pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0083003**
Facility Type	**Industrial**	APS ID	**815028**
Major / Minor	**Minor**	Authorization ID	**1307968**

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

Applicant and Facility Information

Applicant Name	**Dudley Carbon Coalmont Joint Municipal Authority**	Facility Name	**Dudley Carbon Coalmont JMA Water System**
Applicant Address	PO Box 276	Facility Address	3204 Green Garden Road
	Dudley, PA 16634-0276		Dudley, PA 16634
Applicant Contact	Christopher Hamilton	Facility Contact	Christopher Hamilton
Applicant Phone	(814) 635-2384	Facility Phone	(814) 635-2384
Client ID	242720	Site ID	250677
SIC Code	4941	Municipality	Carbon Township
SIC Description	Trans. & Utilities - Water Supply	County	Huntingdon
Date Application Received	February 28, 2020	EPA Waived?	Yes
Date Application Accepted	March 10, 2020	If No, Reason	

Purpose of Application: Renewal of NPDES permit for discharge of treated water treatment filter backwash.

Summary of Review

Dudley-Carbon-Coalmont Joint Municipal Authority has applied to the Pennsylvania Department of Environmental Protection (DEP) for reissuance of its NPDES permit. The permit was last reissued on February 25, 2015 and became effective on March 1, 2015. The permit expired on February 29, 2020.

The facility owns and operates the water filtration plant which discharges filter backwash and blowdown which has a discharge flow design of 0.024 MGD to Shoup Run, and is affected by Acid Mine Drainage (AMD). Alum (Al_2SO_4), Caustic Soda (NaOH), Soda Ash (Na_2CO_3), and Potassium Permanganate (KM_nO_4) are used at the Water Plant. Sludge is periodically pumped from the settling tanks and hauled to the Dudley-Carbon-Coalmont Joint Municipal Authority's sewage treatment plant for further treatment and disposal. This facility is not covered under Effluent Limitation Guideline (ELG).

Since Shoup Run is listed as an AMD stream, limits in the existing permit are evaluated based upon Chapter 95.5, "Treatment requirements for discharges to waters affected by acid mine drainage" which only require technology considerations. Shoup Run is still considered an AMD stream therefore the existing limits in the permit are still valid and will be continued.

Based on the review outline in this fact sheet, it is recommended that the permit be drafted and published in the Pennsylvania Bulletin for public comments for 30 days.

Approve	Deny	Signatures	Date
X		*Hilaryle* Hilary H. Le / Environmental Engineering Specialist	May 28, 2020
		Daniel W. Martin, P.E. / Environmental Engineer Manager	
		Maria D. Bebenek, P.E. / Clean Water Program Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.024
Latitude	40º 12' 19.43"	Longitude	-78º 10' 3.34"
Quad Name	Saxton	Quad Code	
Wastewater Description:	IW Process Effluent without ELG (Water treatment filter backwash and blow down)		
Receiving Waters	Shoup Run (WWF)	Stream Code	13717
NHD Com ID	65842489	RMI	6.2 miles
Drainage Area	2.3 mi.^{2}	Yield (cfs/mi^2)	See comments below
Q_{7-10} Flow (cfs)	See comments below	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1545.93	Slope (ft/ft)	
Watershed No.	11-D	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	METALS, PH		
Source(s) of Impairment	ACID MINE DRAINAGE		
TMDL Status	Final, 04/09/2001	Name	Shoup Run Watershed
Nearest Downstream Public Water Supply Intake	Lake Raystown Resort, Huntingdon County		
PWS Waters	Raystown Branch Juniata River	Flow at Intake (cfs)	
PWS RMI	2.0 miles	Distance from Outfall (mi)	Approximate 43 miles

Changes Since Last Permit Issuance: None

Drainage Area
The discharge is to Shoup Run at RMI 6.2 mile. A drainage area upstream of the discharge is estimated to be 2.33 mi.^{2}, according to USGS PA StreamStats available at https://streamstats.usgs.gov/ss/.

Stream Flow
Stream flows for the water quality were determined by correlating with the yield of USGS gauging station No.01562000 on Raystown Branch Juniata River at Saxton, PA. The Q_{7-10} is 44.9 cfs and the drainage area is 755 mi.^{2} (according to USGS PA StreamStats available at https://streamstats.usgs.gov/ss/) which results in a Q_{7-10} low flow yield of 0.06 cfs/mi.^{2}. This information is used to obtain a chronic or 30-day (Q_{30-10}), and an acute or 1-day (Q_{1-10}) exposure stream flow for the discharge point as follows (Guidance No. 391-2000-023):

Low Flow Yield = 44.9 cfs / 755 mi.^{2} ≈ 0.06 cfs/mi.^{2}
Q_{7-10} discharge = 0.06 cfs/mi.^{2} x D.A discharge = 0.06 cfs/mi.^{2} x 2.33 mi.^{2} = 0.14 cfs
Q_{30-10} = 1.36 * 0.14 cfs ≈ 0.19 cfs
Q_{1-10} = 0.64 * 0.14 cfs ≈ 0.09 cfs

Public Water Supply
The closest water supply intake is located downstream from the discharge in the Lake Raystown Resort, Huntingdon County approximately 43.0 miles from the point of discharge. Given the nature and dilution, the discharge is not expected to significantly impact the water supply.

Treatment Facility Summary				
Treatment Facility Name: Dudley-Barnettstown WS				
WQM Permit No.	**Issuance Date**			
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Industrial	Primary	Sedimentation Tanks	No Disinfection	
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.024		Not Overloaded	Concentration	Other WWTP

Changes Since Last Permit Issuance:

Other Comments:

The treatment system consists of two, three compartment settling tanks.

Compliance History	
Summary of DMRs:	DMRs reported last 12 months from April 1, 2019 to March 31, 2020 are summarized in the Table below (Pages # 4 & 5).
Summary of Inspections:	4/15/2019: Mr. Clark, DEP WQS, conducted compliance evaluation inspection. Their settling tanks were cleaned out last month. There were no violations noted during inspection. 4/12/2018: Mr. Clark, DEP WQS, conducted compliance evaluation inspection. The treatment tank receives water from filter backwashes. No discharge today and no sample taken. There were no violations noted during inspection. 4/6/2017: Mr. Clark, DEP WQS, conducted compliance evaluation inspection. Effluent looked clear, field test results were within permit limits. There were no violations noted during inspection. Sludge is hauled to the Dudley-Carbon-Coalmont STP for further processing.
Other Comments:	There are no open violations associated with this facility or permittee.

Other Comments:

Compliance History

DMR Data for Outfall 001 (from April 1, 2019 to March 31, 2020)

Parameter	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19	MAY-19	APR-19
Flow (MGD) Average Monthly	0.0024	0.0024	0.0023	0.0024	0.0039	0.0026	0.0054	0.0056	0.0042	0.0029	0.0021	0.0022
Flow (MGD) Daily Maximum	0.0085	0.0091	0.0086	0.007	0.076	0.0080	0.0133	0.0102	0.009	0.0104	0.0065	0.0085
pH (S.U.) Instantaneous Minimum	7.3	7.1	7.2	7.2	7.2	7.2	6.3	7.1	7.1	7.0	7.09	7.1
pH (S.U.) Instantaneous Maximum	7.6	7.5	7.7	7.6	7.7	7.8	7.6	7.5	7.5	7.5	7.52	7.7
TSS (lbs/day) Average Monthly	0.2	< 0.1	< 0.07	0.06	< 0.05	< 0.06	< 0.1	< 0.1	< 0.08	< 0.2	< 0.1	< 0.1
TSS (lbs/day) Daily Maximum	0.3	0.2	0.1	0.1	< 0.06	0.09	< 0.2	< 0.2	< 0.1	< 0.2	< 0.1	< 0.2
TSS (mg/L) Average Monthly	5	< 3	< 2	4	< 1.2	< 2	< 2	< 3	< 2.5	< 3	< 2.5	< 3
TSS (mg/L) Daily Maximum	7	5	3	4	< 1.6	2	< 3	< 3	< 2.5	< 3	< 2.5	< 3
Nitrate-Nitrite (mg/L) Annual Average				< 2.400								
Total Nitrogen (mg/L) Annual Average				< 3.4								
TKN (mg/L) Annual Average				< 1.0								
Total Phosphorus (mg/L) Annual Average				< 0.01								
Total Aluminum (lbs/day) Average Monthly	< 0.004	< 0.004	< 0.004	< 0.002	< 0.004	< 0.004	< 0.006	< 0.006	< 0.003	< 0.006	< 0.004	< 0.006
Total Aluminum (lbs/day) Daily Maximum	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.009	< 0.006	< 0.006	< 0.009	< 0.005	< 0.007
Total Aluminum (mg/L) Average Monthly	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.100	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Aluminum (mg/L) Daily Maximum	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10	< 0.100	< 0.10	< 0.10	< 0.10	< 0.10	< 0.10
Total Iron (lbs/day) Average Monthly	0.05	0.04	< 0.01	< 0.02	< 0.02	< 0.02	< 0.03	0.02	0.002	< 0.002	0.003	0.2

Total Iron (lbs/day) Daily Maximum	0.06	0.05	0.02	0.04	0.04	0.03	0.04	0.03	0.003	0.002	0.003	0.03
Total Iron (mg/L) Average Monthly	1.3	1.0	< 0.4	< 0.6	< 0.6	< 0.5	< 0.3	0.3	0.1	< 0.03	0.07	0.3
Total Iron (mg/L) Daily Maximum	1.7	1.3	0.5	1.0	1.0	0.9	0.5	0.5	0.2	0.05	0.09	0.4
Total Manganese (lbs/day) Average Monthly	0.02	0.02	0.006	0.009	0.009	0.009	0.03	0.01	0.003	0.003	0.003	0.01
Total Manganese (lbs/day) Daily Maximum	0.03	0.02	0.01	0.02	0.01	0.01	0.04	0.01	0.006	0.004	0.003	0.02
Total Manganese (mg/L) Average Monthly	0.6	0.5	0.2	0.3	0.2	0.2	0.5	0.2	0.1	0.04	0.07	0.3
Total Manganese (mg/L) Daily Maximum	0.7	0.6	0.3	0.5	0.4	0.4	0.6	0.2	0.1	0.05	0.08	0.3

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.024
Latitude 40º 12' 19.07" **Longitude** -78º 10' 3.20"
Wastewater Description: IW Process Effluent without ELG (Water treatment filter backwash and blowdown)

Technology-Based Limitations

Best Available Technology-based (BAT) effluent limits for water treatment plant wastewater discharges are presented in the Department's June 1989 Guidance document entitled, "Technology Based Controls for Discharges from Water Treatment Plants" as follows:

Parameter	Monthly Avg mg/l	Daily Max. mg/l
Total Suspended Solids	30	60
Total Aluminum	4	8
Total Iron	2	4
Total Manganese	1	2
Flow	Monitor	
pH	6 - 9 S.U at all times	

Comments: when Green Garden Spring is used as a raw surface water source that influences effluent pH, note that standard limits of 6 to 9 from 25 Pa. Code § 93 might be violated if resulting effluent pH is less than 6. According to 25 Pa. Code § 95.2(6), the quality of the effluent need not exceed the quality of the raw water supply if the source or supply would normally drain to the point of effluent discharge, when surface waters are used in an industrial plant. The permit allows a minimum pH to be equal to the pH of the spring, only when the spring is being used as a raw water source. Otherwise the existing pH limit range of 6 thru 9 will remain for the facility when wells are the source of water.

Water Quality-Based Limitations

Toxics

Maximum concentrations of toxic pollutants reported in the application were entered into DEP's Toxics Screening Analysis (TSA). TSA then determined that Cadmium, Copper, Phenols, and Selenium were candidates for PENTOXSD. PENTOXSD is a water quality model for toxic pollutants. Once PENTOXSD's most stringent WQBELs were entered into TSA, TSA does not recommend any requirements for these pollutants. No toxic pollutants have therefore been taken into consideration at this time.

Chesapeake Bay Strategy

According to the SOP for Clean Water Program, Establishing Effluent Limitations for Individual Industrial Permits (SOP No. BPNPSM-PMT-032), industrial facilities that discharge phosphorus in quantities that may exceed 25 lbs/day should at minimum receive a monitoring requirement for Total Phosphorus, and industrial facilities that discharge nitrogen in quantities that may exceed 75 lbs/day should at minimum receive a monitoring requirement for Total Nitrogen. In addition, facilities within the Chesapeake Bay watershed will generally receive monitoring for any discharge in which there is the possibility of a net increase in Total Nitrogen in comparison to influent (source) waters, in accordance with the Chesapeake Bay Phase 2 WIP Supplement.

According to Chesapeake Bay Phase 2 WIP Supplement, for non-significant IW facilities, monitoring and reporting of TN and TP will be required throughout the permit term in renewed or amended permits anytime the facility has the potential to introduce a net TN or TP increase to the load contained within the intake water used in processing. This facility is not expected to introduce a net TN or TP increase to the load however for verification purposes monitoring TP and TN, Nitrate-Nitrite as N and Total Kjeldahl Nitrogen once a year will be required. This monitoring will remain in the proposed permit.

Class A Wild Trout Fisheries

No Class A Wild Trout Fisheries are impacted by this discharge.

Anti-Degradation (93.4)

The effluent limits for this discharge have been developed to ensure that existing instream water uses and the level of water quality necessary to protect the existing uses are maintained and protected. No High-Quality Waters are impacted by this discharge. No High-Quality Waters are impacted by this discharge. No Exceptional Value Waters are impacted by this discharge.

303d Listed Streams

Due to Abandoned Mine Drainage of metals and pH, Shoup Run is listed as a 303(d) stream. A TMDL for the acid mine drainage from deep coal mine portals was developed for the Shoup Run watershed on February 21, 2001. Allocations for the mine drainage sources were given for Aluminum and Manganese. Manganese loadings in the Shoup Run TMDL were calculated to be 129.2 lbs/day and Aluminum loadings in the Shoup Run TMDL were calculated to be 230.6 lbs/day. Although the discharge from this facility predates TMDL development, it was not considered a significant source of these metals. Whereas the Water Treatment Plant is considered an insignificant source of Aluminum and Manganese the technology limits of 4.0 mg/l (0.8 lbs/day) for Aluminum and 1.0 mg/l (0.2 lbs/day) for Manganese in the permit is enough to control loading of Total Aluminum and Total Manganese to the watershed. Actual discharge from the facility is well below permit limit for Total Aluminum and Total Manganese and nowhere near an allowable discharge flow of 0.024 MGD. Refer to DMR reported data summary table. pH will be controlled so that it is better than or meets TMDL requirements for the acid mine drainage sources. Iron allocations were not necessary in the Shoup Run TMDL. No further action is warranted at this time. Historically, although EPA did not approve of issuing the permit with TBELS, they recommended either revising the TMDL to allocate loads to all point sources or permitting the facility at criteria. Since the facility meets limits at criteria, therefore the limits for Total Aluminum (0.75 mg/l AML, DML & IMAX the same), Total Manganese (1.0 mg/l AML) and Total Iron (1.5 mg/l AML) will remain in the proposed permit.

PENTOXSD input

Node 1: Outfall 001 on Shoup Run (13717)

Elevation:	1545.93 ft (USGS National Map Viewer)
Drainage Area:	2.3 $mi.^2$ (USGS PA StreamStats)
River Mile Index:	6.2 (PA DEP eMapPA)
Low Flow Yield:	0.06 $cfs/mi.^2$
Discharge Flow:	0.024 MGD (NPDES Application)

Node 2: Just before junction with Trib. 13733

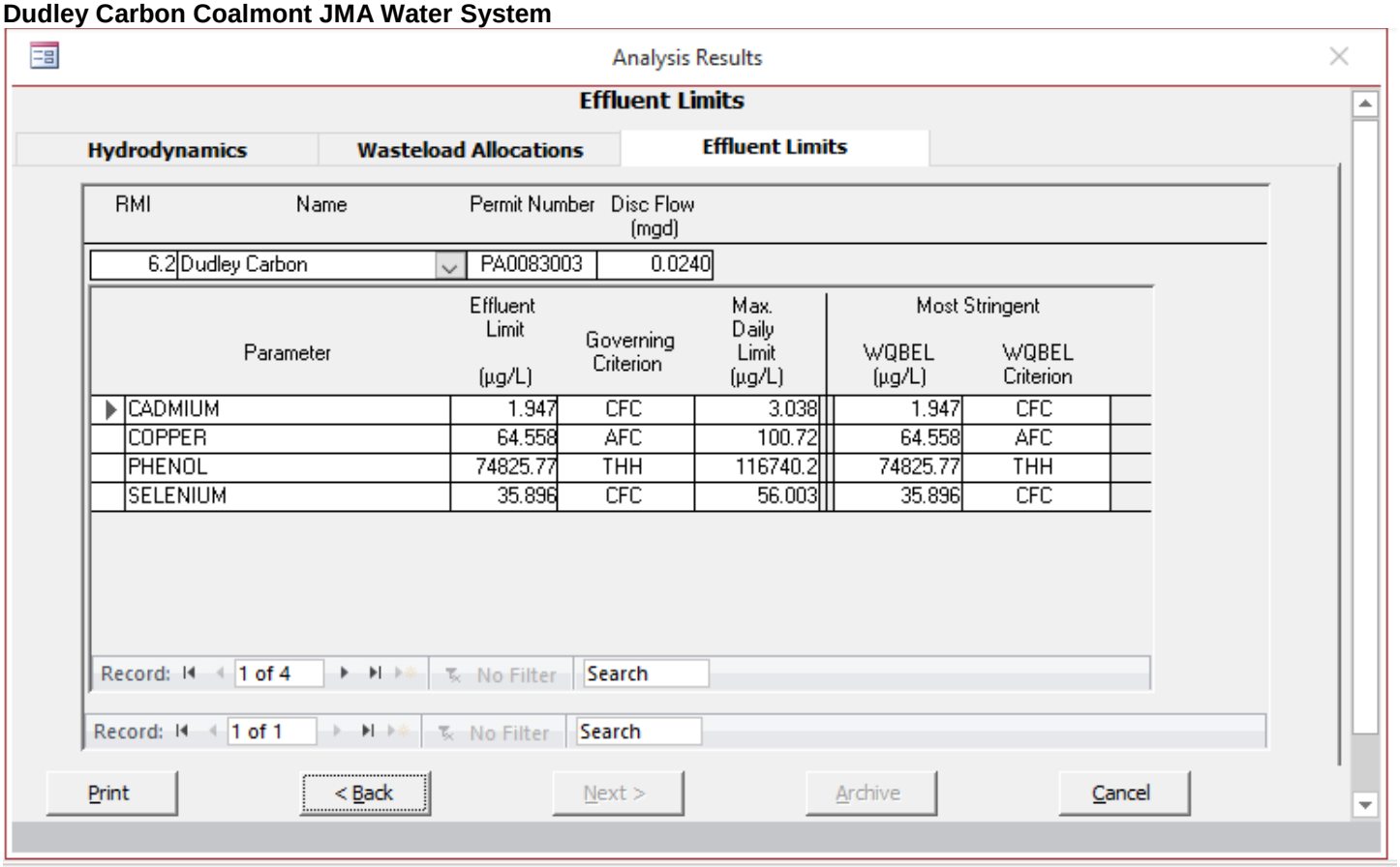
Elevation:	1455.79 ft (USGS National Map Viewer)
Drainage Area:	3.16 $mi.^2$ (USGS PA StreamStats)
River Mile Index:	5.58 (PA DEP eMapPA)
Low Flow Yield:	0.06 $cfs/mi.^2$
Discharge Flow:	0.000 MGD

TOXICS SCREENING ANALYSIS
WATER QUALITY POLLUTANTS OF CONCERN
VERSION 2.7

CLEAR FORM

Facility: **Dudley Carbon Coalmont JMA WTP** NPDES Permit No.: **PA0083003** Outfall: **001**
Analysis Hardness (mg/L): **220** Discharge Flow (MGD): **0.024** Analysis pH (SU): **7**
Stream Flow, Q_{7-10} (cfs): **0.14**

	Parameter	Maximum Concentration in Application or DMRs (µg/L)		Most Stringent Criterion (µg/L)	Candidate for PENTOXSD Modeling?	Most Stringent WQBEL (µg/L)	Screening Recommendation
Group 1	Total Dissolved Solids		351000	500000	No		
	Chloride		18.8	250000	No		
	Bromide	<	0.4	N/A	No		
	Sulfate		201	250000	No		
	Fluoride	<	2	2000	No (Value < QL)		
Group 2	Total Aluminum	<	100	750	No		
	Total Antimony	<	1	5.6	No (Value < QL)		
	Total Arsenic		1.6	10	No		
	Total Barium	<	25	2400	No		
	Total Beryllium	<	2.5	N/A	No		
	Total Boron	<	100	1600	No (Value < QL)		
	Total Cadmium	<	2.5	0.271	Yes	1.947	Establish Limits
	Total Chromium	<	2.5	N/A	No		
	Hexavalent Chromium	<	0.25	10.4	No (Value < QL)		
	Total Cobalt	<	2	19	No		
	Total Copper	<	12.5	9.3	Yes	64.558	Monitor
	Total Cyanide	<	10	N/A	No		
	Total Iron		1,200	1500	No		
	Dissolved Iron		107	300	No		
	Total Lead	<	1	3.2	No (Value < QL)		
	Total Manganese		600	1000	No		
	Total Mercury	<	0.2	0.05	No (Value < QL)		
	Total Molybdenum	<	0.5	N/A	No		
	Total Nickel		3.36	52.2	No		
	Total Phenols (Phenolics)		7	5	Yes	74825.77	No Limits/Monitoring
	Total Selenium	<	12.5	5.0	Yes	35.896	Monitor
	Total Silver	<	2.5	3.8	No		
	Total Thallium	<	1	0.24	No (Value < QL)		
	Total Zinc	<	12.5	119.8	No		
	Acrolein	<		3			
	Acrylamide	<		0.07			


Analysis Results
Effluent Limits
Hydrodynamics
Wasteload Allocations
Effluent Limits
RMI
Name
Permit Number
Disc Flow (mgd)
6.2
Dudley Carbon
PA0083003
0.0240
Parameter
Effluent Limit (µg/L)
Governing Criterion
Max. Daily Limit (µg/L)
Most Stringent
WQBEL (µg/L)
WQBEL Criterion
CADMIUM 1.947 CFC 3.038 1.947 CFC
COPPER 64.558 AFC 100.72 64.558 AFC
PHENOL 74825.77 THH 116740.2 74825.77 THH
SELENIUM 35.896 CFC 56.003 35.896 CFC
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No Filter
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Record: 1 of 1
No Filter
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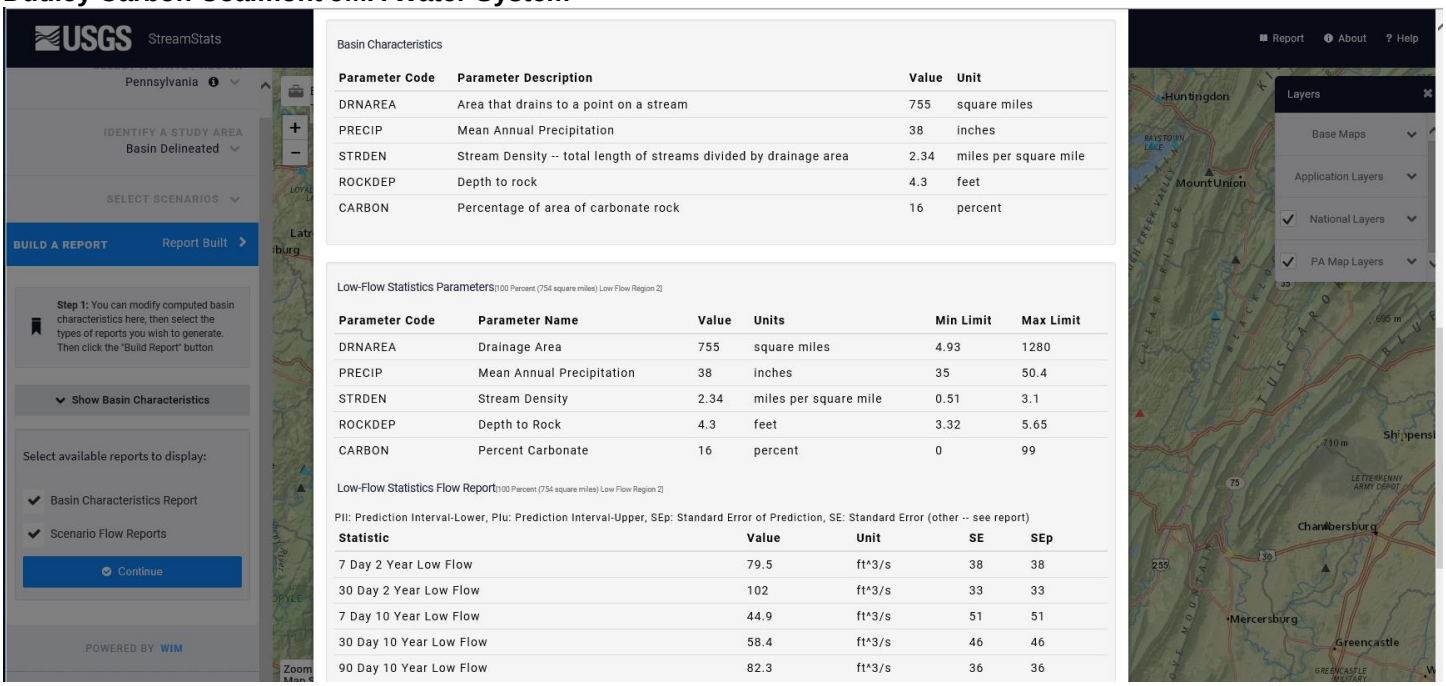


Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	755	square miles
PRECIP	Mean Annual Precipitation	38	inches
STRDEN	Stream Density -- total length of streams divided by drainage area	2.34	miles per square mile
ROCKDEP	Depth to rock	4.3	feet
CARBON	Percentage of area of carbonate rock	16	percent

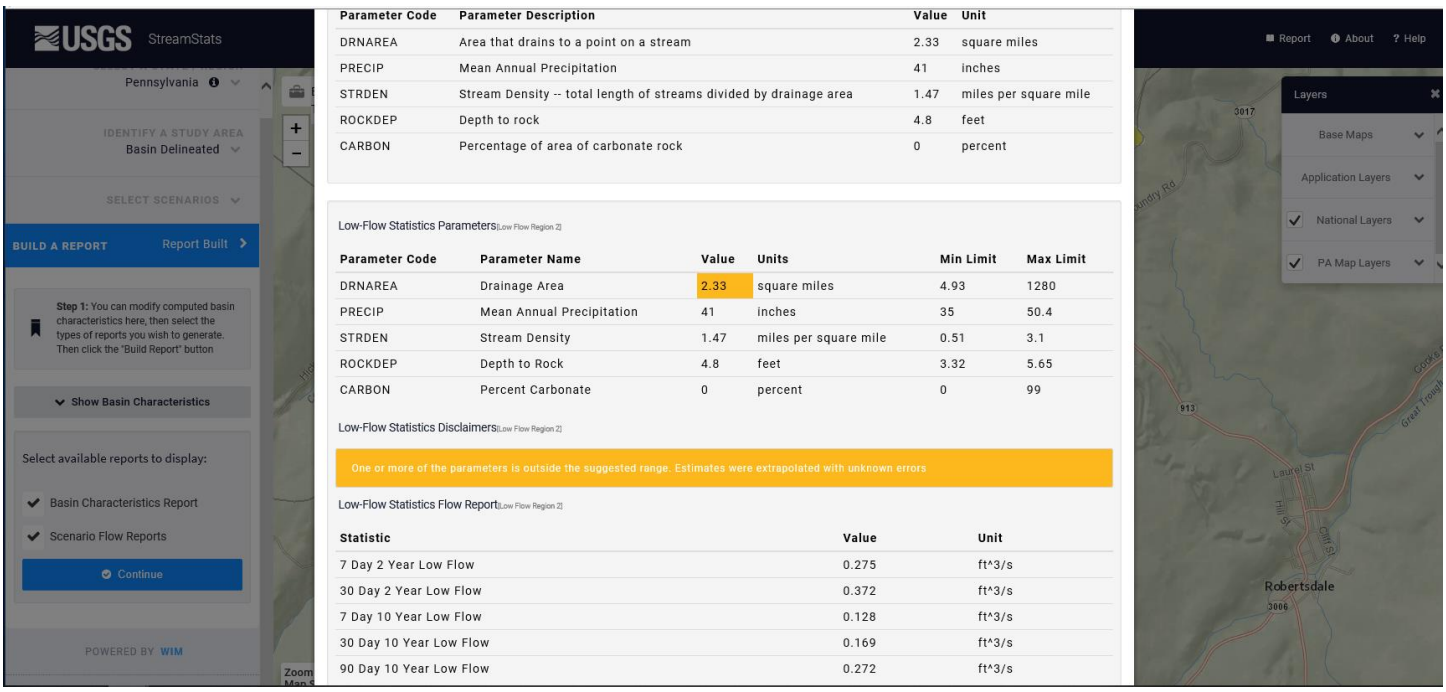
Low-Flow Statistics Parameters[100 Percent (754 square miles) Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	755	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	38	inches	35	50.4
STRDEN	Stream Density	2.34	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	4.3	feet	3.32	5.65
CARBON	Percent Carbonate	16	percent	0	99

Low-Flow Statistics Flow Report[100 Percent (754 square miles) Low Flow Region 2]

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

Statistic	Value	Unit	SE	SEp
7 Day 2 Year Low Flow	79.5	ft^3/s	38	38
30 Day 2 Year Low Flow	102	ft^3/s	33	33
7 Day 10 Year Low Flow	44.9	ft^3/s	51	51
30 Day 10 Year Low Flow	58.4	ft^3/s	46	46
90 Day 10 Year Low Flow	82.3	ft^3/s	36	36



Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	2.33	square miles
PRECIP	Mean Annual Precipitation	41	inches
STRDEN	Stream Density -- total length of streams divided by drainage area	1.47	miles per square mile
ROCKDEP	Depth to rock	4.8	feet
CARBON	Percentage of area of carbonate rock	0	percent

Low-Flow Statistics Parameters[Low Flow Region 2]

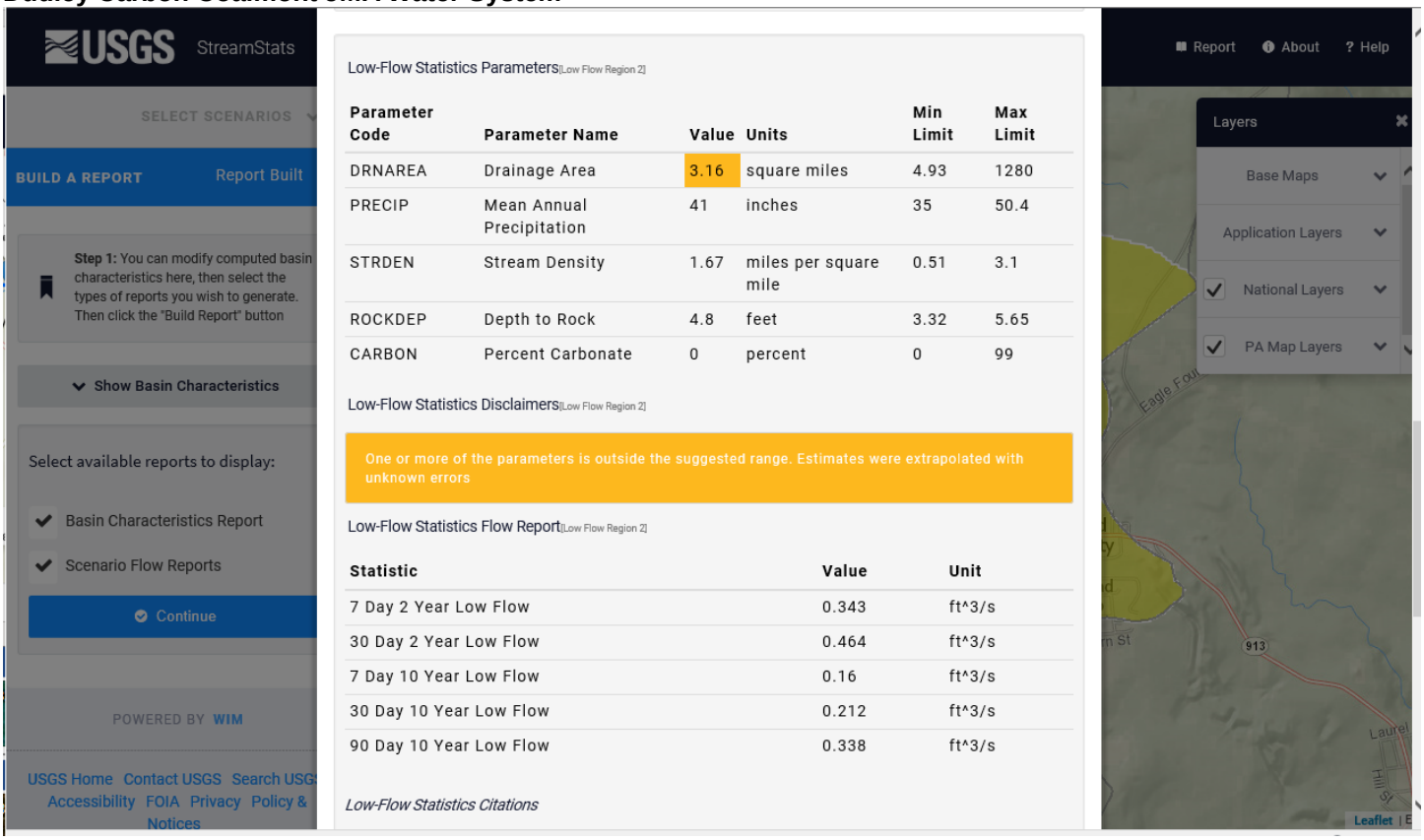
Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	2.33	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	41	inches	35	50.4
STRDEN	Stream Density	1.47	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	4.8	feet	3.32	5.65
CARBON	Percent Carbonate	0	percent	0	99

Low-Flow Statistics Disclaimers[Low Flow Region 2]

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 2]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.275	ft^3/s
30 Day 2 Year Low Flow	0.372	ft^3/s
7 Day 10 Year Low Flow	0.128	ft^3/s
30 Day 10 Year Low Flow	0.169	ft^3/s
90 Day 10 Year Low Flow	0.272	ft^3/s


USGS StreamStats
SELECT SCENARIOS
BUILD A REPORT
Report Built
Step 1: You can modify computed basin characteristics here, then select the types of reports you wish to generate. Then click the "Build Report" button
Show Basin Characteristics
Select available reports to display:
Basin Characteristics Report
Scenario Flow Reports
Continue
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Accessibility FOIA Privacy Policy & Notices
Low-Flow Statistics Parameters [Low Flow Region 2]
Parameter Code | Parameter Name | Value | Units | Min Limit | Max Limit
DRNAREA | Drainage Area | 3.16 | square miles | 4.93 | 1280
PRECIP | Mean Annual Precipitation | 41 | inches | 35 | 50.4
STRDEN | Stream Density | 1.67 | miles per square mile | 0.51 | 3.1
ROCKDEP | Depth to Rock | 4.8 | feet | 3.32 | 5.65
CARBON | Percent Carbonate | 0 | percent | 0 | 99
Low-Flow Statistics Disclaimers [Low Flow Region 2]
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 2]
Statistic | Value | Unit
7 Day 2 Year Low Flow | 0.343 | ft^3/s
30 Day 2 Year Low Flow | 0.464 | ft^3/s
7 Day 10 Year Low Flow | 0.16 | ft^3/s
30 Day 10 Year Low Flow | 0.212 | ft^3/s
90 Day 10 Year Low Flow | 0.338 | ft^3/s
Low-Flow Statistics Citations
Report
About
Help
Layers
Base Maps
Application Layers
National Layers
PA Map Layers
913
Leaflet

Existing Effluent Limitations and Monitoring Requirements

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/day	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
TSS	Report	Report	XXX	30	60	75	2/month	8-Hr Composite
Total Aluminum	Report	Report	XXX	0.75	0.75	0.75	2/month	8-Hr Composite
Total Iron	Report	Report	XXX	1.5	3.0	3.75	2/month	8-Hr Composite
Total Manganese	Report	Report	XXX	1.0	2.0	2.5	2/month	8-Hr Composite
Nitrate-Nitrite	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Calculation
TKN	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite

Proposed Effluent Limitations and Monitoring Requirements

The limitations and monitoring requirements specified below are proposed for the draft permit, and reflect the most stringent limitations amongst technology, water quality and BPJ. Instantaneous Maximum (IMAX) limits are determined using multipliers of 2 (conventional pollutants) or 2.5 (toxic pollutants). Sample frequencies and types are derived from the "NPDES Permit Writer's Manual" (362-0400-001), SOPs and/or BPJ.

Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date.

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	Report	XXX	XXX	XXX	XXX	1/day	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
TSS	Report	Report	XXX	30	60	75	2/month	8-Hr Composite
Total Aluminum	Report	Report	XXX	0.75	0.75	0.75	2/month	8-Hr Composite
Total Iron	Report	Report	XXX	1.5	3.0	3.75	2/month	8-Hr Composite
Total Manganese	Report	Report	XXX	1.0	2.0	2.5	2/month	8-Hr Composite
Nitrate-Nitrite	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
Total Nitrogen	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Calculation
TKN	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite
Total Phosphorus	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	8-Hr Composite

Compliance Sampling Location:

Other Comments:

Tools and References Used to Develop Permit	
☐	WQM for Windows Model (see Attachment)
☒	PENTOXSD for Windows Model (see Attachment)
☐	TRC Model Spreadsheet (see Attachment)
☐	Temperature Model Spreadsheet (see Attachment)
☒	Toxics Screening Analysis Spreadsheet (see Attachment)
☐	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
☐	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.
☐	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 and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
☐	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: