Pennsylvania Department of Environmental Protection

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**New**	Application No.	**PA0218529**
Facility Type	**Storm Water**	APS ID	**1120774**
Major / Minor	**Minor**	Authorization ID	**1498069**

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

Applicant and Facility Information

Applicant Name	**Beaver County Airport Authority**	Facility Name	**Beaver County Airport**
Applicant Address	15 Piper Street	Facility Address	15 Piper Street
	Beaver Falls, PA 15010-1043		Beaver Falls, PA 15010-1043
Applicant Contact	Tim Nestor	Facility Contact	Same as Applicant
Applicant Phone	(724) 847-4662	Facility Phone	Same as Applicant
Applicant email	beavercountyairportbvi@yahoo.com	Facility email	Same as Applicant
Client ID	143687	Site ID	535108
SIC Code	4581	Municipality	Chippewa Township
SIC Description	Airports, Flying Fields, and Services	County	Beaver
Date Application Received	August 29, 2024	EPA Waived?	Yes
Date Application Accepted		If No, Reason	

Purpose of Application: Renewal NPDES Permit Coverage

Summary of Review

In accordance with the terms of the NPDES permit, which was in effect from November 1, 2018, to October 31, 2023, the Beaver County Airport Authority, Inc. was required to submit a complete renewal application to the Department of Environmental Protection (DEP) no later than 180 days prior to the permit's expiration date. However, the authority failed to meet this deadline and instead submitted a late renewal application for the Beaver County Airport on August 29, 2024.

The Facility has a SIC Code of 4581 (Airports, flying fields and services) and North American Industry Classification System Code of 488119 (Other airport operations).

The Beaver County Airport is a public airport owned and operated by the Beaver County Airport Authority. The airport consists of one asphalt runway, a number of hangers as well as a number of aviation related business.

The Beaver County Airport does not perform de-icing operations of any kind.

The site has eight outfalls. Seven of which discharge to an unnamed Tributary of North Fork Little Beaver Creek, designated in 25 PA Code Chapter 93 as a High-Quality Cold-Water Fisheries. Outfall 008 discharges to an Unnamed Tributary to North Branch Brady Run, designated in 25 PA Code Chapter 93 as a Trout Stocking Fishery.

The facility was last inspected by Amanda Illar on September 2, 2021, with no violations noted. However, the inspector recommended verifying that floor drains in the main garage were connected to the sanitary sewer. During the review of the current application, the facility acknowledged that this task remained incomplete.

Approve	Deny	Signatures	Date
X		Angela Rohrer / Environmental Engineering Specialist	February 25, 2025
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	March 7, 2025

Summary of Review

The Department reiterated the request to eliminate the floor drain connections to Outfall 003 and recommended sealing the drains with concrete. On February 24, 2025, the facility confirmed that the main garage drains had been sealed and provided supporting photographs.

Although the Department acknowledges completion of this task, it notes that the soft patch asphalt used may not provide a permanent or impermeable seal. The facility may need to consider improving the seal in the future to ensure long-term effectiveness.

The facility has no open violations.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001, 002, 003, 004, 005, 006, 007	Design Flow (MGD)	0
Latitude	See Table 1	Longitude	See Table 1
Quad Name	California	Quad Code	1806
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to North Fork Little Beaver Creek	Stream Code	33399
NHD Com ID	99677308	RMI	See Table 1.
Drainage Area	0.14 mi^2	Yield (cfs/mi^2)	0.0052
Q_{7-10} Flow (cfs)	0.000734	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1228	Slope (ft/ft)	0.0001
Watershed No.	20-B	Chapter 93 Class.	HQ-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	
Nearest Downstream Public Water Supply Intake	Unknown, in Ohio		
PWS Waters	Unknown	Flow at Intake (cfs)	Unknown
PWS RMI	Unknown	Distance from Outfall (mi)	Greater than 9 miles

Table 1: Outfall Locations

Outfall	Latitude	Longitude	RMI
001	40º 46' 40"	-80º 23' 08"	1.47
002	40º 46' 36"	-80º 23' 06"	1.47
003	40º 46' 32"	-80º 23' 07"	1.47
004	40º 46' 26"	-80º 23' 29"	1.16
005	40º 46' 20"	-80º 23' 28"	1.16
006	40º 46' 20"	-80º 23' 16"	1.44
007	40º 46' 20"	-80º 23' 03"	1.51

Discharge, Receiving Waters and Water Supply Information

Outfall No.	008	Design Flow (MGD)	0
Latitude	40º 46' 18"	Longitude	-80º 22' 44"
Quad Name	California	Quad Code	1806
Wastewater Description:	Stormwater		
Receiving Waters	Unnamed Tributary to North Branch Brady Run (TSF)	Stream Code	33987
NHD Com ID	123918463	RMI	1.86
Drainage Area	0.17 mi^2	Yield (cfs/mi^2)	0.0052
Q_{7-10} Flow (cfs)	0.0009	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1256	Slope (ft/ft)	0.0001
Watershed No.	20-B	Chapter 93 Class.	Trout Stocking (TSF)
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	
Nearest Downstream Public Water Supply Intake	Center Township Water Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	5,880
PWS RMI	953.0	Distance from Outfall (mi)	9.8

Development of Effluent Limitations

Outfall No.	001, 002, 004, 005, 006, 007, 008	**Design Flow (MGD)**	0
Latitude	See Table 1	**Longitude**	See Table 1
Wastewater Description:	Stormwater		

Technology-Based Limitations

Federal Effluent Limitation Guidelines (ELGs)

The site does not conduct deicing activities; therefore, the ELG that would apply at airports, 40 CFR 449 Airport Deicing Point Source Category, does not apply.

Stormwater Technology Limits

Outfalls 001, 002, 004, 005, 006, 007, and 008 will be subject to the conditions of the PAG-03 General Stormwater Permit as a minimum requirement. Although the facility's SIC code corresponds to Appendix G of the PAG-03, the monitoring requirements outlined in this appendix are not applicable to these outfalls, as these Outfalls do not receive stormwater runoff from areas involved in vehicle maintenance, equipment cleaning, or deicing operations. Nevertheless, the site must still implement and comply with airport-specific best management practices (BMPs), which are outlined in Part C of the Draft Permit. Since Appendix G monitoring is not required, Appendix J monitoring requirements will be applied to these outfalls.

Table 2: PAG-03 Appendix (J) Monitoring Requirements

Parameters	Monitoring Requirements		Benchmark Values
	Minimum Measurement Frequency	Sample Type	
Total Nitrogen (mg/L)	1/6 Months	Calculation	XXX
Total Phosphorus (mg/L)	1/6 Months	Grab	XXX
Total Suspended Solids (TSS) (mg/L)	1/6 Months	Grab	100
Oil and Grease (mg/L)	1/6 Months	Grab	30
pH (S.U)	1/6 Months	Grab	9.0
Chemical Oxygen Demand (COD) (mg/L)	1/6 Months	Grab	120

Water Quality-Based Limitations

Water quality analyses are typically performed under low-flow (Q&-10) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharges from Outfalls 001, 002, 004, 005, 006, 007 and 008 are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations based on water quality analyses are not proposed.

Anti-Degradation

The site existed prior to designation date of the high-quality water. The site has been in operation since 1948. Therefore, non-degrading effluent limitations do not need to be evaluated.

Anti-Backsliding

Previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l) and are displayed below in Table 3. These limitations are currently imposed on Outfall 008.

Table 3. Current Effluent Limitation at Outfalls 001, 002, 004, 005, 006, 007 and 008

Parameter	Mass Units (lb/day)		Concentrations (mg/L)				Monitoring Requirements	
	Average Monthly	Daily Maximum	Instant Minimum	Average Monthly	Daily Maximum	Instantaneous Maximum	Sample Frequency	Sample Type
Total Suspended Solids	-	-	-	-	Report	-	1/6 months	Grab
Oil and Grease	-	-	-	-	Report	-	1/6 months	Grab

Proposed Monitoring Requirements

As part of the technical review of the application, sample data submitted with the application and DMRs were evaluated. The review indicated that Outfalls 004 and 005 have been maintained throughout the current permit cycle, with reported values significantly below the benchmark, and maximum concentrations as follows:

Parameter	Maximum Concentration reported (mg/L)		Benchmark Values
	Outfall 004	Outfall 005	
Total Suspended Solids (TSS)	29.5	10.0	100
Oil and Grease	<6.3	<5.6	30
Chemical Oxygen Demand (COD)	24.0	10.6	120
BOD_5	<4.8	<3.0	30

As a result of the review, the Department is proposing to eliminate the monitoring requirements for Outfalls 004 and 005. Instead, due to the similar activities within their drainage areas, Outfall 006 will be considered representative of Outfall 004, and Outfall 007 will also be considered representative of Outfall 005. Although Outfalls 004 and 005 will be exempt from monitoring, they will be listed in Part C of the permit for documentation purposes and to aid DEP in conducting inspections. Additionally, the site is still required to implement and maintain airport-specific best management practices (BMPs) at Outfalls 004 and 005 to ensure compliance with regulatory standards.

Outfalls 001, 002, 006, 007, 008 will be subject to the semi-annual monitoring requirements in Appendix J of the PAG-03 General Permit. The proposed effluent monitoring requirements are displayed in Table 4 below. A Part C condition is included in the Draft Permit requiring development and submission of a Corrective Action Plan whenever there is one or more consecutive exceedances of the benchmark values, which are also included in the Part C condition. The benchmark values are also displayed below in Table 4. These values are not effluent limitations, an exceedance of the benchmark value is not a violation. As described above, if there is one or more consecutive exceedances of the benchmark value, a Corrective Action Plan must be conducted to evaluate site stormwater controls and BMPs. 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 4: Proposed Monitoring Requirements

Parameters	Concentration (mg/l)				Measurement Frequency	Sample Type	Benchmark Values
	Minimum	Average Monthly	Daily Maximum	Instant. Maximum			
Total Nitrogen	XXX	XXX	Report	XXX	1/6 Months	Calculation	XXX
Total Phosphorus	XXX	XXX	Report	XXX	1/6 Months	Grab	XXX
Total Suspended Solids (TSS)	XXX	XXX	Report	XXX	1/6 Months	Grab	100
Oil and Grease	XXX	XXX	Report	XXX	1/6 Months	Grab	30
pH (S.U)	XXX	XXX	Report	XXX	1/6 Months	Grab	9.0
Chemical Oxygen Demand (COD)	XXX	XXX	Report	XXX	1/6 Months	Grab	120

Development of Effluent Limitations

Outfall No. 003 **Design Flow (MGD)** 0
Latitude 40º 46' 32" **Longitude** -80º 23' 07"
Wastewater Description: Stormwater

Technology-Based Limitations

Federal Effluent Limitation Guidelines (ELGs)

The site does not conduct deicing activities; therefore, the ELG that would apply at airports, 40 CFR 449 Airport Deicing Point Source Category, does not apply.

Stormwater Technology Limits

Outfall 003 will be subject to PAG-03 General Stormwater Permit conditions because it discharges stormwater associated with industrial activity. Based on the site's SIC code and due to the presence of maintenance activities within its drainage area., the corresponding appendix that would apply to the facility is Appendix G of the PAG-03. The proposed monitoring requirements are shown in Table 5 below. The benchmark values listed below are not effluent limitations, and exceedances do not constitute permit violations. However, if the permittee's sampling demonstrates exceedances of benchmark values for one monitoring period, the permittee shall submit a Corrective Action Plan. This requirement will be included in Part C of the permit.

Table 5: PAG-03 Appendix (G) Monitoring Requirements

Parameters	Monitoring Requirements		Benchmark Values
	Minimum Measurement Frequency	Sample Type	
Total Nitrogen (mg/L)	1/6 Months	Calculation	XXX
Total Phosphorus (mg/L)	1/6 Months	Grab	XXX
pH (S.U))	1/6 Months	Grab	9.0
5-Day Biochemical Oxygen Demand (BOD_5)	1/6 Months	Grab	30
Chemical Oxygen Demand (COD) (mg/L)	1/6 Months	Grab	120
Total Suspended Solids (TSS) (mg/L)	1/6 Months	Grab	100
Ammonia-Nitrogen (mg/L)	1/6 Months	Grab	XXX
Total Dissolved Solids (mg/L)	1/6 Months	Grab	XXX

Water Quality-Based Limitations

Water quality analyses are typically performed under low-flow (Q_{7-10}) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q_{7-10} conditions. Since the discharges from Outfalls 003 are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations based on water quality analyses are not proposed.

Anti-Degradation

The site existed prior to designation date of the high-quality water. The site has been in operation since 1948. Therefore, non-degrading effluent limitations do not need to be evaluated.

Anti-Backsliding

Previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l) and are displayed below in Table 6. These limitations are currently imposed on Outfall 008.

Table 6. Current Effluent Limitation at Outfall 003

Parameter	Mass Units (lb/day)		Concentrations (mg/L)				Monitoring Requirements	
	Average Monthly	Daily Maximum	Instant Minimum	Average Monthly	Daily Maximum	Instantaneous Maximum	Sample Frequency	Sample Type
Total Suspended Solids	-	-	-	-	Report	-	1/6 months	Grab
Oil and Grease	-	-	-	-	Report	-	1/6 months	Grab

Proposed Monitoring Requirements

Outfall 003 will be subject to the semi-annual monitoring requirements in Appendix G of the PAG-03 General Permit. The proposed effluent monitoring requirements for Outfalls 003 are displayed in Table 7 below. A Part C condition is included in the Draft Permit requiring development and submission of a Corrective Action Plan whenever there is one or more consecutive exceedances of the benchmark values, which are also included in the Part C condition. The benchmark values are also displayed below in Table 7. These values are not effluent limitations, an exceedance of the benchmark value is not a violation. As described above, if there is one or more consecutive exceedances of the benchmark value, a Corrective Action Plan must be conducted to evaluate site stormwater controls and BMPs. 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.

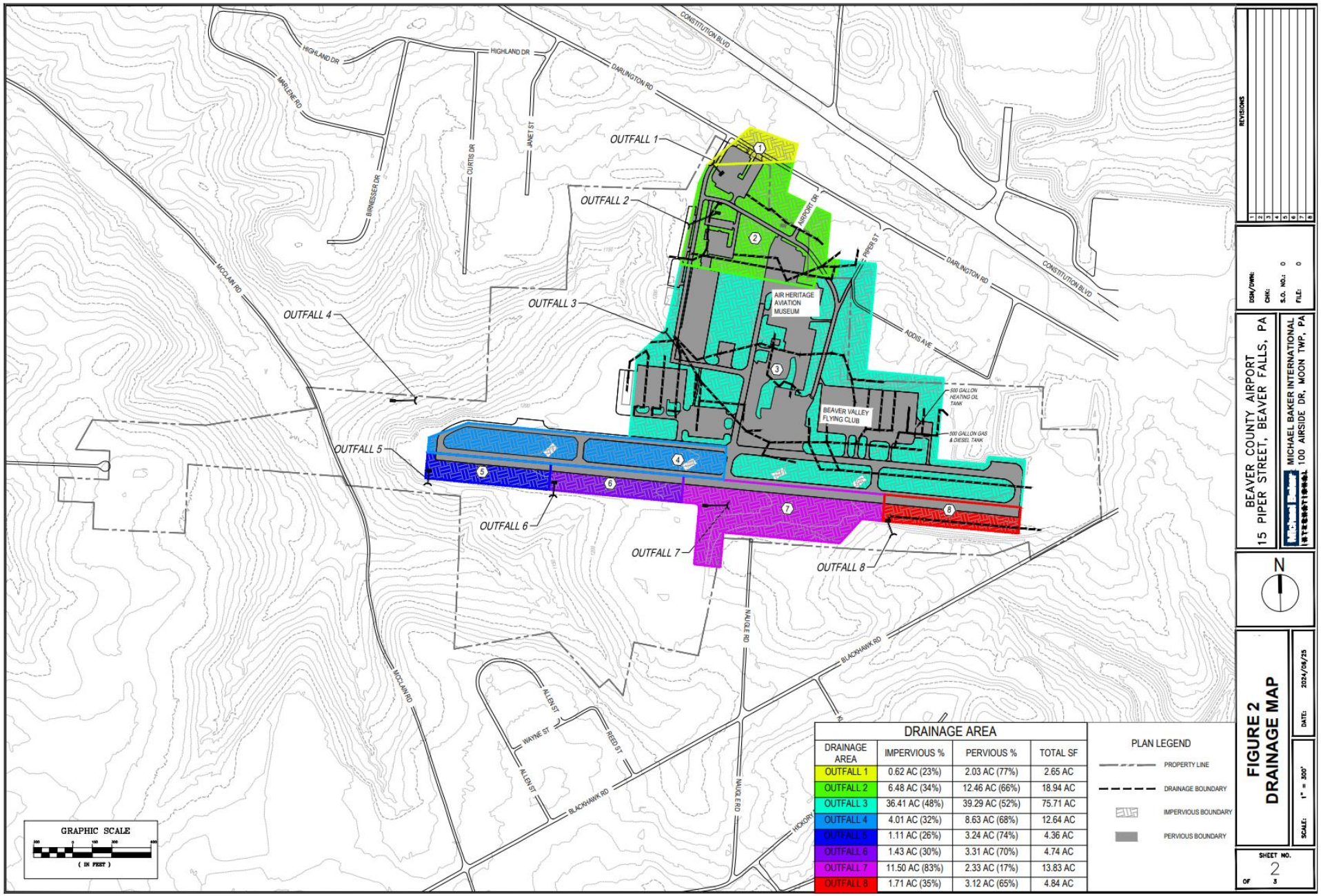
Table 7: Proposed Monitoring Requirements

Parameters	Concentration (mg/l)				Measurement Frequency	Sample Type	Benchmark Values
	Minimum	Average Monthly	Daily Maximum	Instant. Maximum			
Total Nitrogen	XXX	XXX	Report	XXX	1/6 Months	Calculation	XXX
Total Phosphorus	XXX	XXX	Report	XXX	1/6 Months	Grab	XXX
pH (S.U))	XXX	XXX	Report	XXX	1/6 Months	Grab	100
5-Day Biochemical Oxygen Demand (BOD_5)	XXX	XXX	Report	XXX	1/6 Months	Grab	30
Chemical Oxygen Demand (COD)	XXX	XXX	Report	XXX	1/6 Months	Grab	9.0
Total Suspended Solids (TSS)	XXX	XXX	Report	XXX	1/6 Months	Grab	120
Ammonia-Nitrogen	XXX	XXX	Report	XXX	1/6 Months	Calculation	XXX
Total Dissolved Solids	XXX	XXX	Report	XXX	1/6 Months	Calculation	XXX

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:

ATTACHMENT A.
SITE PLAN


OUTFALL 1
OUTFALL 2
OUTFALL 3
OUTFALL 4
OUTFALL 5
OUTFALL 6
OUTFALL 7
OUTFALL 8
CONSTITUTION BLVD
DARLINGTON RD
HIGHLAND DR
MARLENE RD
CURTIS DR
JANET ST
SWANSBERG
MCCLAIN RD
AIRPORT DR
PIPER ST
ADDIS AVE
AIR HERITAGE AVIATION MUSEUM
BEAVER VALLEY FLYING CLUB
500 GALLON HEATING OIL TANK
250 GALLON GAS & DIESEL TANK
NOBLE RD
BLACKHAWK RD
ALLEN ST
WAYNE ST
REBER ST
HICKORY DR
KUTCH ST
GRAPHIC SCALE
(IN FEET)
1 inch = 500 ft.
REVISIONS
DSN./DWN.:
CHK.:
S.O. NO.: 0
FILE: 0
BEAVER COUNTY AIRPORT
15 PIPER STREET, BEAVER FALLS, PA
MICHAEL BAKER INTERNATIONAL
100 AIRSIDE DR, MOON TWP, PA
N
FIGURE 3
AERIAL MAP
SCALE: 1" = 300'
DATE: 2024/06/28
SHEET NO. 3
OF 3

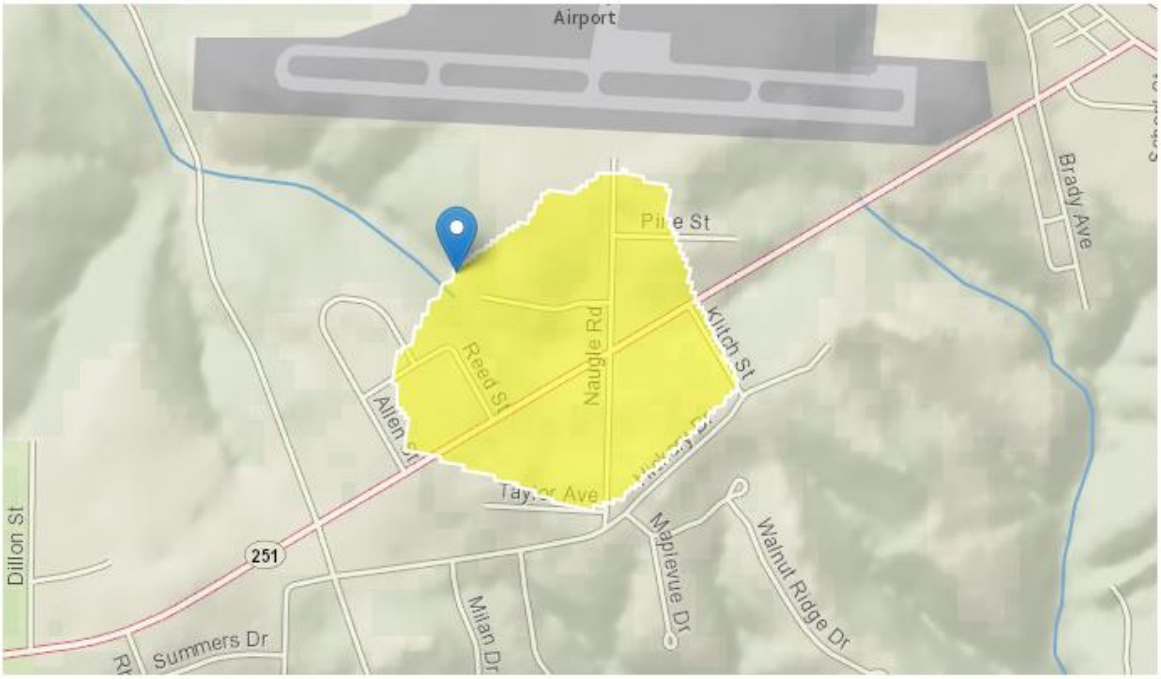


DRAINAGE AREA	IMPERVIOUS %	PERVIOUS %	TOTAL SF
OUTFALL 1	0.62 AC (23%)	2.03 AC (77%)	2.65 AC
OUTFALL 2	6.48 AC (34%)	12.46 AC (66%)	18.94 AC
OUTFALL 3	36.41 AC (48%)	39.29 AC (52%)	75.71 AC
OUTFALL 4	4.01 AC (32%)	8.63 AC (68%)	12.64 AC
OUTFALL 5	1.11 AC (26%)	3.24 AC (74%)	4.36 AC
OUTFALL 6	1.43 AC (30%)	3.31 AC (70%)	4.74 AC
OUTFALL 7	11.50 AC (83%)	2.33 AC (17%)	13.83 AC
OUTFALL 8	1.71 AC (35%)	3.12 AC (65%)	4.84 AC

Attachment B.
StreamStats Report

PA0218529 - StreamStats Report

Region ID: PA
Workspace ID: PA20250203182514206000
Clicked Point (Latitude, Longitude): 40.76899, -80.39479
Time: 2025-02-03 13:25:43 -0500



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	0	percent
DRNAREA	Area that drains to a point on a stream	0.14	square miles
ELEV	Mean Basin Elevation	1220	feet
FOREST	Percentage of area covered by forest	0.9024	percent
PRECIP	Mean Annual Precipitation	37	inches
URBAN	Percentage of basin with urban development	98.9848	percent

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.14	square miles	2.26	1400
ELEV	Mean Basin Elevation	1220	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	0.00303	ft^3/s
30 Day 2 Year Low Flow	0.00641	ft^3/s
7 Day 10 Year Low Flow	0.000734	ft^3/s
30 Day 10 Year Low Flow	0.00183	ft^3/s
90 Day 10 Year Low Flow	0.00412	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/)

Base Flow Statistics

Base Flow Statistics Parameters [Statewide Mean and Base Flow]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
CARBON	Percent Carbonate	0	percent	0	99
DRNAREA	Drainage Area	0.14	square miles	2.26	1720
FOREST	Percent Forest	0.9024	percent	5.1	100