

Application Type Renewal  
 Facility Type Non-Municipal  
 Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0254444  
 APS ID 1150098  
 Authorization ID 1548519

**Applicant and Facility Information**

Applicant Name	<u>Consol PA Coal Co. LLC</u>	Facility Name	<u>Enlow Fork Mine Oak Spring Slope &amp; Supply Yard STP</u>
Applicant Address	<u>275 Technology Drive Suite 101 Canonsburg, PA 15317-9565</u>	Facility Address	<u>Oak Spring Road East Finley, PA 15323</u>
Applicant Contact	<u>Christopher Rerko</u>	Facility Contact	<u></u>
Applicant Phone	<u>(724) 416-8452</u>	Facility Phone	<u></u>
Client ID	<u>259457</u>	Site ID	<u>744867</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>East Finley Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Washington</u>
Date Application Received	<u>November 6, 2025</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>NPDES Permit Renewal</u>		

**Summary of Review**

**Overview**

The permittee applied to renew PA0254444 on 11/6/25. The permit is set to expire on 6/30/26. WQM Permit 6311401 approved a flow rate of 2800 GPD.

No permit limits or monitoring requirements are changing in this permit. The facility has been generally in compliance.

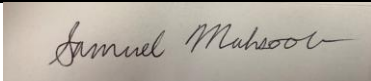

**Facility Information**

The discharge location, Outfall 001, is located at 40° 2' 32", -80° 22' 35". The facility discharges to UNT 32722 of Rocky Run, and is classified as a Trout-Stocked Fishery (TSF).

The wastewater treatment system uses the extended aeration process which is a variation of the activated sludge process. The treatment process includes the following: screening/comminution, equalization, aeration, clarification, chlorination/dechlorination, and sludge digestion. The unit consists of 3 process tanks: an aeration basin, a clarifier, and chlorination/dichlorination/post-aeration.

**Act 14 Notifications**

Act 14 Notifications were provided to Washington County and East Finley on October 20, 2025.

Approve	Return	Deny	Signatures	Date
x			 Sam Mahsoob, EIT / Environmental Engineering Specialist	2/27/2026
x			 Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineer Manager	4/7/2026

**Summary of Review**

**Client ID Compliance Check**

The permittee, Consol PA Coal Co. LLC, has violations with Oil & Gas, Coal, and Air Quality, but none with the Clean Water department. There are open violations for this specific facility.

**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.	<u>001</u>	Design Flow (MGD)	<u>.0028</u>
Latitude	<u>40° 2' 32"</u>	Longitude	<u>-80° 22' 35"</u>
Wastewater Description:		<u>Sewage Effluent</u>	
Receiving Waters	<u>Unnamed Tributary to Rocky Run (TSF)</u>	Stream Code	<u>32722</u>
NHD Com ID	<u>73869286</u>	RMI	<u>1.2</u>
Drainage Area	<u>0.24</u>	Yield (cfs/mi <sup>2</sup> )	<u>0.00629</u>
Q <sub>7-10</sub> Flow (cfs)	<u>0.00151</u>	Q <sub>7-10</sub> Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u>1238</u>	Slope (ft/ft)	<u>0.0255</u>
Watershed No.	<u>20-E</u>	Chapter 93 Class.	<u>TSF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u></u>		
Source(s) of Impairment	<u></u>		
TMDL Status	<u></u>	Name	<u></u>
Background/Ambient Data		Data Source	
pH (SU)	<u></u>		<u></u>
Temperature (°F)	<u></u>		<u></u>
Hardness (mg/L)	<u></u>		<u></u>
Other:	<u></u>		<u></u>
Nearest Downstream Public Water Supply Intake	<u>N/A – Stream flows into WV</u>		

Changes Since Last Permit Issuance: None

Treatment Facility Summary				
<b>Treatment Facility Name:</b> Enlow Fork Mine Oak Spring Slope & Supply Yard STP				
<b>WQM Permit No.</b>		<b>Issuance Date</b>		
6311401		2/7/2012		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD) in 2025
Sewage	Secondary With Ammonia Reduction	Extended Aeration	Chlorine With Dechlorination	0.00186
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0028	15	Not Overloaded	Aerobic Digestion	Other WWTP

Changes Since Last Permit Issuance: None

**Compliance History**

**Operations Compliance Check Summary Report**

**Facility:** ENLOW FORK MINE OAK SPRING SLOPE & SUPPLY YARD STP

**NPDES Permit No.:** PA0254444

**Compliance Review Period:** 1/1/21-1/12/26

**Inspection Summary:**

INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC
09/29/2021	Compliance Evaluation	PA Dept of Environmental Protection	No Violations Noted

**Violation Summary:**

No violations noted during review period

**Open Violations by Client ID:**

No open violations for Client ID 259457 with Clean Water Program. Consol PA Coal Co LLC has the following open violations in Southwest Region with Air Quality, Oil & Gas, and Mining Coal Regulatory Programs:

FACILITY	PF STATUS	INSP PROGRAM	PROGRAM SPECIFIC ID	INSP ID	VIOLATION ID	INSPECTION CATEGORY	VIOLATION DATE	VIOLATION CODE	INSP REGION
D GRAY 1	Active	Oil & Gas	059-02117	2980875	874236	PF	01/08/2020	OGA3220(A)	OG - SWRO
R VAN SYAC 1263 OG WELL	Plugged OG Well	Oil & Gas	059-28185	3321217	950141	PF	02/11/2022	102.4(b)1	OG - SWRO
R VAN SYAC 1263 OG WELL	Plugged OG Well	Oil & Gas	059-28185	3321217	950142	PF	02/11/2022	102.11(a)1	OG - SWRO
R VAN SYAC 1263 OG WELL	Plugged OG Well	Oil & Gas	059-28185	3321217	950143	PF	02/11/2022	78.53	OG - SWRO
R VAN SYAC 1263 OG WELL	Plugged OG Well	Oil & Gas	059-28185	3321217	950144	PF	02/11/2022	102.4(b)2	OG - SWRO
R VAN SYAC 1263 OG WELL	Plugged OG Well	Oil & Gas	059-28185	3321217	950145	PF	02/11/2022	102.22(b)1	OG - SWRO
BROWN 1447	Plugged OG Well	Oil & Gas	059-28450	3963606	8230859	PF	04/23/2025	78.51(a)	OG - SWRO
BROWN 1447	Plugged OG Well	Oil & Gas	059-28450	3963606	8230860	PF	04/23/2025	CSL 301	OG - SWRO

**NPDES Permit Fact Sheet**  
**Enlow Fork Mine Oak Spring Slope & Supply Yard STP**

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BROWN 1447	Plugged OG Well	Oil & Gas	059-28450	3963606	8230861	PF	04/23/2025	CSL 307(a)	OG - SWRO
BROWN 1447	Plugged OG Well	Oil & Gas	059-28450	3963606	8230862	PF	04/23/2025	91.34(A)	OG - SWRO
BROWN 1447	Plugged OG Well	Oil & Gas	059-28450	3963606	8230863	PF	04/23/2025	SWMA 301	OG - SWRO
BROWN 1447	Plugged OG Well	Oil & Gas	059-28450	3963606	8230864	PF	04/23/2025	78.54	OG - SWRO
BROWN 1447	Plugged OG Well	Oil & Gas	059-28450	3968790	8231450	PF	04/30/2025	CSL 301	OG - SWRO
BROWN 1447	Plugged OG Well	Oil & Gas	059-28450	3968790	8231451	PF	04/30/2025	CSL 307(a)	OG - SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3493301	8164019	PF	10/18/2022	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8165052	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8172080	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8172081	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8172082	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8172083	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8172084	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8172085	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8172086	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8172087	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8172088	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8172089	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8172090	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8172091	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386- 1	3644601	8172092	PF	09/07/2023	127.25	SWRO

**NPDES Permit Fact Sheet**  
**Enlow Fork Mine Oak Spring Slope & Supply Yard STP**

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CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386-1	3644601	8172093	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386-1	3644601	8172094	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386-1	3644601	8172095	PF	09/07/2023	127.25	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386-1	3999073	8240506	PF	06/13/2025	127.444	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386-1	3999073	8246212	PF	06/13/2025	127.444	SWRO
CONSOL PA COAL CO LLC/BAILEY PREP PLT	Active	Air Quality	25-1402386-1	3999073	8246233	PF	06/13/2025	127.444	SWRO
BAILEY DEEP MINE	Active	MING Coal Regulatory	30841316	1586418	504391	PF	12/12/2006	89.52.C	DMO - CALIFORNIA
		Oil & Gas	OGO-31846	3331615	947334	Clnt	02/17/2022	102.22(b)1	OG - SWRO
		Oil & Gas	OGO-31846	3454171	974891	Clnt	11/04/2022	OGA3259(2I)	OG - SWRO
		Oil & Gas	OGO-31846	3454171	974892	Clnt	11/04/2022	102.5(c)	OG - SWRO
		Oil & Gas	OGO-38810	3762583	8187279	Clnt	05/07/2024	78.91(a)	OG - SWRO
		Oil & Gas	OGO-38810	4032974	8244439	Clnt	08/12/2025	78.65(3)	OG - SWRO

**Enforcement Summary:**

No enforcements executed during review period

**Effluent Violation Summary:**

<u>MON PD</u>	<u>PARAMETER</u>	<u>REPORTED VALUE</u>	<u>PERMIT LIMIT</u>	<u>UNIT</u>	<u>STAT BASE CODE</u>	<u>FACILITY COMMENTS</u>
Jan-23	Total Suspended Solids	60.5	60.0	mg/L	Instantaneous Maximum	Follow up sampling showed the TSS value to be within the effluent limits.
Jul-22	Ammonia-Nitrogen	< 2.59	1.9	mg/L	Average Monthly	The monthly average exceedance resulted from one elevated sample collected late in the month. Results from the elevated sample were received after the month ended.
Jul-22	Ammonia-Nitrogen	4.37	3.8	mg/L	Instantaneous Maximum	It is not known what caused the elevated ammonia nitrogen. Ammonia nitrogen was not detected in samples collected prior to and after the elevated sample was collected.
Apr-22	Dissolved Oxygen	5.8	6.0	mg/L	Instantaneous Minimum	

**NPDES Permit Fact Sheet  
Enlow Fork Mine Oak Spring Slope & Supply Yard STP**

**NPDES Permit No. PA0254444**

Feb-22	Dissolved Oxygen	5.2	6.0	mg/L	Instantaneous Minimum	We are investigating the cause of the low dissolved oxygen value to determine corrective actions to take.
Jan-22	Fecal Coliform	> 49	2000	No./100 ml	Geometric Mean	
Mar-21	Ammonia-Nitrogen	8.2	5.6	mg/L	Instantaneous Maximum	Food to microorganism imbalance. Plant was reseeded with seed sludge.
Jan-21	Ammonia-Nitrogen	8.6	5.6	mg/L	Instantaneous Maximum	

**Compliance Status:** Facility is in general compliance; There are no open violations or pending enforcements with Bureau of Clean Water

**Completed by:** Amanda Illar

**Completed date:** 1/12/26

Compliance History

DMR Data for Outfall 001 (from January 1, 2025 to December 31, 2025)

Parameter	DEC-25	NOV-25	OCT-25	SEP-25	AUG-25	JUL-25	JUN-25	MAY-25	APR-25	MAR-25	FEB-25	JAN-25
Flow (MGD) Average Monthly	0.00109	0.00194	0.0008	0.0011	0.0008	0.001	0.00033	0.001	0.001	0.00159	0.001	0.001
pH (S.U.) Instantaneous Minimum	7.19	7.37	7.47	7.38	7.19	7.38	7.41	6.64	7.41	7.06	7.13	7.64
pH (S.U.) Instantaneous Maximum	7.95	8.14	8.10	7.88	7.91	8.00	7.99	8.13	8.27	7.79	8.04	8.24
DO (mg/L) Instantaneous Minimum	8.0	6.2	7.9	7.6	7.9	6.3	7.9	7.5	8.4	6.1	8.7	9.2
TRC (mg/L) Average Monthly	0.01	0.01	0.02	0.02	0.02	0.02	0.02	0.02	0.01	0.02	0.02	0.01
TRC (mg/L) Instantaneous Maximum	0.02	0.02	0.03	0.02	0.03	0.03	0.02	0.04	0.02	0.04	0.03	0.03
CBOD5 (mg/L) Average Monthly	2.99	2.05	< 2.0	< 2.29	< 2.0	8.3	15.35	3.88	< 5.09	4.935	4.7	5.1
CBOD5 (mg/L) Instantaneous Maximum	3.38	2.1	< 2.0	2.57	< 2.0	9.1	20.9	4.38	8.18	5.49	5.62	8.17
TSS (mg/L) Average Monthly	9.5	11.0	< 8.5	< 7.0	11.5	14.5	13.5	16.0	14.0	< 12.5	8.5	14.5
TSS (mg/L) Instantaneous Maximum	11.0	15.0	12.0	9.0	13.0	16.0	19.0	19.0	17.0	20.0	9.0	19.0
Fecal Coliform (No./100 ml) Geometric Mean	38.88	57.7	20	98.45	132	4.12	8.66	79.82	6.7	238.11	25.63	123.1
Ammonia (mg/L) Average Monthly	1.92	2.25	0.33	< 0.203	0.404	< 0.150	0.801	< 0.1625	< 0.785	1.95	1.277	1.7
Ammonia (mg/L) Instantaneous Maximum	2.25	2.32	0.462	0.255	0.524	< 0.150	0.859	0.175	1.42	2.36	2.18	2.68

**Development of Effluent Limitations**

<b>Outfall No.</b> <u>001</u>	<b>Design Flow (MGD)</b> <u>.0028</u>
<b>Latitude</b> <u>40° 2' 32.00"</u>	<b>Longitude</b> <u>-80° 22' 35.00"</u>
<b>Wastewater Description:</b> <u>Sewage Effluent</u>	

**Technology-Based Limitations**

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Pollutant	Limit (mg/L)	SBC	Federal Regulation	State Regulation
Flow	Report	Average Monthly	-	§§ 92a.27, 92a.61
Flow	Report	Max Daily	-	§§ 92a.27, 92a.61
CBOD <sub>5</sub>	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Total Nitrogen	Report	Average Monthly	-	92a.61(7)
Total Phosphorus	Report	Average Monthly	-	92a.61(8)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
E. Coli (No./100 ml)	-	Report		93a.61(11)(12)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)
Total Residual Chlorine	1.6	IMAX	-	92a.47-48(3)(4)
Ammonia-Nitrogen	25	Average Monthly	-	BPJ (5)
Ammonia-Nitrogen	50	IMAX	-	BPJ (5)
Dissolved Oxygen	4.0	IMIN	-	BPJ (6)

Comments: TBEL Limits will be maintained from the previous renewal.

**Water Quality-Based Limitations**

The following limitations were determined through water quality modeling (See Attachments 3, 4 & 5):

Parameter	Limit (mg/l)	SBC	Model
Ammonia-Nitrogen (May 1 to Oct 31)	2.19	Average Monthly	WQM 7.0
	4.38	IMAX	
Ammonia-Nitrogen (Nov 1 to Apr 30)	6.27	Average Monthly	
	12.54	IMAX	
Dissolved Oxygen	6 (summer); 4 (winter)	Minimum	TRC_Calc
Total Residual Chlorine	0.06	Average Monthly	
	0.195	IMAX	

Comments: Water quality limits in the previous permit are more stringent compared to the water quality modeling results above.

Previous permit limits have been carried over in the renewed permit in accordance with the federal anti-backsliding regulations for re-issued permits specified in 40 CFR 122.44(l).

**Additional Considerations**

**Anti-Backsliding**

Section 402(o) of the Clean Water Act (CWA), enacted in the Water Quality Act of 1987, establishes anti-backsliding rules governing two situations. The first situation occurs when a permittee seeks to revise a Technology-Based effluent limitation based on BPJ to reflect a subsequently promulgated effluent guideline which is less stringent. The second situation addressed by Section 402(o) arises when a permittee seeks relaxation of an effluent limitation which is based upon a State treatment standard of water quality standard.

Previous limits can be used pursuant to EPA's anti-backsliding regulation. Reissued permits. (1) Except as provided in paragraph (l)(2) of this section when a permit is renewed or reissued. Interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62). (2) In the case of effluent limitations established on the basis of Section 402(a)(1)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.

*(40 CFR 122.44 (l)(2) Establishing limitations, standards, and other permit conditions., 40 CFR Ch. I (7-1-21 Edition))*

No permits limits have been made less stringent in the renewal draft permit.

**E. Coli**

Sewage discharges will include monitoring, at a minimum, for E. Coli, in new and reissued permits, with a monitoring frequency of 1/month for design flows  $\geq$  1 MGD, 1/quarter for design flows  $\geq$  0.05 and  $<$  1 MGD, 1/year for design flows of 0.002 – 0.05 MGD.

*(Note 12 SOP-Establishing Effluent Limitations for Individual Sewage Permits Final November 9, 2012, Revised February 5, 2024, Version 2.0. and 25 PA Code 92a.61(b).)*

**Nutrient Monitoring**

Nutrient monitoring is required by the SOP for Effluent Limitations for Individual Sewage Permits. Monitoring is included to establish the nutrient load from the wastewater treatment facility and the impacts that load may have on the quality of the receiving stream(s). The receiving stream is not listed as impaired for nutrients, therefore at the discretion of the application manager, a monitoring frequency less than the equivalent of conventional pollutants in Table 6-3 of the Permit Writer's Manual has been selected.

*(Section I.A, Note 7 & 8, SOP for Clean Water Program, Establishing Effluent Limitations for Individual Sewage Permits, Final November 9, 2012, Revised March 24, 2021, Version 1.9 and 25 PA Code 92a.61(b).)*

**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" (386-0400-001), SOPs and/or BPJ.

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

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	Daily when Discharging	Grab
DO	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	Daily when Discharging	Grab
TRC	XXX	XXX	XXX	0.02	XXX	0.04	Daily when Discharging	Grab
CBOD5	XXX	XXX	XXX	25.0	XXX	50.0	2/month	Grab
TSS	XXX	XXX	XXX	30.0	XXX	60.0	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Ammonia-Nitrogen Nov 1 - Apr 30	XXX	XXX	XXX	2.8	XXX	5.6	2/month	Grab
Ammonia-Nitrogen May 1 - Oct 31	XXX	XXX	XXX	1.9	XXX	3.8	2/month	Grab

Outfall 001 , Continued (from Permit Effective Date through Permit Expiration Date )

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Total Phosphorus	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001

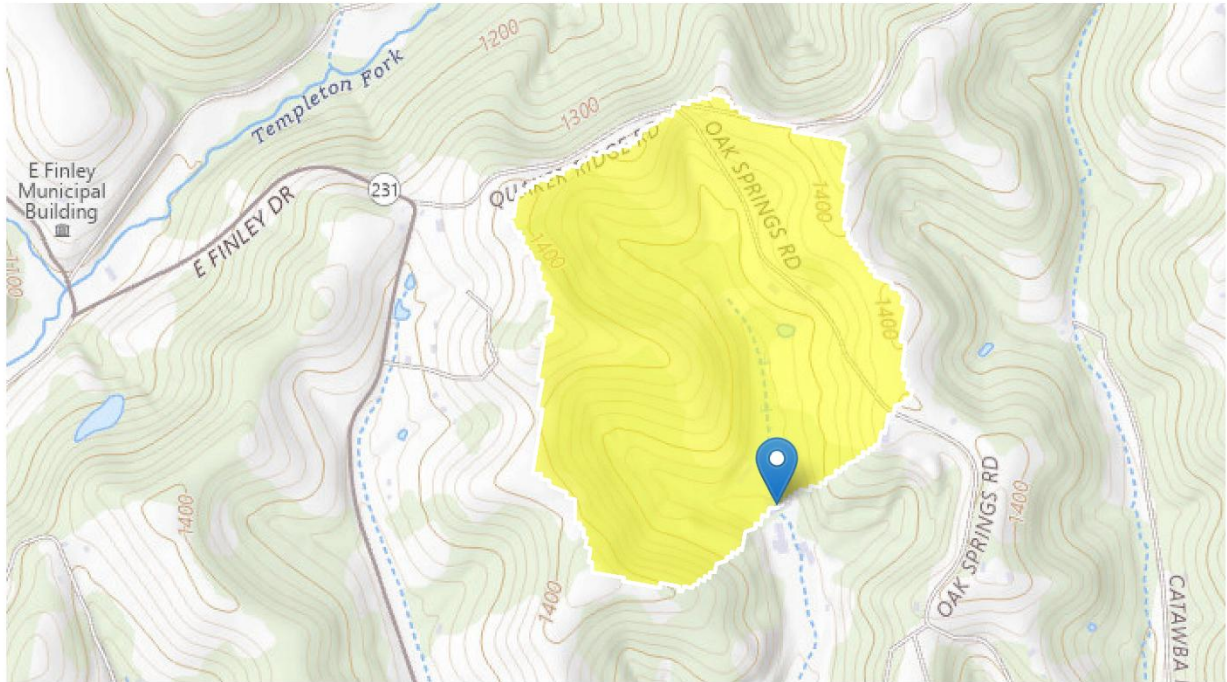
**Changes to Permit Limits**

There have been no changes made to the permit limits or monitoring.

Attachment 1  
USGS StreamStats  
Upstream

## US - StreamStats Report

Region ID: PA  
Clicked Point (Latitude, Longitude): 40.04179, -80.37701  
Time: 2026-02-11 16:21:05 -0500



### StreamStats Update

Starting with version 4.30.0, the StreamStats application uses services that were redeveloped with open-source software components. Users may observe minor variations in computed results when compared to those from previous versions. These differences are expected and do not reflect errors in the underlying data or analytical methods. Users are advised to consider these potential variations when interpreting or comparing results generated across different versions of StreamStats. Please email [streamstats@usgs.gov](mailto:streamstats@usgs.gov) with any questions or concerns. A full list of changes can be found at <https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release> (<https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release>).

+ Collapse All

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.24	square miles
ELEV	Mean Basin Elevation	1342.9	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	0.24	square miles	2.26	1400
ELEV	Mean Basin Elevation	1342.9	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	0.00607	ft <sup>3</sup> /s
30 Day 2 Year Low Flow	0.0126	ft <sup>3</sup> /s
7 Day 10 Year Low Flow	0.00151	ft <sup>3</sup> /s
30 Day 10 Year Low Flow	0.00363	ft <sup>3</sup> /s
90 Day 10 Year Low Flow	0.00816	ft <sup>3</sup> /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/>)**

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**Application Version: 4.31.0**

**SSHydro Services Version: 1.1.0**

**SSDelineate Services Version: 1.0.1**

**NSS Services Version: 2.2.1**

**GageStats Services Version: 1.2.1**

**Pourpoint Services Version: 1.2.0**

**Batch Processor Version: 1.6.1**

# Attachment 2

## USGS StreamStats

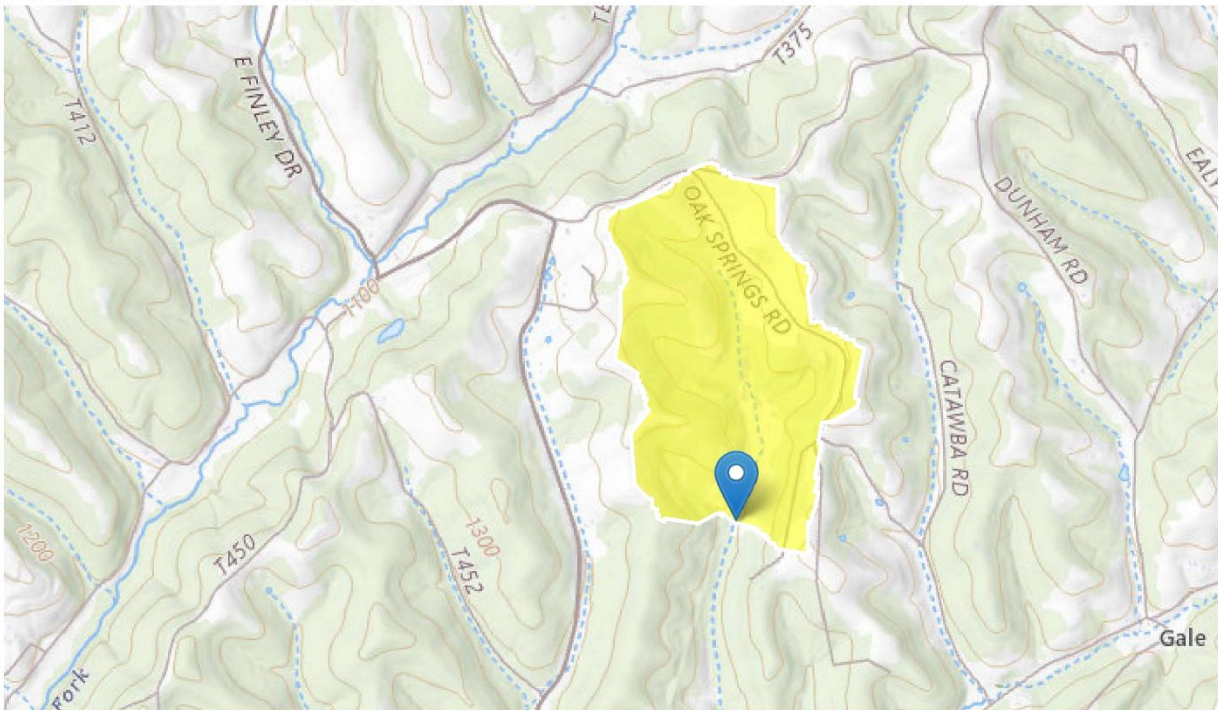
### Downstream

## DS - StreamStats Report

Region ID: PA

Clicked Point (Latitude, Longitude): 40.03645, -80.37737

Time: 2026-02-11 16:30:52 -0500



### StreamStats Update

Starting with version 4.30.0, the StreamStats application uses services that were redeveloped with open-source software components. Users may observe minor variations in computed results when compared to those from previous versions. These differences are expected and do not reflect errors in the underlying data or analytical methods. Users are advised to consider these potential variations when interpreting or comparing results generated across different versions of StreamStats. Please email [streamstats@usgs.gov](mailto:streamstats@usgs.gov) with any questions or concerns. A full list of changes can be found at

<https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release>  
(<https://www.usgs.gov/streamstats/news/streamstats-data-updates-open-source-code-release>) .

 Collapse All

➤ Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.43	square miles
ELEV	Mean Basin Elevation	1329.2	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	0.43	square miles	2.26	1400
ELEV	Mean Basin Elevation	1329.2	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	0.0117	ft <sup>3</sup> /s
30 Day 2 Year Low Flow	0.0236	ft <sup>3</sup> /s
7 Day 10 Year Low Flow	0.00307	ft <sup>3</sup> /s
30 Day 10 Year Low Flow	0.00708	ft <sup>3</sup> /s
90 Day 10 Year Low Flow	0.0154	ft <sup>3</sup> /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/>)**

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**USGS Product Names Disclaimer:** Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the U.S. Government.

**Application Version: 4.31.0**

**SSHydro Services Version: 1.1.0**

**SSDelineate Services Version: 1.0.1**

**NSS Services Version: 2.2.1**

**GageStats Services Version: 1.2.1**

**Pourpoint Services Version: 1.2.0**

**Batch Processor Version: 1.6.1**

# Attachment 3

## WQM 7.0 Model - Summer

**Input Data WQM 7.0**

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
20E	32722	Trib 32722 to Rocky Run	1.200	1238.00	0.24	0.00000	0.00	<input checked="" type="checkbox"/>

**Stream Data**

Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	Tributary Temp	Tributary pH	Stream Temp	Stream pH
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C)		(°C)	
Q7-10	0.006	0.00	0.00	0.000	0.000	10.0	0.00	0.00	25.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

**Discharge Data**

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
Enlow Fork	PA0254444	0.0028	0.0028	0.0028	0.000	20.00	7.50

**Parameter Data**

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	4.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

**Input Data WQM 7.0**

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
20E	32722	Trib 32722 to Rocky Run	0.820	1187.00	0.43	0.00000	0.00	<input checked="" type="checkbox"/>

**Stream Data**

Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	Tributary Temp	Tributary pH	Stream Temp	Stream pH
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C)		(°C)	
Q7-10	0.007	0.00	0.00	0.000	0.000	10.0	0.00	0.00	25.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

Discharge Data							
Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
		0.0000	0.0000	0.0000	0.000	25.00	7.00

Parameter Data				
Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	3.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

**WQM 7.0 Modeling Specifications**

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	<input checked="" type="checkbox"/>
WLA Method	EMPR	Use Inputted W/D Ratio	<input type="checkbox"/>
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	<input type="checkbox"/>
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	<input checked="" type="checkbox"/>
D.O. Saturation	90.00%	Use Balanced Technology	<input checked="" type="checkbox"/>
D.O. Goal	6		

**WQM 7.0 Hydrodynamic Outputs**

<u>SWP Basin</u>		<u>Stream Code</u>				<u>Stream Name</u>						
20E		32722				Trib 32722 to Rocky Run						
RMI	Stream Flow (cfs)	PWS With (cfs)	Net Stream Flow (cfs)	Disc Analysis Flow (cfs)	Reach Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Reach Trav Time (days)	Analysis Temp (°C)	Analysis pH
<b>Q7-10 Flow</b>												
1.200	0.00	0.00	0.00	.0043	0.02542	.22	1.44	6.53	0.02	1.257	21.29	7.31
<b>Q1-10 Flow</b>												
1.200	0.00	0.00	0.00	.0043	0.02542	NA	NA	NA	0.02	1.327	20.91	7.36
<b>Q30-10 Flow</b>												
1.200	0.00	0.00	0.00	.0043	0.02542	NA	NA	NA	0.02	1.196	21.61	7.27

**WQM 7.0 Wasteload Allocations**

**SWP Basin**      **Stream Code**      **Stream Name**  
 20E                      32722                      Trib 32722 to Rocky Run

**NH3-N Acute Allocations**

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
1.200	Enlow Fork	10.5	12.85	10.5	12.85	0	0

**NH3-N Chronic Allocations**

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
1.200	Enlow Fork	1.49	2.19	1.49	2.19	0	0

**Dissolved Oxygen Allocations**

RMI	Discharge Name	<u>CBOD5</u>		<u>NH3-N</u>		<u>Dissolved Oxygen</u>		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
1.20	Enlow Fork	25	25	2.19	2.19	6	6	0	0

**WQM 7.0 D.O. Simulation**

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>		
20E	32722	Trib 32722 to Rocky Run		
<u>RMI</u>	<u>Total Discharge Flow (mgd)</u>	<u>Analysis Temperature (°C)</u>	<u>Analysis pH</u>	
1.200	0.003	21.292	7.307	
<u>Reach Width (ft)</u>	<u>Reach Depth (ft)</u>	<u>Reach WDRatio</u>	<u>Reach Velocity (fps)</u>	
1.436	0.220	6.526	0.018	
<u>Reach CBOD5 (mg/L)</u>	<u>Reach Kc (1/days)</u>	<u>Reach NH3-N (mg/L)</u>	<u>Reach Kn (1/days)</u>	
19.06	1.380	1.63	0.773	
<u>Reach DO (mg/L)</u>	<u>Reach Kr (1/days)</u>	<u>Kr Equation</u>	<u>Reach DO Goal (mg/L)</u>	
6.580	25.383	Owens	6	
<u>Reach Travel Time (days)</u>	<b>Subreach Results</b>			
1.257	<u>TravTime (days)</u>	<u>CBOD5 (mg/L)</u>	<u>NH3-N (mg/L)</u>	<u>D.O. (mg/L)</u>
	0.126	15.85	1.48	7.26
	0.251	13.19	1.34	7.54
	0.377	10.97	1.22	7.76
	0.503	9.13	1.10	7.95
	0.628	7.59	1.00	8.05
	0.754	6.32	0.91	8.05
	0.880	5.25	0.82	8.05
	1.005	4.37	0.75	8.05
	1.131	3.64	0.68	8.05
	1.257	3.02	0.62	8.05

**WQM 7.0 Effluent Limits**

<u>SWP Basin</u>		<u>Stream Code</u>	<u>Stream Name</u>				
20E		32722	Trib 32722 to Rocky Run				
RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
1.200	Enlow Fork	PA0254444	0.003	CBOD5	25		
				NH3-N	2.19	4.38	
				Dissolved Oxygen			6

# Attachment 4

## WQM 7.0 Model - Winter

**Input Data WQM 7.0**

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
20E	32722	Trib 32722 to Rocky Run	1.200	1238.00	0.24	0.00000	0.00	<input checked="" type="checkbox"/>

**Stream Data**

Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	Tributary Temp	Tributary pH	Stream Temp	Stream pH
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C)		(°C)	
Q7-10	0.012	0.00	0.00	0.000	0.000	10.0	0.00	0.00	5.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

**Discharge Data**

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
Enlow Fork	PA0254444	0.0028	0.0028	0.0028	0.000	15.00	7.50

**Parameter Data**

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	4.00	12.51	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

**Input Data WQM 7.0**

SWP Basin	Stream Code	Stream Name	RMI	Elevation (ft)	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
20E	32722	Trib 32722 to Rocky Run	0.820	1187.00	0.43	0.00000	0.00	<input checked="" type="checkbox"/>

**Stream Data**

Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rch Depth	Tributary Temp	Tributary pH	Stream Temp	Stream pH
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C)		(°C)	
Q7-10	0.014	0.00	0.00	0.000	0.000	10.0	0.00	0.00	5.00	7.00	0.00	0.00
Q1-10		0.00	0.00	0.000	0.000							
Q30-10		0.00	0.00	0.000	0.000							

**Discharge Data**

Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reserve Factor	Disc Temp (°C)	Disc pH
		0.0000	0.0000	0.0000	0.000	25.00	7.00

**Parameter Data**

Parameter Name	Disc Conc (mg/L)	Trib Conc (mg/L)	Stream Conc (mg/L)	Fate Coef (1/days)
CBOD5	25.00	2.00	0.00	1.50
Dissolved Oxygen	3.00	8.24	0.00	0.00
NH3-N	25.00	0.00	0.00	0.70

**WQM 7.0 Modeling Specifications**

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	<input checked="" type="checkbox"/>
WLA Method	EMPR	Use Inputted W/D Ratio	<input type="checkbox"/>
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	<input type="checkbox"/>
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	<input checked="" type="checkbox"/>
D.O. Saturation	90.00%	Use Balanced Technology	<input checked="" type="checkbox"/>
D.O. Goal	6		

**WQM 7.0 Hydrodynamic Outputs**

<u>SWP Basin</u>		<u>Stream Code</u>				<u>Stream Name</u>						
20E		32722				Trib 32722 to Rocky Run						
RMI	Stream Flow (cfs)	PWS With (cfs)	Net Stream Flow (cfs)	Disc Analysis Flow (cfs)	Reach Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Reach Trav Time (days)	Analysis Temp (°C)	Analysis pH
<b>Q7-10 Flow</b>												
1.200	0.00	0.00	0.00	.0043	0.02542	.229	1.52	6.65	0.02	1.111	10.95	7.23
<b>Q1-10 Flow</b>												
1.200	0.00	0.00	0.00	.0043	0.02542	NA	NA	NA	0.02	1.213	11.96	7.28
<b>Q30-10 Flow</b>												
1.200	0.00	0.00	0.00	.0043	0.02542	NA	NA	NA	0.02	1.029	10.19	7.19

**WQM 7.0 Wasteload Allocations**

SWP Basin      Stream Code                      Stream Name  
 20E                      32722                                      Trib 32722 to Rocky Run

**NH3-N Acute Allocations**

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
1.200	Enlow Fork	17.93	25.75	17.93	25.75	0	0

**NH3-N Chronic Allocations**

RMI	Discharge Name	Baseline Criterion (mg/L)	Baseline WLA (mg/L)	Multiple Criterion (mg/L)	Multiple WLA (mg/L)	Critical Reach	Percent Reduction
1.200	Enlow Fork	3.26	6.27	3.26	6.27	0	0

**Dissolved Oxygen Allocations**

RMI	Discharge Name	<u>CBOD5</u>		<u>NH3-N</u>		<u>Dissolved Oxygen</u>		Critical Reach	Percent Reduction
		Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)		
1.20	Enlow Fork	25	25	6.27	6.27	4	4	0	0

**WQM 7.0 D.O.Simulation**

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>		
20E	32722	Trib 32722 to Rocky Run		
<u>RMI</u>	<u>Total Discharge Flow (mgd)</u>	<u>Analysis Temperature (°C)</u>	<u>Analysis pH</u>	
1.200	0.003	10.947	7.227	
<u>Reach Width (ft)</u>	<u>Reach Depth (ft)</u>	<u>Reach WDRatio</u>	<u>Reach Velocity (fps)</u>	
1.522	0.229	6.650	0.021	
<u>Reach CBOD5 (mg/L)</u>	<u>Reach Kc (1/days)</u>	<u>Reach NH3-N (mg/L)</u>	<u>Reach Kn (1/days)</u>	
15.68	1.366	3.73	0.349	
<u>Reach DO (mg/L)</u>	<u>Reach Kr (1/days)</u>	<u>Kr Equation</u>	<u>Reach DO Goal (mg/L)</u>	
7.449	20.069	Owens	6	
<u>Reach Travel Time (days)</u>	<b>Subreach Results</b>			
1.111	<u>TravTime (days)</u>	<u>CBOD5 (mg/L)</u>	<u>NH3-N (mg/L)</u>	<u>D.O. (mg/L)</u>
	0.111	14.19	3.59	9.50
	0.222	12.83	3.45	9.82
	0.333	11.61	3.32	9.92
	0.444	10.51	3.20	9.92
	0.555	9.51	3.07	9.92
	0.666	8.60	2.96	9.92
	0.778	7.78	2.85	9.92
	0.889	7.04	2.74	9.92
	1.000	6.37	2.63	9.92
	1.111	5.76	2.53	9.92

**WQM 7.0 Effluent Limits**

<u>SWP Basin</u>		<u>Stream Code</u>	<u>Stream Name</u>				
20E		32722	Trib 32722 to Rocky Run				
RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
1.200	Enlow Fork	PA0254444	0.003	CBOD5	25		
				NH3-N	6.27	12.54	
				Dissolved Oxygen			4

# Attachment 5

## TRC Model

TRC\_CALC

TRC EVALUATION				
Input appropriate values in A3:A9 and D3:D9				
0.00151	= Q stream (cfs)		0.5	= CV Daily
0.0028	= Q discharge (MGD)		0.5	= CV Hourly
30	= no. samples		1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream		1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge		15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value		720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)			=Decay Coefficient (K)
Source	Reference	AFC Calculations		Reference
TRC	1.3.2.iii	WLA_afc = 0.130		1.3.2.iii
PENTOXSD TRG	5.1a	LTAMULT_afc = 0.373		5.1c
PENTOXSD TRG	5.1b	LTA_afc = 0.049		5.1d
				WLA_cfc = 0.119
				LTAMULT_cfc = 0.581
				LTA_cfc = 0.069
Source	Effluent Limit Calculations			
PENTOXSD TRG	5.1f	AML_MULT = 1.231		
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.060		AFC
		INST MAX LIMIT (mg/l) = 0.195		
WLA_afc	$(.019/e^{-k \cdot AFC\_tc}) + [(AFC\_Yc \cdot Qs \cdot .019 / Qd \cdot e^{-k \cdot AFC\_tc}) \dots + Xd + (AFC\_Yc \cdot Qs \cdot Xs / Qd)] \cdot (1 - FOS / 100)$			
LTAMULT_afc	$EXP((0.5 \cdot LN(cvh^2 + 1)) - 2.326 \cdot LN(cvh^2 + 1)^{0.5})$			
LTA_afc	wla_afc * LTAMULT_afc			
WLA_cfc	$(.011/e^{-k \cdot CFC\_tc}) + [(CFC\_Yc \cdot Qs \cdot .011 / Qd \cdot e^{-k \cdot CFC\_tc}) \dots + Xd + (CFC\_Yc \cdot Qs \cdot Xs / Qd)] \cdot (1 - FOS / 100)$			
LTAMULT_cfc	$EXP((0.5 \cdot LN(cvd^2 / no\_samples + 1)) - 2.326 \cdot LN(cvd^2 / no\_samples + 1)^{0.5})$			
LTA_cfc	wla_cfc * LTAMULT_cfc			
AML_MULT	$EXP(2.326 \cdot LN((cvd^2 / no\_samples + 1)^{0.5}) - 0.5 \cdot LN(cvd^2 / no\_samples + 1))$			
AVG MON LIMIT	MIN(BAT_BPJ, MIN(LTA_afc, LTA_cfc) * AML_MULT)			
INST MAX LIMIT	1.5 * ((av_mon_limit / AML_MULT) / LTAMULT_afc)			