

 Application Type
 Renewal

 Facility Type
 Storm Water

 Major / Minor
 Minor

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

Application No.PAS206101APS ID685241Authorization ID1194133

## **Applicant and Facility Information**

Applicant Name	Dynam	ic Materials Corporation	Facility Name	Dunbar Mine Facility
Applicant Address	P.O. Bo	ox 317 1138 Industrial Park Drive	Facility Address	25 DMC Road
	Mount E	Braddock, PA 15465-0317		Dunbar, PA 15431
Applicant Contact	Andy V	argo	Facility Contact	Jaison Kenney
Applicant Phone	(724) 62	20-5013	Facility Phone	724-620-5013
Client ID	93880		Site ID	517311
SIC Code	3499		Municipality	Dunbar Township
SIC Description	Fabrica	ted Metal Products	County	Fayette
Date Application Receiv	ved	August 7, 2017	EPA Waived?	Yes
Date Application Accep	oted	May 16, 2019	If No, Reason	
Purpose of Application		Renewal of NPDES Permit for the c	lischarge of Stormwate	r Associated with Industrial Activity.

### Summary of Review

# **Background**

The Department received a NPDES permit application from Dynamic Materials Corporation on August 7, 2017 to renew coverage of the discharge from its Dunbar Mine Facility in Dunbar Township of Fayette County. Dunbar Mine Facility is a former Limestone Deep Mine Facility (Stone and New Castle Mine) that the Dynamic Materials Corporation (DMC) leases for the production of composite metals through explosion cladding. DMC has leased and operated the Dunbar Mine Facility since 1996. The facility operates under SIC Code 3499 (Fabricated Metal Products). The previous NPDES permit was issued on November 1, 2012 and expired on October 31, 2017.

### Property and Operations

Dunbar Mine Facility operates to combine metals that can't be welded together using an explosive coating. Detonation of the explosive coating creates a bond for dissimilar metals. Metal plates are first ground and/or polished to achieve a uniform surface finish. The plates are then placed into a cladding assembly where a cladding metal plate is positioned parallel to and above a backer plate separated by a small, uniform distance. Ammonium Nitrate Fuel Oil (ANFO) explosive powder is then uniformly applied to the cladding metal. All materials used in the explosion welding process are stored inside approved storage buildings and magazines and used underground. No materials are stored on the surface of the mine site.

Upon detonation the cladding metal is accelerated into the backer metal along a detonation front that propagates away from the detonation point across the surface of the cladding metal plate. The high velocity and angle of the impact produces a jet of air ahead of the collision front that breaks away a thin layer of the cladder and backer plates. The resulting collision forms a metallurgical bond between the two plates. This type of cladding allows for the joining of numerous types of metals such as

Approve	Deny	Signatures	Date
х		Lauren Nolfi / Environmental Engineering Specialist	May 17, 2023
х		Michael E. Fifth, P.E. / Environmental Engineer Manager	May 18, 2023

#### Summary of Review

stainless steel, copper and nickel alloys, titanium and zirconium. The welded plates are then flattened and cut as necessary to meet customers' specifications. These operations are conducted indoors with the explosion welding being done in an underground chamber. Following the detonation, processed limestone dust is swept up and deposited in the mine. DMC does not reuse any of the processed metal plates (limestone dust). The limestone dust pile is removed from the mine as needed.

# <u>Outfalls</u>

The facility has one outfall, Outfall 001, which discharges to Dunbar Creek, designated in 25 PA Code Chapter 93 as a High Quality – Cold Water Fishery (HQ-CWF). Outfall 001 receives stormwater from a 475,421 square foot drainage area consisting of grass, wooded areas and impervious surfaces of the plant area. 19% of the drainage area is impervious. Stormwater discharges for Outfall 001 are piped below Hardy Hill Run before discharging to Dunbar Creek. Outfall 001 reportedly rarely discharges since the driveway is sloped toward the highwall of the mine.

Outfall 002 has been removed from permit coverage, since no stormwater discharges have been reported since at least 2012. Dunbar Mine reported that Outfall 002 does not discharge anymore and the stormwater in this location flows back towards the highwall of the mine.

# Proposed Construction Project

DMC has proposed a construction project consisting of constructing an excess material stockpile using limestone rock from the project property. The project will include an expansion of the underground facility. The underground rock material removed will be placed into this permanent stockpile. Surface disturbance associated with this permit intends to consist of a single phase: constructing the material stockpile and reconfiguring the access road leading to the site. The project does not intend to be a long-term waste area but will provide a location to construct a stockpile for the on-site fill material. Conditions in Part C of the Draft Permit are included with requirements applicable to stormwater outfalls associated with construction and post-construction stormwater management.

### **Public Participation**

Dunbar Mine Facility provided evidence of Act 14 municipal and county notification to Dunbar Township and Fayette County on June 22, 2017.

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.

# **Conclusion**

Draft permit issuance is recommended.

Discharge, Receiving Waters and Water Supply Info	rmation	
Outfall No. 001	Design Flow (MGD)	0
Latitude 39° 57' 55.85"	Longitude	-79º 35' 08.34"
Quad Name South Connellsville	Quad Code	1909
Wastewater Description: Stormwater		
Receiving Waters Dunbar Creek (HQ-CWF)	Stream Code	38164
NHD Com ID69919587	RMI	4.72
Drainage Area 22.5 mi <sup>2</sup>	Yield (cfs/mi <sup>2</sup> )	0.0226
Q <sub>7-10</sub> Flow (cfs) 0.509	Q7-10 Basis	USGS StreamStats
Elevation (ft) 1153	Slope (ft/ft)	0.017
Watershed No. <u>19-D</u>	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	Westmoreland County Munici	pal Authority McKeesport
PWS Waters Youghiogheny River	Flow at Intake (cfs)	18.57
PWS RMI <u>1.37</u>	Distance from Outfall (mi)	48.7

Changes Since Last Permit Issuance: Outfall 002 has been removed from permit coverage, since no stormwater discharges have been reported since at least 2012. Dunbar Mine reported that Outfall 002 does not discharge anymore and the stormwater in this location flows back towards the highwall of the mine.

Other Comments: The USGS Stream Stats Data for the drainage area is displayed in Attachment A.

	Compliance History				
Summary of DMRs:	Dunbar Mine Facility received four effluent violations between January 30, 2019 and April 1, 2022. Effluent violations from the last three years are as follows: 3/21/21 TSS Avg Monthly 35 > 30 mg/L 9/30/21 Aluminum Avg. Mo. 0.8 > 0.75 mg/L 9/30/21 TSS Avg Monthly 45 > 3 mg/L				
Summary of Inspections:	<ul> <li>Dunbar Mine Facility was most recently inspected on April 21, 2022 by Jim Stewart. The facility received a violation for failure to meet effluent limits.</li> <li>Mr. Stewart made the following observations and recommendations: <ul> <li>PPC plan review log and training log should be created and maintained. Potential for soil erosion needs to be added to the PPC plan as discussed, as well as missing items on page 7 of inspection report</li> <li>pH analysis needs to be performed in the field. If done inhouse, calibration log will need to be created and maintained.</li> <li>Fuel tanks need to be placed under roof in order to follow BMPs.</li> <li>Once you receive the new permit, please read it carefully. There will be changes to your requirements.</li> </ul> </li> </ul>				

# Other Comments:

A compliance review was completed on May 16, 2023 by Amanda Schmidt for the review period May 1, 2018 – May 16, 2023 (included as Attachment B). The facility was most recently inspected on April 20, 2022 as an administrative/ file review and on April 21, 2022 as a compliance evaluation. A violation was noted on April 21, 2022 for violations of the permit effluent limits; the violation was resolved on July 19, 2022. DMC is in compliance and has no open violations or pending enforcement.

DMC responded to the April 21, 2022 inspection report and violation on June 17, 2022. DMC stated that the elevated TSS readings were caused by an excessive build-up of sediment in the drainage ditches and catch basins. DMC reportedly cleaned out the drainage ditches and catch basins and added fresh filter media to prevent TSS from exceeding limits. DMC stated that they were unable to identify the cause of the aluminum effluent noncompliance event and would continue to evaluate and monitor for potential aluminum sources. DMC updated the PPC plan to include the missing items referenced in the inspection report as of June 17, 2021. The addition of a roof over the fuel tanks was added to the capital expense project and expected to be completed in May 2023. DMC discussed the pH analysis with their lab and reported that the pH analysis would be performed immediately when the sample is dropped off at the lab.

		Dev	velopment of Effluent Limitations		
Outfall No.	001		Design Flow (MGD)	0	
Latitude	39º 57' 55.85	5"	Longitude	-79º 35' 08.34"	
Wastewater E	Description:	Stormwater			

# Stormwater Drainage Overview

Outfall 001 receives stormwater from a 475,421 square foot drainage area consisting of grass, wooded areas, and impervious surfaces of the plant area. 19% of the drainage area is impervious. Stormwater discharges for Outfall 001 are piped below Hardy Hill Run before discharging to Dunbar Creek. Outfall 001 reportedly rarely discharges since the driveway is sloped toward the highwall of the mine.

### **Technology-Based Limitations**

Outfall 001 will be subject to the monitoring requirements in Appendix U of the PAG-03 General Stormwater Permit as a minimum requirement because the outfalls receive stormwater only. The SIC code for the site is 3499 (Fabricated Metal Products, Not Elsewhere Classified) and the corresponding appendix that would apply to the facility is Appendix U. The reporting requirements applicable to stormwater discharges are shown in Table 1 below. Along with the monitoring requirements, sector specific BMPs included in Appendix U (Fabricated Metal Products) of the PAG-03 will also be included in Part C of the Draft Permit.

Table 1: PAG-03 Appendix U Monitoring Requirements						
	Average	Daily Maximum	Benchmark Values	Monitoring Requirements		
Parameters	Monthly (mg/L)	(mg/L)	(mg/L)	Monitoring Frequency	Sample Type	
Nitrogen, total	-	Monitor & Report	-	1/6 Months	Grab	
Phosphorus, total	-	Monitor & Report	-	1/6 Months	Grab	
рН	-	Monitor & Report	9.0	1/6 Months	Grab	
Total Suspended Solids	-	Monitor & Report	100	1/6 Months	Grab	
Oil and Grease	-	Monitor & Report	30	1/6 Months	Grab	
Nitrate + Nitrite Nitrogen	-	Monitor & Report	3.0	1/6 Months	Grab	
Aluminum, total	-	Monitor & Report	-	1/6 Months	Grab	
Iron, total	-	Monitor & Report	-	1/6 Months	Grab	
Zinc, total	-	Monitor & Report	-	1/6 Months	Grab	

### Water Quality-Based Limitations

Water quality analyses are typically performed under low-flow (Q7-10) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharges from Outfalls 001 and 002 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 Department's antidegradation regulations outlined in 25 Pa. Code Chapter 93.4a – 93.4d and the Department's supplemental Water Quality Antidegradation Implementation Guidance (Antidegradation Guidance) requirements are applied, due to the high-quality designation of the receiving stream. Antidegradation regulations under Chapter 93.4c(a)(I)(i) require discharges to protect the existing use of receiving waters. The Department has determined that the receiving water for this facility's discharge, Dunbar Creek, is currently attaining its designated use. Therefore discharges from Outfall 001 must be controlled to protect the existing HQ-CWF use of Dunbar Creek.

Appendix F of the Department's Antidegradation Guidance describes the requirements for managing storm water discharges in high quality watersheds. The requirements include best management practices and erosion and sedimentation controls. Chapter 93.4c(b) requires dischargers to consider non-discharge alternatives, public participation and social/economic justification when proposing new, additional or increased discharges to high quality or exceptional value streams. Since no new discharges or expansions to existing discharges are being proposed by DMC, the provisions of 93.4c(b) do not apply.

To ensure that the discharge does not degrade the stream, EPA's Multi-Sector General Permit (MSGP) "benchmark values" are compared with the facility's stormwater effluent data. The goal for the permittee is to be consistently below these benchmark values; doing this shows that the discharges are uncontaminated stormwater and will maintain and protect the existing quality of the receiving waters. 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.

The previous permit imposed effluent limitations and benchmark monitoring requirements consistent with or more stringent than EPA's Multisector General Permit (MSGP). The effluent limitation and monitoring requirements imposed by the previous permit are discussed below in the Anti-Backsliding section.

# Anti-Backsliding

The effluent limits and monitoring requirements in Table 2 below are from the previous permit, issued on November 1, 2012. The previous permit contained a Part C condition stating that the permittee shall submit a Stormwater Pollution Prevention Plan (SWPPP) or update its existing Pollutant Reduction Report identifying BMPs, housekeeping procedures, and control structures installed or implemented to reduce the amount of pollutants in the stormwater discharges, no later than twelve months after the permit effective date. The SWPPP was also expected to describe all measures that were implemented to meet the discharge goals, shown in Table 2, and/ or eliminate or reduce the pollutants in the discharge.

	Table 2: Previous Permit Effluent Limits – Outfall 001						
Parameter	Daily Minimum	Average Monthly	Daily Maximum	ΙΜΑΧ	Goal	Units	Monitoring Frequency
Flow	-	Monitor & R	leport	-	-	MGD	2/ quarter
Total Suspended Solids	-	30	-	60	-	mg/L	2/ quarter
Oil and Grease	-	15	-	30	-	mg/L	2/ quarter
BOD <sub>5</sub>	-	Monitor & Report	-	Monitor & Report	-	mg/L	2/ quarter
Nitrate-Nitrite as N	-	Monitor & Report	-	Monitor & Report	0.68	mg/L	2/ quarter
Total Dissolved Solids	-	Monitor & Report	-	Monitor & Report	-	mg/L	2/ quarter
Sulfate, total	-	Monitor & Report	-	Monitor & Report	-	mg/L	2/ quarter
Aluminum, total	-	0.75	-	1.5	-	mg/L	2/ quarter
Iron, total	-	1.0	-	2.0	-	mg/L	2/ quarter
Zinc, total	-	0.117	-	0.234	-	mg/L	2/ quarter
рН	6.0	-	-	9.0	-	S.U.	2/ quarter

### Flow

Since the discharges from Outfall 001 are composed entirely of stormwater, flow monitoring is not applicable to these outfalls and will be removed from the permit.

# Total Suspended Solids

The facility's stormwater effluent data exceeded the permitted average monthly limit for total suspended solids (TSS) during four sampling events from 2017-2023. A maximum reported TSS concentration of 94 mg/L was reported in the first quarter of 2017. Dunbar Mine received two effluent violations in 2021 for exceedances of the TSS average monthly limit. Dunbar Mine stated that the elevated TSS readings were caused by an excessive build-up of sediment in the drainage ditches and catch basins. Dunbar Mine reportedly cleaned out the drainage ditches and catch basins and added fresh filter media to prevent TSS from exceeding limits. TSS is still considered a pollutant of concern for Dunbar Mine; effluent limits for TSS will remain in the permit.

### NPDES Permit Fact Sheet Dunbar Mine Facility

### Oil and Grease

The facility's stormwater effluent data reported oil and grease as non-detect for every sample from 2017-2023. However since oil and grease is considered a potential pollutant of concern for Fabricated Metal Product facilities and is included in Appendix U, the effluent limits for oil and grease will remain in the permit.

# BOD<sub>5</sub>

Dunbar Mine's previous permit, issued in 2004, imposed  $BOD_5$  monitoring based on a review of analytical results. DMRs from 2017-2023 were reviewed and a maximum  $BOD_5$  concentration of 6.4 mg/L was reported in the second quarter of 2018. The Department determined, based on the concentrations of  $BOD_5$  reported in Dunbar Mine's DMRs, BOD5 is not considered a pollutant of concern. BOD5 monitoring will be removed from the permit.

### Nitrate-Nitrite as N

The previous permit imposed benchmark monitoring for nitrate-nitrite, based on DMR results showing high concentrations compared to the MSGP benchmark concentration of 0.68 mg/L. The nitrate-nitrite MSGP benchmark concentration was included in the permit as a monitoring goal at both outfalls, along with a requirement to develop a SWPPP. The benchmark was imposed under Best Professional Judgment. Since then, the Department has developed a nitrate-nitrite benchmark for Appendix U of 3.0 mg/L which reflects a more realistic level of achievement for stormwater facilities. DMRs from 2017-2023 show that Dunbar Mine has exceeded the previous benchmark concentration during every sampling period, with the maximum reported concentration of nitrate-nitrite reported in 2017 to be 8.41 mg/L. Accordingly, the benchmark will be revised to be consistent with the current benchmark. This revision is not subject to anti-backsliding considerations because benchmarks are not effluent limits and therefore not subject to antibacksliding regulations.

### Total Dissolved Solids

Regulations under 25 Pa. Code §95.10 were promulgated on August 21, 2010 to address treatment requirements for new and expanding mass loadings of Total Dissolved Solids (TDS). The provisions of §95.10 are applicable only to the extent that the stormwater has the potential to exceed 2,000 mg/L TDS as a monthly average. TDS monitoring was imposed by the previous permit to establish the level at which the Dunbar Mine Facility contributes TDS to the Monongahela River watershed. DMRs from 2017-2023 were reviewed and one sample reported a TDS concentration of 2054 mg/L in the first quarter of 2017. The Department determined, based on the concentrations reported in Dunbar Mine's DMRs, stormwater discharges from Outfall 001 have minimal potential to exceed 2000 mg/L TDS as a monthly average and TDS is not considered a pollutant of concern. TDS monitoring will be removed from the permit.

### Sulfate

Discharges from the Dunbar Mine Facility are located in the Monongahela River watershed, and the Monongahela River itself is impaired by sulfate as listed on the Department's 2010 Integrated List of All Waters. Sulfate monitoring was imposed by the previous permit to monitor the sulfate contribution to the river from the facility. DMRs from 2017-2023 were reviewed and a maximum sulfate concentration of 40.9 mg/L was reported in the first quarter of 2017. The Department determined, based on the concentrations of TDS and sulfate reported in Dunbar Mine's DMRs, stormwater discharges from Outfall 001 do not significantly contribute sulfate to the river. Sulfate monitoring will be removed from the permit.

### Aluminum, Iron and Zinc

The previous permit imposed limits for aluminum, iron and zinc based on the EPA's MSGP benchmark concentrations. The limits were imposed on the basis that DMC's Pollutant Reduction Report (PRR) did not meet the intent of the PRR condition, that controls were not implemented, and that pollutant concentrations were not reduced.

The facility's stormwater effluent data exceeded the permitted average monthly limit twice for aluminum and once for iron during from 2017-2023. Maximum reported concentrations of aluminum and iron were reported in the first quarter of 2017 to be 2.24 mg/L and 2.65 mg/L, respectively. All reported concentrations of zinc were within the permitted limits. Dunbar Mine received an effluent violation in 2021 for exceeding the aluminum average monthly limit. In response to the aluminum effluent violations, Dunbar Mine stated that they were unable to identify the cause of the aluminum effluent noncompliance event and would continue to evaluate and monitor for potential aluminum sources.

EPA's 2021 MSGP updated the benchmark for aluminum to be 1.1 mg/L and for zinc to be 0.12 mg/L. The benchmark concentration for iron was removed from EPA's 2021 MSGP. Effluent limits or aluminum, iron and zinc are updated in the permit to be consistent with EPA's 2021 MSGP benchmark values.

# <u>рН</u>

The facility's stormwater effluent data reported pH within the permitted range from 2017-2023. Since pH is considered a potential pollutant of concern for Fabricated Metal Product facilities and is included in Appendix U, the effluent limits for oil and grease will remain in the permit.

# Proposed Effluent Limitations and Monitoring Requirements for Outfall 001

Effluent limitations and monitoring requirements applicable at Outfall 001 are the most stringent values from the above effluent limitation development. The proposed effluent limitations and monitoring requirements for Outfall 001 are displayed below in Table 3. The sampling frequency will remain 2/ quarter for all parameters so that sufficient data is generated to reliably compare sampling data with effluent limitations and benchmark values.

A Part C condition is included in the Draft Permit requiring a Corrective Action Plan after two or more consecutive exceedances of the benchmark values, which are included in the Part C condition and displayed below in Table 3. These values are not effluent limitations and an exceedance of the benchmark value is not a violation. If there is an exceedance of the benchmark value, a correction 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. To ensure that the discharge is not degrading the high-quality waters, the benchmark values from EPA' 2021 MSGP will be used as the benchmark values in the permit.

Table 3: Effluent Limitations and Monitoring Requirements – Outfall 001							
Parameters	Daily Minimum	Average Quarterly	Daily Maximum	ІМАХ	Benchmark Values	Monito Requirer Monitoring Frequency	ring nents Sample Type
Total Suspended Solids (mg/L)	-	30	60	-		2/ quarter	Grab
Oil and Grease (mg/L)	-	15	30	-		2/ quarter	Grab
Nitrate + Nitrite Nitrogen (mg/L)	-	-	Monitor & Report	-	3.0	2/ quarter	Grab
Aluminum, total (mg/L)	-	1.1	2.2	-		2/ quarter	Grab
Iron, total (mg/L)	-	-	Monitor & Report	-		2/ quarter	Grab
Zinc, total (mg/L)	-	0.12	0.24	-		2/ quarter	Grab
pH (S.U.)	6.0	-	-	9.0		2/ quarter	Grab
Nitrogen, total (mg/L)	-	-	Monitor & Report	-		2/ quarter	Grab
Phosphorus, total (mg/L)	-	-	Monitor & Report	-		2/ quarter	Grab

DMC has proposed a construction project consisting of constructing an excess material stockpile using limestone rock from the project property. The project will include an expansion of the underground facility. The underground rock material removed will be placed into this permanent stockpile. Surface disturbance associated with this permit intends to consist of a single phase: constructing the material stockpile and reconfiguring the access road leading to the site. The project does not intend to be a long-term waste area but will provide a location to construct a stockpile for the on-site fill material.

Conditions in Part C of the Draft Permit are included with requirements applicable to stormwater outfalls associated with construction and post-construction stormwater management. These conditions will ensure compliance with water quality standards through a combination of best management practices including pollution prevention and exposure minimization, good housekeeping, erosion and sediment control, and spill prevention and response.

	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.
$\square$	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.
	Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
	Pennsylvania CSO Policy, 385-2000-011, 9/08.
$\boxtimes$	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen
	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges
	391-2000-008, 10/1997.
	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 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, 391-2000-019, 10/97.
	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 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, 391-2000-022, 3/1999.
	Design Stream Flows, 391-2000-023, 9/98.
	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98.
	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
	SOP:
	Other:

# **Attachments**

Attachment A: StreamStats Report for Outfall 001

Attachment B: Operations Compliance Report

# ATTACHMENT A: StreamStats Report for Outfall 001

# StreamStats Report



Collapse All

Basin Characteristic	3		
Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	22.5	square miles
ELEV	Mean Basin Elevation	1995	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	22.5	square miles	2.26	1400
ELEV	Mean Basin Elevation	1995	feet	1050	2580

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

PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other - see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	1.49	ft^3/s	43	43
30 Day 2 Year Low Flow	2.56	ft^3/s	38	38
Statistic	Value	Unit	SE	ASEp
7 Day 10 Year Low Flow	0.509	ft^3/s	66	66
30 Day 10 Year Low Flow	0.904	ft^3/s	54	54
00 Dev 10 Mars Law Flam	1.70	11101		4.

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: Operations Compliance Report

# **Operations Compliance Check Summary Report**

**Facility:** Dunbar Mine **NPDES Permit No.:** PAS206101 **Compliance Review Period:** 5/1/18-5/16/23 **Inspection Summary:** 

INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC
04/21/2022	Compliance Evaluation	PA Dept of Environmental Protection	Violation(s) Noted
04/20/2022	Administrative/File Review	PA Dept of Environmental Protection	No Violations Noted
12/12/2018	Compliance Evaluation	PA Dept of Environmental Protection	No Violations Noted

# **Violation Summary:**

VIOLATION	VIOLATION		RESOLVED
DATE	TYPE	VIOLATION TYPE DESC	DATE
04/21/2022	92A.44	NPDES - Violation of effluent limits in Part A of permit	07/19/2022

# **Open Violations by Client ID:**

No open violations for Client ID 93880

# **Enforcement Summary:**

NOV was issued 4/25/2022 with report for Compliance Evaluation Inspection on 4/21/2022

### Effluent Violation Summary: Monitoring

Pd	PARAMETER	SAMPLE	PERMIT	UNIT	STAT_BASE_CODE
Jul-21	Aluminum, Total	0.8	0.75	mg/L	Average Monthly
	Total Suspended				
Jul-21	Solids	45	30	mg/L	Average Monthly
	Total Suspended				
Jan-21	Solids	35	30	mg/L	Average Monthly

<u>Compliance Status:</u> Facility is in compliance with no open violations or pending enforcement at this time. <u>Completed by:</u> Amanda Schmidt <u>Completed date:</u> 5/16/2023