Pennsylvania Department of Environmental Protection

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0253502**
Facility Type	**Storm Water**	APS ID	**1122663**
Major / Minor	**Minor**	Authorization ID	**1501293**

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

Applicant and Facility Information

Applicant Name	**Colona Transfer, L.P.**	Facility Name	**Colona Dock**
Applicant Address	1755 Pennsylvania Avenue Colona Dock	Facility Address	1755 Pennsylvania Avenue Colona Dock
	Monaca, PA 15061		Monaca, PA 15061
Applicant Contact	Jordan Miller	Facility Contact	Jordan Miller
Applicant Phone	724-487-7156	Facility Phone	724-487-7156
Client ID	160150	Site ID	495590
SIC Code	5052	Municipality	Monaca Borough
SIC Description	Coal and Other Minerals and Ores	County	Beaver
Date Application Received	October 1, 2024	EPA Waived?	Yes
Date Application Accepted	October 2, 2024	If No, Reason	

Purpose of Application: Renewal of Individual Industrial Stormwater NPDES permit

Summary of Review

The Department received an NPDES permit application for renewal coverage of the Colona Transfer, L.P. Colona Dock facility on 10/1/2024. The prior permit was issued on 3/12/2020 with an effective date of 4/1/2020 and an expiration date of 3/31/2025. This is the first renewal of its Individual NPDES permit—the prior permit replaced a General Stormwater Permit # PAR806212 issued in 2002 since DEP determined that coal pile runoff no longer qualified for General permit coverage.

Shown in Figure 1 and 2, the approximately 82-acre Colona Dock facility is a road, rail, and river transshipment yard along the Ohio River utilized primarily for coal but also stocks aggregate, coke, and salt along with other miscellaneous commodities like graphite, gypsum, metals, industrial minerals, frac sand, and fertilizer. The site has been used as a coal and aggregate transshipment yard since at least 1931. Coal, aggregates, and coke are stored outdoors, uncovered in the lower yard, while the upper yard contains uncovered limestone aggregate piles and salt piles under impermeable tarp. Warehouses on-site are used for indoor storage of commodities not appropriate for outdoor bulk storage. The asphalt batch plant shown in Figure 1 was removed.

Only stormwater is discharged from the site; no process wastewater is produced. Passive sedimentation ponds with smaller preliminary “cleanout ponds” provide treatment for stormwater runoff from stockpiles in the yards. Outfall 001 is the discharge of the large Settling Pond #1 receiving stormwater runoff from the lower and upper yards which includes coal, coke, aggregate, and salt stockpiles. Outfall 005 in the prior permit previously discharged stormwater from the upper yard to an unnamed tributary to the Ohio River bisecting the site but has been rerouted to drain to Settling Pond #1 influent so it will be removed from this permit. Outfall 003 is the discharge of the small Settling Pond # 3 at the end of the haul road at the far southern tip of the lower yard. Outfall 004 is the discharge of the New Cleanout Pond for stormwater from the large coal stockpiles on the western side of the lower yard. Outfall 004 discharges to another sedimentation pond receiving off-site road drainage before final discharge to the above-mentioned unnamed tributary of the Ohio River. Outfall 006 discharges

Approve	Deny	Signatures	Date
X		Jace William Marsh / Environmental Engineering Specialist	February 19, 2025
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	February 21, 2025

Summary of Review

stormwater from the area around the conveyor and clamshell unloader near the shore in the lower yard. The application indicates that all outfalls are influenced by coal pile runoff. Outfalls 001, 003, and 006 discharge to the Ohio River which has a 25 PA Code Chapter 93 Warm Water Fishes designation and is impaired for polychlorinated biphenyls (PCBs), pathogens, and dioxin all from unknown sources. The 0.6-mile unnamed tributary to the Ohio River receiving stormwater from Outfall 004 is not included in Department records or the National Hydrography Dataset so is assumed to be ephemeral and thus, for the purposes of this review, will have the same designation as the downstream point of first use: the Ohio River.

The permittee has one open violation under the Storage Tanks program at this facility: “Failure to meet aboveground storage tank protective coating requirements”. This violation shouldn’t impede NDPES permit renewal since the tank is still in use and simply needs a coating touchup as weather allows according to the inspection record. A NPDES compliance evaluation inspection was last performed by Shawn Bell on 8/30/2021 with no violations noted. In at least the past two years, the permittee has not exceeded their current effluent limits, but has had three minor benchmark violations: Outfall 003 Total Dissolved Solids at 2,130 mg/L (current benchmark is 2,000 mg/L), Outfall 001 Total Zinc 0.18 mg/L (current benchmark is 0.12 mg/L), and again, but not in a consecutive monitoring period, Outfall 001 Total Zinc 0.15 mg/L.

Effluent limits and benchmarks for Outfall 001, Outfall 003, Outfall 004, and Outfall 006 in the Draft permit originate from Federal Effluent Limitation Guidelines for coal preparation plants and coal preparation plant associated areas in 40 CFR 434.25 and the PAG-03 General Stormwater permit.

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	Design Flow (MGD)	0
Latitude	40º 40' 53"	Longitude	-80º 15' 34.5"
Quad Name	Beaver	Quad Code	1303
Wastewater Description:	Discharge of Settling Pond #1 receiving stormwater from yard operations and coal, coke, aggregate, and salt stockpiles		
Receiving Waters	Ohio River (WWF)	Stream Code	32317
NHD Com ID	99679124	RMI	17.2
Drainage Area	19,600 mi^2	Yield (cfs/mi^2)	0.267
Q_{7-10} Flow (cfs)	5,240	Q_{7-10} Basis	USACE Q_{7-10} Flows of Major Rivers
Elevation (ft)	684	Slope (ft/ft)	0.148 (mean basin slope)
Watershed No.	20-G	Chapter 93 Class.	WWF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Impaired		
Cause(s) of Impairment	Dioxin, Pathogens, Polychlorinated Biphenyls (PCBs)		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	Ohio River
Nearest Downstream Public Water Supply Intake	Center Township Water Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	5880
PWS RMI	13.1	Distance from Outfall (mi)	4.00

Changes Since Last Permit Issuance:

Other Comments:

Discharge, Receiving Waters and Water Supply Information

Outfall No.	003	Design Flow (MGD)	0
Latitude	40º 40' 43.7"	Longitude	-80º 15' 24.5"
Quad Name	Beaver	Quad Code	1303
Wastewater Description:	Discharge of Settling Pond #3 receiving stormwater from haul road		
Receiving Waters	Ohio River (WWF)	Stream Code	32317
NHD Com ID	99679124	RMI	17.4
Drainage Area	19,600 mi^2	Yield (cfs/mi^2)	0.267
Q_{7-10} Flow (cfs)	5,240	Q_{7-10} Basis	USACE Q_{7-10} Flows of Major Rivers
Elevation (ft)	684	Slope (ft/ft)	0.148 (mean basin slope)
Watershed No.	20-G	Chapter 93 Class.	WWF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Impaired		
Cause(s) of Impairment	Dioxin, Pathogens, Polychlorinated Biphenyls (PCBs)		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	Ohio River
Nearest Downstream Public Water Supply Intake	Center Township Water Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	5880
PWS RMI	13.1	Distance from Outfall (mi)	4.25

Changes Since Last Permit Issuance:

Other Comments:

Discharge, Receiving Waters and Water Supply Information

Outfall No.	004	Design Flow (MGD)	0
Latitude	40º 41' 0.7"	Longitude	-80º 15' 53.1"
Quad Name	Beaver	Quad Code	1303
Wastewater Description:	Discharge of New Cleanout Pond receiving stormwater from coal stockpiles		
Receiving Waters	Unnamed Tributary to Ohio River	Stream Code	n/a
NHD Com ID	n/a	RMI	0.15
Drainage Area	0.27 mi^2	Yield (cfs/mi^2)	0.0051
Q_{7-10} Flow (cfs)	0.00139	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	738	Slope (ft/ft)	0.107 (mean basin slope)
Watershed No.	20-G	Chapter 93 Class.	n/a
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	n/a		
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	Center Township Water Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	5880
PWS RMI	13.1	Distance from Outfall (mi)	3.43

Changes Since Last Permit Issuance:

Other Comments:

Discharge, Receiving Waters and Water Supply Information

Outfall No.	006	Design Flow (MGD)	0
Latitude	40º 41' 0.5"	Longitude	-80º 15' 34.3"
Quad Name	Beaver	Quad Code	1303
Wastewater Description:	Stormwater discharge from the area around the conveyor and clamshell unloader		
Receiving Waters	Ohio River (WWF)	Stream Code	32317
NHD Com ID	99679124	RMI	17.0
Drainage Area	19,600 mi^2	Yield (cfs/mi^2)	0.267
Q_{7-10} Flow (cfs)	5,240	Q_{7-10} Basis	USACE Q_{7-10} Flows of Major Rivers
Elevation (ft)	684	Slope (ft/ft)	0.148 (mean basin slope)
Watershed No.	20-G	Chapter 93 Class.	WWF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Impaired		
Cause(s) of Impairment	Dioxin, Pathogens, Polychlorinated Biphenyls (PCBs)		
Source(s) of Impairment	Source Unknown		
TMDL Status	Final	Name	Ohio River
Nearest Downstream Public Water Supply Intake	Center Township Water Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	5880
PWS RMI	13.1	Distance from Outfall (mi)	3.86

Changes Since Last Permit Issuance:

Other Comments:

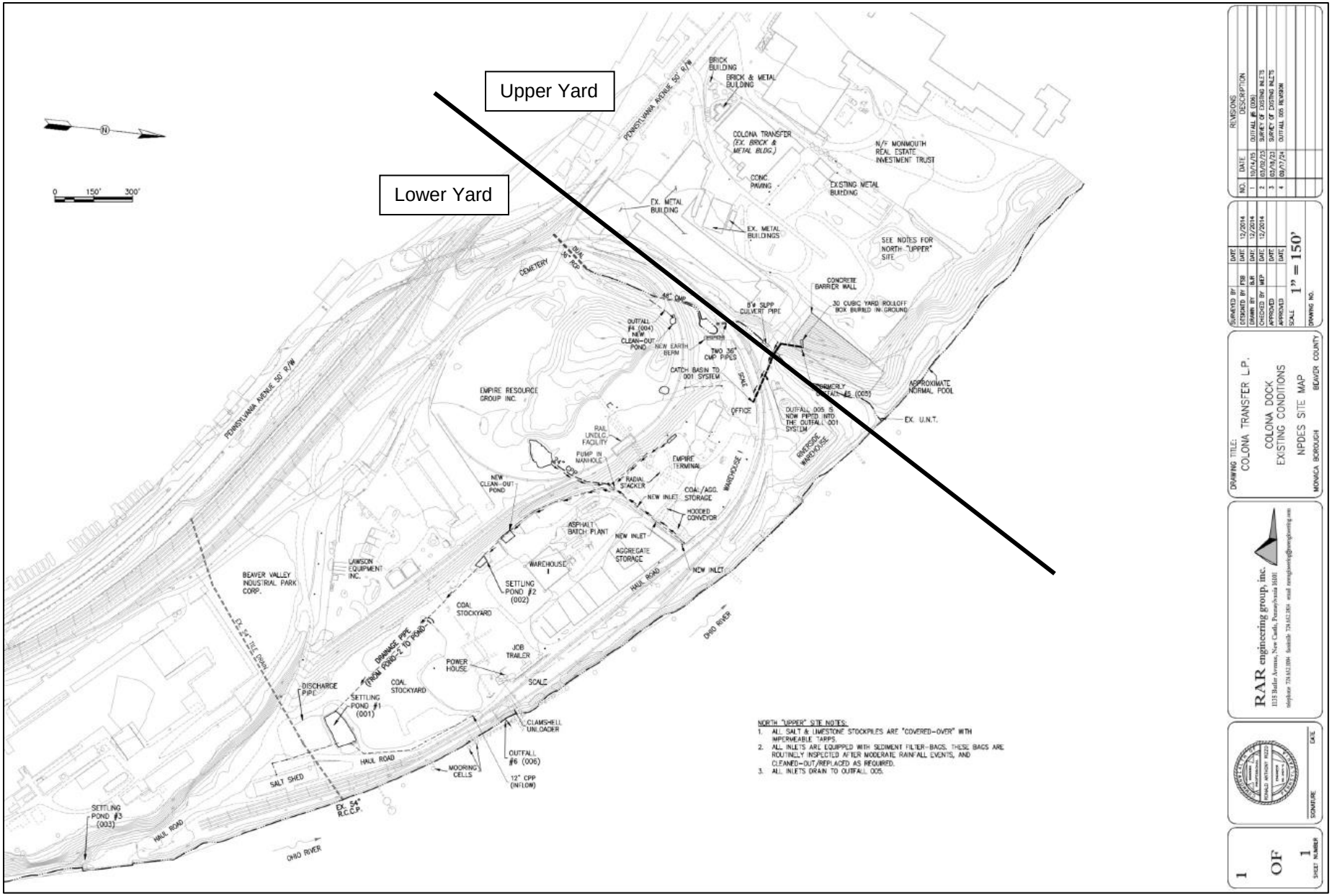


Figure 1. Layout of Colona Dock

Figure 2. Satellite imagery of Colona Dock with approximate facility boundary in red

Development of Effluent Limitations

Outfall No.	001	**Design Flow (MGD)**	0
Latitude	40º 40' 53"	**Longitude**	-80º 15' 34.5"

Wastewater Description: Discharge of Settling Pond #1 receiving stormwater from yard operations and coal, coke, aggregate, and salt stockpiles

001.A Technology-Based Limitations

Federal Effluent Limitation Guidelines (ELGs)

Since this is a coal storage facility and the application indicates all outfalls have influence from coal piles, the Colona Dock is subject to the ELGs for coal preparation plants and coal preparation plant associated areas in 40 CFR 434.25, shown in Table 1. Per 40 CFR 434.11(f):

> *The term "coal preparation plant associated areas" means the coal preparation plant yards, immediate access roads, coal refuse piles* ***and coal storage piles and facilities****.*

Since this site is a historic coal storage facility dating back to at least 1931, New Source Performance Standards (NSPS) will not be applied; best practicable control technology currently available (BPT) is applied instead. DMR data shows pH values of stormwater discharges at the facility are consistently above 6.0 S.U., and neither passive nor active methods of pH adjustment are used prior to discharge so 40 CFR 434.22(b) is relevant BPT for the facility. Since this discharge is stormwater only which is typically not sampled monthly in comparable permits, only the Daily Maximum will be applied.

Table 1. BPT effluent limitations

Parameter	Monthly Average (mg/L)	Daily Maximum (mg/L)
Total Iron	3.5	7.0
Total Suspended Solids (TSS)	35	70
pH (S.U.)	6.0-9.0 at all times	

PAG-03 General Stormwater Permit

Outfall 001 will be subject to 2022 PAG-03 General Stormwater permit conditions as a minimum requirement because the outfalls discharge stormwater associated with industrial activity. The SIC code for the facility is 5052— Coal and Other Minerals which has no corresponding PAG-03 Appendix so would be classified as Appendix J—Other Facilities and Appendix K—Existing Salt Storage and Distribution Sites to account for the salt storage piles in the upper yard. The reporting requirements applicable to stormwater discharges under these appendices are shown in Table 1 below. PAG-03 Appendix K best management practices (BMPs) will be included in Part C of the Draft permit.

These benchmark values are not effluent limitations, and an exceedance of the benchmark value is not a violation. An exceedance of the benchmark provides permittees with an indication that the facility's BMPs may not be sufficiently controlling pollutants in stormwater. A Part C condition is included in the Draft permit requiring a Corrective Action Plan to evaluate site stormwater controls and BMPs when there are two consecutive exceedances of the benchmark values.

Table 2. 2022 PAG-03 combined Appendix J and Appendix K monitoring requirements

Parameter	Benchmark Values (mg/L)	Measurement Frequency	Sample Type
Total Nitrogen	XXX	1/6 Months	Grab
Total Phosphorus	XXX	1/6 Months	Grab
pH (S.U.)	9.0	1/6 Months	Grab
Total Suspended Solids (TSS)	100	1/6 Months	Grab
Oil & Grease	30	1/6 Months	Grab
Chemical Oxygen Demand (COD)	120	1/6 Months	Grab
Total Dissolved Solids (TDS)	XXX	1/6 Months	Grab
Chloride	2,000	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 discharges from the outfalls are 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

Shown in Table 4, previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l). These limits and benchmarks were based on a combination of the defunct General Stormwater Permit Appendix E for coal piles, Best Professional Judgement (BPJ) for TSS, 25 Pa Code § 95.10 for TDS, 25 Pa Code § 95.2(2) for the Oil & Grease benchmark, 25 Pa Code § 95.2(4) for the Dissolved Iron benchmark, and the EPA 2008 Multi-Sector General Permit for Total Copper, Total Nickel, and Total Zinc benchmarks.

Table 3. Limits and benchmarks for Outfall 001 in previous permit

Parameter	Instantaneous Maximum	Benchmark Values (mg/L)	Measurement Frequency	Sample Type
pH (S.U.)	Report	XXX	1/Quarter	Grab
Total Suspended Solids (TSS)	50.0	n/a	1/Quarter	Grab
Total Dissolved Solids (TDS)	Report	2,000	1/Quarter	Grab
Oil and Grease	Report	30.0	1/Quarter	Grab
Total Copper	Report	0.014	1/Quarter	Grab
Dissolved Iron	Report	7.0	1/Quarter	Grab
Total Nickel	Report	0.47	1/Quarter	Grab
Total Zinc	Report	0.12	1/Quarter	Grab

001.D Proposed Effluent Limitations and Monitoring Requirements

Effluent limits imposed at Outfall 001 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements as summarized in Table 4. 1/Quarter monitoring frequency is adjusted to 1/6 months in the Draft permit due to consistent benchmark achievement and to reflect typical stormwater monitoring practices for compliant facilities. If compliance becomes an issue, stormwater monitoring frequency may be increased for future renewals. Benchmarks for Total Zinc and Total Nickel are removed due to consistent achievement of benchmarks and a stringent TSS limit. The past two years of monitoring data show only two minor benchmark exceedances for Zinc at Outfall 001: 0.18 mg/L and 0.15 mg/L. Metals in stormwater are heavily associated with TSS and are mostly bound in solid form unlike metals in highly acidic wastewaters like acid mine drainage that are often aqueous (dissolved) so if TSS is within the limit of 50.0 mg/L then concentration of any incidental metals in sediment should also be under control.

Table 4. Proposed stormwater effluent limitations and benchmarks for Outfall 001

Parameter	Daily Maximum (mg/L)	Benchmark Value (mg/L)	Monitoring Frequency	Sample Type
Total Iron	7.0	n/a	1/6 Months	Grab
Total Suspended Solids (TSS)	50.0	n/a	1/6 Months	Grab
pH (S.U.)	6.0-9.0 at all times	n/a	1/6 Months	Grab
Total Nitrogen	Report	XXX	1/6 Months	Grab
Total Phosphorus	Report	XXX	1/6 Months	Grab
Oil & Grease	Report	30	1/6 Months	Grab
Chemical Oxygen Demand (COD)	Report	120	1/6 Months	Grab
Total Dissolved Solids (TDS)	Report	XXX	1/6 Months	Grab
Chloride	Report	2,000	1/6 Months	Grab

Development of Effluent Limitations

Outfall No. 003 **Design Flow (MGD)** 0
Latitude 40º 40' 43.7" **Longitude** -80º 15' 24.5"
Wastewater Description: Discharge of Settling Pond #3 receiving stormwater from haul road

003.A Technology-Based Limitations

Federal Effluent Limitation Guidelines (ELGs)

See Section 001.A for ELG reasoning.

Table 5. BPT effluent limitations

Parameter	Monthly Average (mg/L)	Daily Maximum (mg/L)
Total Iron	3.5	7.0
Total Suspended Solids (TSS)	35	70
pH (S.U.)	6.0-9.0 at all times	

PAG-03 General Stormwater Permit

See Section 001.A for PAG-03 General Stormwater Permit reasoning. Appendix K requirements are removed since no salt piles exist in the drainage area.

Table 6. 2022 PAG-03 combined Appendix J monitoring requirements

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

003.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 discharges from the outfalls are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations are not proposed.

003.C Anti-Backsliding

Shown in Table 7, previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l). This TSS limit and TDS benchmark followed the same reasoning as in section 001.C, but a comment received during the previous Draft period that stated Outfall 001 is representative of Outfall 003 led to less sampled parameters in the previous Final permit.

Table 7. Limits and benchmarks for Outfall 003 in previous permit

Parameter	Instantaneous Maximum	Benchmark Values (mg/L)	Measurement Frequency	Sample Type
Total Suspended Solids (TSS)	50.0	n/a	1/Quarter	Grab
Total Dissolved Solids (TDS)	Report	2,000	1/Quarter	Grab

003.D <u>Proposed Effluent Limitations and Monitoring Requirements</u>

Effluent limits imposed at Outfall 003 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements as summarized in Table 8. 1/Quarter monitoring frequency is adjusted to 1/6 months in the Draft permit due to consistent benchmark achievement and to reflect typical stormwater monitoring practices for compliant facilities. If compliance becomes an issue, stormwater monitoring frequency may be increased for future renewals. Monitoring for TDS is removed since 25 Pa Code § 95.10 typically only applies to industrial waste. Benchmarks for Total Zinc and Total Nickel are removed due to consistent achievement of benchmarks and a stringent TSS limit. The past two years of monitoring data show only two minor benchmark exceedances for Zinc at Outfall 001: 0.18 mg/L and 0.15 mg/L. Metals in stormwater are heavily associated with TSS and are mostly bound in solid form unlike metals in acidic wastewaters like acid mine drainage that are often aqueous (dissolved) so if TSS is within the limit of 50.0 mg/L then concentration of any incidental metals in sediment should also be under control.

Table 8. Proposed stormwater effluent limitations and benchmarks for Outfall 003

Parameter	Daily Maximum (mg/L)	Benchmark Value (mg/L)	Monitoring Frequency	Sample Type
Total Iron	7.0	n/a	1/6 Months	Grab
Total Suspended Solids (TSS)	50.0	n/a	1/6 Months	Grab
pH (S.U.)	6.0-9.0 at all times	n/a	1/6 Months	Grab
Total Nitrogen	Report	XXX	1/6 Months	Grab
Total Phosphorus	Report	XXX	1/6 Months	Grab
Oil & Grease	Report	30	1/6 Months	Grab
Chemical Oxygen Demand (COD)	Report	120	1/6 Months	Grab

Development of Effluent Limitations

Outfall No. 004 **Design Flow (MGD)** 0
Latitude 40º 41' 0.7" **Longitude** -80º 15' 53.1"
Wastewater Description: Discharge of New Cleanout Pond receiving stormwater from coal stockpiles

004.A Technology-Based Limitations

Federal Effluent Limitation Guidelines (ELGs)

See Section 001.A for ELG reasoning.

Table 9. BPT effluent limitations

Parameter	Monthly Average (mg/L)	Daily Maximum (mg/L)
Total Iron	3.5	7.0
Total Suspended Solids (TSS)	35	70
pH (S.U.)	6.0-9.0 at all times	

PAG-03 General Stormwater Permit

See Section 001.A for PAG-03 General Stormwater Permit reasoning. Appendix K requirements are removed since no salt piles exist in the drainage area.

Table 10. 2022 PAG-03 combined Appendix J monitoring requirements

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

004.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 discharges from the outfalls are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations are not proposed.

004.C Anti-Backsliding

Shown in Table 11, previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l). See Section 001.C for brief summary of limit and benchmark origins.

Table 11. Limits and benchmarks for Outfall 004 in previous permit

Parameter	Instantaneous Maximum	Benchmark Values (mg/L)	Measurement Frequency	Sample Type
pH (S.U.)	Report	XXX	1/Quarter	Grab
Total Suspended Solids (TSS)	50.0	n/a	1/Quarter	Grab
Total Dissolved Solids (TDS)	Report	2,000	1/Quarter	Grab
Oil and Grease	Report	30.0	1/Quarter	Grab
Total Copper	Report	0.014	1/Quarter	Grab
Dissolved Iron	Report	7.0	1/Quarter	Grab
Total Nickel	Report	0.47	1/Quarter	Grab
Total Zinc	Report	0.12	1/Quarter	Grab

004.D Proposed Effluent Limitations and Monitoring Requirements

Effluent limits imposed at Outfall 004 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements as summarized in Table 12. 1/Quarter monitoring frequency is adjusted to 1/6 months in the Draft permit due to consistent benchmark achievement and to reflect typical stormwater monitoring practices for compliant facilities. If compliance becomes an issue, stormwater monitoring frequency may be increased for future renewals. Monitoring for TDS is removed since 25 Pa Code § 95.10 typically only applies to industrial waste. Benchmarks for Total Zinc and Total Nickel are removed due to consistent achievement of benchmarks and a stringent TSS limit. The past two years of monitoring data show only two minor benchmark exceedances for Zinc at Outfall 001: 0.18 mg/L and 0.15 mg/L. Metals in stormwater are heavily associated with TSS and are mostly bound in solid form unlike metals in acidic wastewaters like acid mine drainage that are often aqueous (dissolved) so if TSS is within the limit of 50.0 mg/L then concentration of any incidental metals in sediment should also be under control.

Table 12. Proposed stormwater effluent limitations and benchmarks for Outfall 004

Parameter	Daily Maximum (mg/L)	Benchmark Value (mg/L)	Monitoring Frequency	Sample Type
Total Iron	7.0	n/a	1/6 Months	Grab
Total Suspended Solids (TSS)	50.0	n/a	1/6 Months	Grab
pH (S.U.)	6.0-9.0 at all times	n/a	1/6 Months	Grab
Total Nitrogen	Report	XXX	1/6 Months	Grab
Total Phosphorus	Report	XXX	1/6 Months	Grab
Oil & Grease	Report	30	1/6 Months	Grab
Chemical Oxygen Demand (COD)	Report	120	1/6 Months	Grab

Development of Effluent Limitations

Outfall No. 006 **Design Flow (MGD)** 0
Latitude 40º 41' 0.5" **Longitude** -80º 15' 34.3"
Wastewater Description: Stormwater discharge from the area around the conveyor and clamshell unloader

006.A Technology-Based Limitations

Federal Effluent Limitation Guidelines (ELGs)

See Section 001.A for ELG reasoning.

Table 23. BPT effluent limitations

Parameter	Monthly Average (mg/L)	Daily Maximum (mg/L)
Total Iron	3.5	7.0
Total Suspended Solids (TSS)	35	70
pH (S.U.)	6.0-9.0 at all times	

PAG-03 General Stormwater Permit

See Section 001.A for PAG-03 General Stormwater Permit reasoning. Appendix K requirements are removed since no salt piles exist in the drainage area.

Table 14. 2022 PAG-03 combined Appendix J monitoring requirements

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

006.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 discharges from the outfalls are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations are not proposed.

006.C Anti-Backsliding

Shown in Table 15, previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l). See Section 001.C for brief summary of limit and benchmark origins.

Table 15. Limits and benchmarks for Outfall 006 in previous permit

Parameter	Instantaneous Maximum	Benchmark Values (mg/L)	Measurement Frequency	Sample Type
pH (S.U.)	Report	XXX	1/Quarter	Grab
Total Suspended Solids (TSS)	50.0	n/a	1/Quarter	Grab
Total Dissolved Solids (TDS)	Report	2,000	1/Quarter	Grab
Oil and Grease	Report	30.0	1/Quarter	Grab
Total Copper	Report	0.014	1/Quarter	Grab
Dissolved Iron	Report	7.0	1/Quarter	Grab
Total Nickel	Report	0.47	1/Quarter	Grab
Total Zinc	Report	0.12	1/Quarter	Grab

006.D Proposed Effluent Limitations and Monitoring Requirements

Effluent limits imposed at Outfall 004 are the more stringent of TBELs, WQBELs, regulatory effluent standards, and monitoring requirements as summarized in Table 16. 1/quarter monitoring frequency is adjusted to 1/6 month in the Draft permit due to consistent benchmark achievement and to reflect typical stormwater monitoring practices for compliant facilities. If compliance becomes an issue, stormwater monitoring frequency may be increased for future renewals. Monitoring for TDS is removed since 25 Pa Code § 95.10 typically only applies to industrial waste. Benchmarks for Total Zinc and Total Nickel are removed due to consistent achievement of benchmarks and a stringent TSS limit. The past two years of monitoring data show only two minor benchmark exceedances for Zinc at Outfall 001: 0.18 mg/L and 0.15 mg/L. Metals in stormwater are heavily associated with TSS and are mostly bound in solid form unlike metals in acidic wastewaters like acid mine drainage that are often aqueous (dissolved) so if TSS is within the limit of 50.0 mg/L then concentration of any incidental metals in sediment should also be under control.

Table 16. Proposed stormwater effluent limitations and benchmarks for Outfall 006

Parameter	Daily Maximum (mg/L)	Benchmark Value (mg/L)	Monitoring Frequency	Sample Type
Total Iron	7.0	n/a	1/6 Months	Grab
Total Suspended Solids (TSS)	50.0	n/a	1/6 Months	Grab
pH (S.U.)	6.0-9.0 at all times	n/a	1/6 Months	Grab
Total Nitrogen	Report	XXX	1/6 Months	Grab
Total Phosphorus	Report	XXX	1/6 Months	Grab
Oil & Grease	Report	30	1/6 Months	Grab
Chemical Oxygen Demand (COD)	Report	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: BCW-PMT-001, BCW-PMT-032
☒	Other: USGS StreamStats (see attachment A), 2024 Integrated Report, 2022 PAG-03

Attachment A:
USGS StreamStats

PA0253502 Renewal StreamStats Report

Region ID: PA
Workspace ID: PA20250124165428486000
Clicked Point (Latitude, Longitude): 40.68534, -80.25916
Time: 2025-01-24 11:55:04 -0500

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	8.4309	degrees
DRNAREA	Area that drains to a point on a stream	19600	square miles
ELEV	Mean Basin Elevation	1669	feet
PRECIP	Mean Annual Precipitation	45	inches

Low-Flow Statistics

Low-Flow Statistics Parameters [57.0 Percent (11200 square miles) Low Flow Region 3]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	19600	square miles	2.33	1720
ELEV	Mean Basin Elevation	1669	feet	898	2700
PRECIP	Mean Annual Precipitation	45	inches	38.7	47.9

Low-Flow Statistics Parameters [43.0 Percent (8360 square miles) Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	19600	square miles	2.26	1400
ELEV	Mean Basin Elevation	1669	feet	1050	2580

Low-Flow Statistics Disclaimers [57.0 Percent (11200 square miles) Low Flow Region 3]

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

Low-Flow Statistics Flow Report [57.0 Percent (11200 square miles) Low Flow Region 3]

Statistic	Value	Unit
7 Day 2 Year Low Flow	2830	ft^3/s
30 Day 2 Year Low Flow	3560	ft^3/s
7 Day 10 Year Low Flow	2010	ft^3/s
30 Day 10 Year Low Flow	2330	ft^3/s
90 Day 10 Year Low Flow	3110	ft^3/s

Low-Flow Statistics Disclaimers [43.0 Percent (8360 square miles) 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 [43.0 Percent (8360 square miles) Low Flow Region 4]

Statistic	Value	Unit
7 Day 2 Year Low Flow	2870	ft^3/s
30 Day 2 Year Low Flow	3560	ft^3/s
7 Day 10 Year Low Flow	1950	ft^3/s
30 Day 10 Year Low Flow	2040	ft^3/s
90 Day 10 Year Low Flow	2780	ft^3/s

Low-Flow Statistics Flow Report [Area-Averaged]

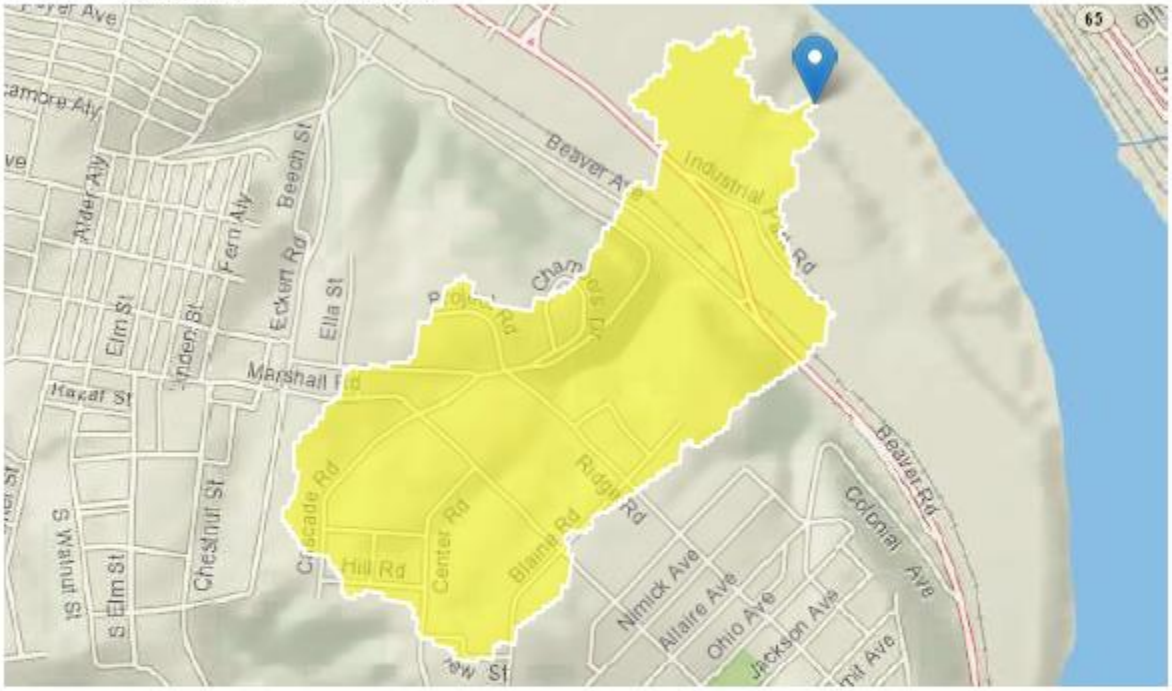
Statistic	Value	Unit
7 Day 2 Year Low Flow	2850	ft^3/s
30 Day 2 Year Low Flow	3560	ft^3/s
7 Day 10 Year Low Flow	1980	ft^3/s
30 Day 10 Year Low Flow	2210	ft^3/s
90 Day 10 Year Low Flow	2970	ft^3/s

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/)

PA0253502 Outfall 004 StreamStats Report

Region ID: PA
Workspace ID: PA20250131165122531000
Clicked Point (Latitude, Longitude): 40.68611, -80.26403
Time: 2025-01-31 11:51:44 -0500



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
BSLOPD	Mean basin slope measured in degrees	6.1166	degrees
DRNAREA	Area that drains to a point on a stream	0.27	square miles
ELEV	Mean Basin Elevation	904	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	0.27	square miles	2.26	1400
ELEV	Mean Basin Elevation	904	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	0.00499	ft^3/s
30 Day 2 Year Low Flow	0.0101	ft^3/s
7 Day 10 Year Low Flow	0.00139	ft^3/s
30 Day 10 Year Low Flow	0.00321	ft^3/s
90 Day 10 Year Low Flow	0.00656	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/)