Flow	701	ft^3/s
30 Day 2 Year Low Flow	929	ft^3/s
7 Day 10 Year Low Flow	410	ft^3/s
30 Day 10 Year Low Flow	479	ft^3/s
90 Day 10 Year Low Flow	710	ft^3/s

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (http://pubs.usgs.gov/sir/2006/5130/)

Attachment B
Current Site Conditions

Figure B.1. Lime Pile closeup

Figure B.2. Lime Pile in background

Figure B.3. General view of demolished power plant site

Figure B.4. Outfall 001 representative catch basin

Figure B.5. Outfall 002 representative catch basin