



Application Type
Facility Type
Major / Minor

Renewal
Municipal
Minor

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. **PA0020702**
APS ID **1131390**
Authorization ID **1516679**

Applicant and Facility Information

Applicant Name	Fayette City Borough	Facility Name	Fayette City Borough WWTP
Applicant Address	PO Box 552	Facility Address	1615 Fayette Avenue
	Fayette City, PA 15438-0552		Fayette City, PA 15438
Applicant Contact	Jim Eley	Facility Contact	Josh Sphar
Applicant Phone	(724) 326-5656	Facility Phone	(412) 582-9642
Client ID	110666	Site ID	263550
Ch 94 Load Status	Not Overloaded	Municipality	Fayette City Borough
Connection Status	Not Limited	County	Fayette
Date Application Received	March 25, 2014	EPA Waived?	No
Date Application Accepted		If No, Reason	CSO Facility
Purpose of Application	Application for the renewal of an NPDES permit for the discharge of treated Sewage.		

Summary of Review

Introduction

The Authority has applied for the renewal of NPDES Permit No. PA0020702, which was previously issued on August 3, 2009, and expired on August 31, 2014.

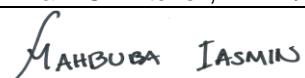
On July 26, 2024, the Department issued an Administrative Order to the Applicant to (1) make immediate repairs to pumps at Water Street PS & Cook Street PS; (2) submit a compliance plan to address operational and maintenance issues, implementation of its Long Term Control Plan (LTCP) and submission of required permit applications; and (3) submit required annual CSO reports and quarterly progress reports detailing compliance with the order. The Applicant failed to comply with the Administrative Order.

On January 23, 2025, the Department filed a Petition to Enforce Administrative Order, requesting that the Court order the Applicant to comply with the order. The Applicant has not filed an answer to the Petition to Enforce.

The Applicant entered into a Consent Order and Agreement (COA) with the Department on May 12, 2025. The COA covers the submittal of all NPDES and WQM Permit Applications, and addresses O&M of the CSS, PS & WWTP (which includes continued implementation of the Nine Minimum Controls (NMC), implementation of the Department approved LTCP, and submittal of a Post Construction Compliance Monitoring Plan (PCCMP)).

Facility Overview

WQM Permit No. 461S27 A-1, issued on May 18, 1993, authorized plant construction with a rated annual average design flow of 0.125 MGD and a design organic capacity of 209 lbs./day.

Approve	Deny	Signatures	Date
X		 William C. Mitchell, E.I.T. / Project Manager	December 18, 2025
X		 Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineering Manager	December 19, 2025

Summary of Review

Amendment A-1 to the 1996 NPDES Permit revised the design hydraulic capacity (for Chapter 94 Reporting) to 0.175 MGD.

Secondary treatment is provided by two SBRs. Sludge is processed in the aerobic digestion tank and dewatered with sludge drying beds. Chlorine is used for disinfection prior to discharge (Outfall 001) to Monongahela River, which is designated as a Warm Water Fishery (WWF) per 25 Pa. Chapter 93 Designated Use, located in State Watershed 19-C.

A comprehensive listing of outfalls can be found below:

001	WWTP Outfall	Treated Sewage
002	Fording Street Overflow	CSO
003	Cook Street Overflow	CSO

Combined Sewer Overflows (CSO) 002 & 003 will again be permitted. These outfalls are necessitated by stormwater entering the sewer system and exceeding the hydraulic capacity of the sewers and/or the treatment plant and are permitted to discharge only for this reason. Part C.II, Combined Sewer Overflows, has been incorporated into the permit.

The renewal application does not list any industrial or commercial contributors to the sewer system.

Combined Sewer Overflows

Part C. II. requires the Applicant to continue implementation of the NMCs and demonstrate system-wide compliance with the NMCs. Site specific O&M obligations were taken from the NMC Plan (dated October 2005). A Department NMC inspection will occur after permit issuance to ensure continued compliance.

The Applicant shall implement the LTCP in accordance with the implementation schedule taken from the Department's LTCP Approval Letter, dated February 11, 2009, which was based upon the Applicant's LTCP Report (dated December 2007).

In summary, the LTCP proposes to:

- Comply with EPA CSO Policy's Presumption Approach criteria to meet receiving Water Quality Standards (WQS) by capturing no less than 85% by volume of the combined sewage collected in the CSS during precipitation events on a system-wide average annual basis.

In addition to the LTCP approach, these requirements are established for LTCP approval:

- The Applicant shall submit a PCCMP for Department approval on or before August 30, 2011. The PCCMP should be sufficient to demonstrate to the Department that the selected LTCP approach meets the Presumption Approach narrative and capture criteria in addition to meeting receiving WQS in accordance with EPA CSO Policy.

To date the Applicant has failed to fully implement the Department approved LTCP, submit a PCCMP, and demonstrate compliance with receiving WQS. Item 5.G. (Existing COA) requires the Applicant to submit an Alternative Compliance Plan and Implementation Schedule to the Department. The chosen Alternative Compliance Plan shall be completed by July 31, 2027.

Summary of Changes Since Last Permit Issuance

- Dissolved Oxygen limitation added
- Raw Sewage Influent monitoring added for BOD5 & TSS
- *E. Coli* monitoring added
- Ammonia-Nitrogen monitoring added
- Total Nitrogen & Total Phosphorus monitoring added
- Part C.II language revised (Combined Sewer Overflows)

Sludge use and disposal description and location(s): Sludge is hauled by County Hauling Corp. to Westmoreland Landfill. Application data indicates that the STP does not receive any hauled in waste.

Summary of Review

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)	0.125
Latitude	40° 6' 11.0"	Longitude	-79° 50' 35.00"
Quad Name	Fayette City	Quad Code	1807
Wastewater Description:	Sewage Effluent		
Receiving Waters	Monongahela River (WWF)	Stream Code	37185
NHD Com ID	99408226	RMI	45.9
Drainage Area	5190	Yield (cfs/mi ²)	0.102
Q ₇₋₁₀ Flow (cfs)	530	Q ₇₋₁₀ Basis	US Army Corp. of Engineers & USGS Streamstats (Attachment 1)
Elevation (ft)	743.5	Slope (ft/ft)	0.00002
Watershed No.	19-C	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use	NONE	Exceptions to Criteria	NONE
Assessment Status	Impaired		
Cause(s) of Impairment	POLYCHLORINATED BIPHENYLS (PCBS)		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Monongahela River TMDL
Background/Ambient Data		Data Source	
pH (SU)			
Temperature (°F)			
Hardness (mg/L)			
Other:			
Nearest Downstream Public Water Supply Intake	Municipal Authority of Washington Township		
PWS Waters	Monongahela River	Flow at Intake (cfs)	530
PWS RMI	45.8	Distance from Outfall (mi)	0.1

Changes Since Last Permit Issuance: NONE

Other Comments: The STP discharges to the Monongahela River which has an EPA Approved TMDL and is impaired by PCBs & Chlordane. No WLAs have been developed for this sewage discharge as neither PCBs nor Chlordane is typically found in sewage but instead found in legacy sediments. No additional monitoring requirements for these pollutants will be placed on this facility at this time.

Treatment Facility Summary				
Treatment Facility Name: Fayette City STP				
WQM Permit No.	Issuance Date			
461S27				
461S27 A-1	05/18/1993			
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Sequencing Batch Reactor	Gas Chlorine	0.125
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.175	209		Drying	Landfill

Changes Since Last Permit Issuance: None

Other Comments: N/A

Compliance History

Operations Compliance Check Summary Report

Facility: Fayette City Borough WWTP

NPDES Permit No.: PA0020702

Compliance Review Period: 12/16/2020-12/16/2025

Inspection Summary:

INSP ID	INSP CATEGORY	INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC	INSPECTOR ID	INSPECTOR	INSPECTION COMMENT	CREATION DATE	UPDATE DATE	# OF VIOLATIONS
3931812	PF	01/24/2025	Routine/Partial Inspection	PA Dept of Environmental Protection	Violation(s) Noted	00434771	DUNN, HOWARD	ACO	03/07/2025	08/03/2025	1
3931844	PF	02/03/2025	Routine/Partial Inspection	PA Dept of Environmental Protection	Violation(s) Noted	00434771	DUNN, HOWARD	ACO	03/07/2025	08/03/2025	1
4020813	PF	07/24/2025	Chapter 94 Inspection	PA Dept of Environmental Protection	Violation(s) Noted	00833634	LUCAS, AUSTIN		07/24/2025	08/01/2025	1
4003804	PF	06/27/2025	Administrative/File Review	PA Dept of Environmental Protection	Violation(s) Noted	00610195	KOHUT, JEFFREY		06/27/2025	06/27/2025	1
3942566	PF	03/05/2025	Routine/Partial Inspection	PA Dept of Environmental Protection	No Violations Noted	00763477	STEWART, JAMES		03/21/2025	03/21/2025	0
3922114	PF	01/09/2025	Routine/Partial Inspection	PA Dept of Environmental Protection	Violation(s) Noted	00763477	STEWART, JAMES		02/21/2025	02/25/2025	2
3924495	PF	01/31/2025	Routine/Partial Inspection	PA Dept of Environmental	Violation(s) Noted	00763477	STEWART, JAMES		02/25/2025	02/25/2025	1
3922114	PF	01/09/2025	Routine/Partial Inspection	PA Dept of Environmental Protection	Violation(s) Noted	00763477	STEWART, JAMES		02/21/2025	02/25/2025	2
3924495	PF	01/31/2025	Routine/Partial Inspection	PA Dept of Environmental Protection	Violation(s) Noted	00763477	STEWART, JAMES		02/25/2025	02/25/2025	1
3923669	PF	01/27/2025	Routine/Partial Inspection	PA Dept of Environmental Protection	Violation(s) Noted	00763477	STEWART, JAMES		02/24/2025	02/24/2025	1
3922417	PF	01/17/2025	Routine/Partial Inspection	PA Dept of Environmental Protection	Violation(s) Noted	00763477	STEWART, JAMES		02/21/2025	02/21/2025	2
3744760	PF	03/19/2024	Compliance Evaluation	PA Dept of Environmental Protection	Violation(s) Noted	00763477	STEWART, JAMES		04/14/2024	02/04/2025	11
3790788	PF	07/08/2024	Chapter 94 Inspection	PA Dept of Environmental Protection	Violation(s) Noted	00789778	ASCOLILLO, ANTHONY		07/08/2024	02/04/2025	1
3744934	PF	03/18/2024	Administrative/File Review	PA Dept of Environmental Protection	No Violations Noted	00763477	STEWART, JAMES	An administrative review revealed no effluent violations, however (4) CSO reports have not been submitted. This will be noted on the 3.19.24 CFI	04/15/2024	04/15/2024	0

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3423549	PF	09/06/2022	Compliance Evaluation	PA Dept of Environmental Protection	Violation(s) Noted	00763477	STEWART, JAMES		09/16/2022	01/26/2024	2
3376053	PF	12/14/2021	Combined Sewer Overflow-Non-Sampling	PA Dept of Environmental Protection	Violation(s) Noted	00763477	STEWART, JAMES		06/10/2022	01/26/2024	2
3593065	PF	07/18/2023	Compliance Evaluation	PA Dept of Environmental Protection	Violation(s) Noted	00763477	STEWART, JAMES		07/31/2023	01/26/2024	7
3300119	PF	12/14/2021	Compliance Evaluation	PA Dept of Environmental Protection	Violation(s) Noted	00763477	STEWART, JAMES		12/28/2021	01/22/2024	9
3199133	PF	05/17/2021	Compliance Evaluation	PA Dept of Environmental Protection	Violation(s) Noted	00763477	STEWART, JAMES		05/31/2021	12/29/2023	10
3593046	PF	07/17/2023	Administrative/File Review	PA Dept of Environmental Protection	No Violations Noted	00763477	STEWART, JAMES	An administrative review from 1/1/2022 to 7/17/2023 revealed no effluent violations. The CSO reports need separated out from the Chapter 94 reports.	07/31/2023	07/31/2023	0
3295639	PF	12/13/2021	Administrative/File Review	PA Dept of Environmental Protection	No Violations Noted	00763477	STEWART, JAMES	An administrative review from 5/1/21 to 12/13/21 revealed two effluent violations which have been noted on the 12.14.21 CEI report.	12/16/2021	12/16/2021	0
3194787	PF	05/19/2021	Administrative/File Review	PA Dept of Environmental Protection	No Violations Noted	00763477	STEWART, JAMES	An administrative review of the 2020 Chapter 94 report revealed no organic or hydraulic overloads. 2.25 dry tons of sludge were removed from the plant in 2020.	05/20/2021	05/20/2021	0
3194782	PF	05/18/2021	Administrative/File Review	PA Dept of Environmental Protection	No Violations Noted	00763477	STEWART, JAMES	An administrative review from the last inspection on 10/25/19 to 5/18/21 revealed two fecal violations which have been noted on the CEI inspection on 5/17/21.	05/20/2021	05/20/2021	0
3924518	PF	02/04/2025	Routine/Partial Inspection	PA Dept of Environmental Protection	No Violations Noted	00763477	STEWART, JAMES		02/25/2025		0

Violation Summary:

VIOL ID	VIOLATION DATE	VIOLATION TYPE	VIOLATION TYPE DESC	VIOL CODE ID	VIOL PROGRAM	RESOLVED DATE	INSPI ID	INSPI CATEGORY	INSPECTED DATE	INSPI TYPE	INSPECTOR
8218099	01/09/2025	91.33(A)	91 - Failure to immediately report a pollution incident to DEP for non-NPDES permitted activities	22434	WPCES		3922114	PF	01/09/2025	Routine/Partial Inspection	STEWART, JAMES
8218100	01/09/2025	92A.41(B)	NPDES - Failure to orally notify DEP within 4 hours of a pollution incident or submit written report within 5 days of incident	17288	WPCNP		3922114	PF	01/09/2025	Routine/Partial Inspection	STEWART, JAMES
8218101	01/09/2025	92A.41(A)5	NPDES - Failure to properly operate and maintain all facilities which are installed or used by the permittee to achieve compliance	17260	WPCNP		3922114	PF	01/09/2025	Routine/Partial Inspection	STEWART, JAMES
8218102	01/09/2025	92A.44	NPDES - Violation of effluent limits in Part A of permit	17291	WPCNP		3922114	PF	01/09/2025	Routine/Partial Inspection	STEWART, JAMES
8218103	01/09/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP		3922114	PF	01/09/2025	Routine/Partial Inspection	STEWART, JAMES
8218104	01/09/2025	CSL611	CSL - Failure to comply with DEP regulations or the Clean Streams Law	22448	WPCES		3922114	PF	01/09/2025	Routine/Partial Inspection	STEWART, JAMES

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8221896	01/17/2025	92A.46	NPDES - Violation of Part C permit condition(s)	17292	WPCNP		3922417	PF	01/17/2025	Routine/Partial Inspection	STEWART, JAMES
8221897	01/17/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP		3922417	PF	01/17/2025	Routine/Partial Inspection	STEWART, JAMES
8222097	01/27/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP		3923669	PF	01/27/2025	Routine/Partial Inspection	STEWART, JAMES
8222209	01/31/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP		3924495	PF	01/31/2025	Routine/Partial Inspection	STEWART, JAMES
8223735	01/24/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP	08/03/2025	3931812	PF	01/24/2025	Routine/Partial Inspection	DUNN, HOWARD
8223742	02/03/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP	08/03/2025	3931844	PF	02/03/2025	Routine/Partial Inspection	DUNN, HOWARD
8238993	06/27/2025	CSL611	CSL - Failure to comply with DEP regulations or the Clean Streams Law	22448	WP CES	06/27/2025	4003804	PF	06/27/2025	Administrative/ File Review	KOHUT, JEFFREY
8242954	07/24/2025	94.12(A)	Wasteload Management - Failure to submit a timely Chapter 94 report	17325	WPCWP	08/01/2025	4020813	PF	07/24/2025	Chapter 94 Inspection	LUCAS, AUSTIN
918897	05/17/2021	92A.44	NPDES - Violation of effluent limits in Part A of permit	17291	WPCNP	05/17/2021	3199133	PF	05/17/2021	Compliance Evaluation	STEWART, JAMES
918898	05/17/2021	FLOW DEVICE	NPDES - 92A.61(D)ND Failure to monitor flow as required by the NPDES permit- No Flow Measurement Device	20548	WPCNP	05/17/2021	3199133	PF	05/17/2021	Compliance Evaluation	STEWART, JAMES
918899	05/17/2021	92A.41(A)5	NPDES - Failure to properly operate and maintain all facilities which are installed or used by the permittee to achieve compliance	17280	WPCNP	05/17/2021	3199133	PF	05/17/2021	Compliance Evaluation	STEWART, JAMES
918900	05/17/2021	92A.41(A)5	NPDES - Failure to properly operate and maintain all facilities which are installed or used by the permittee to achieve compliance	17280	WPCNP	05/17/2021	3199133	PF	05/17/2021	Compliance Evaluation	STEWART, JAMES
918901	05/17/2021	92A.46	NPDES - Violation of Part C permit condition(s)	17292	WPCNP	05/17/2021	3199133	PF	05/17/2021	Compliance Evaluation	STEWART, JAMES
918902	05/17/2021	CSL611	CSL - Failure to comply with terms and conditions of a WQM permit	17324	WPCWP	05/17/2021	3199133	PF	05/17/2021	Compliance Evaluation	STEWART, JAMES
918903	05/17/2021	CSL611	CSL - Failure to comply with terms and conditions of a WQM permit	17324	WPCWP	05/17/2021	3199133	PF	05/17/2021	Compliance Evaluation	STEWART, JAMES
918904	05/17/2021	302.1201	Operator Certification - Operator failed to comply with the Act or Chapter 302 regulations	17335	WPCWP	05/17/2021	3199133	PF	05/17/2021	Compliance Evaluation	STEWART, JAMES
918905	05/17/2021	302.1201	Operator Certification - Operator failed to comply with the Act or Chapter 302 regulations	17335	WPCWP	05/17/2021	3199133	PF	05/17/2021	Compliance Evaluation	STEWART, JAMES
918906	05/17/2021	302.1201	Operator Certification - Operator failed to comply with the Act or Chapter 302 regulations	17335	WPCWP	05/17/2021	3199133	PF	05/17/2021	Compliance Evaluation	STEWART, JAMES
940303	12/14/2021	92A.44	NPDES - Violation of effluent limits in Part A of permit	17291	WPCNP	01/22/2024	3300119	PF	12/14/2021	Compliance Evaluation	STEWART, JAMES
940304	12/14/2021	92A.41(A)4	NPDES - Failure to take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of a permit	17259	WPCNP	01/22/2024	3300119	PF	12/14/2021	Compliance Evaluation	STEWART, JAMES
940305	12/14/2021	FLOW DEVICE	NPDES - 92A.61(D)ND Failure to monitor flow as required by the NPDES permit- No Flow Measurement Device	20548	WPCNP	01/22/2024	3300119	PF	12/14/2021	Compliance Evaluation	STEWART, JAMES

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Open Violations by Client ID:

IN SP PROGRAM	PROGRAM SPECIFIC ID	IN SP ID	VIOLATION ID	INSPECTION CATEGORY	VIOLATION DATE	VIOLATION CODE	VIOLATION	PF INSPECTOR
WPC NPDES	PA0020702	3922114	8218099	PF	01/09/2025	91.33(A)	91 - Failure to immediately report a pollution incident to DEP for non-NPDES permitted activities	STEWART,JAMES
WPC NPDES	PA0020702	3922114	8218100	PF	01/09/2025	92A.41(B)	NPDES - Failure to orally notify DEP within 4 hours of a pollution incident or submit written report within 5 days of incident	STEWART,JAMES
WPC NPDES	PA0020702	3922114	8218101	PF	01/09/2025	92A.41(A)5	NPDES - Failure to properly operate and maintain all facilities which are installed or used by the permittee to achieve compliance	STEWART,JAMES
WPC NPDES	PA0020702	3922114	8218102	PF	01/09/2025	92A.44	NPDES - Violation of effluent limits in Part A of permit	STEWART,JAMES
WPC NPDES	PA0020702	3922114	8218103	PF	01/09/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	STEWART,JAMES
WPC NPDES	PA0020702	3922114	8218104	PF	01/09/2025	CSL611	CSL - Failure to comply with DEP regulations or the Clean Streams Law	STEWART,JAMES
WPC NPDES	PA0020702	3922417	8221896	PF	01/17/2025	92A.46	NPDES - Violation of Part C permit condition(s)	STEWART,JAMES
WPC NPDES	PA0020702	3922417	8221897	PF	01/17/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	STEWART,JAMES
WPC NPDES	PA0020702	3923669	8222097	PF	01/27/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	STEWART,JAMES
WPC NPDES	PA0020702	3924495	8222209	PF	01/31/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	STEWART,JAMES

Enforcement Summary:

ENF ID	ENF TYPE	ENF TYPE DESC	CREATION DATE	EXECUTED DATE	INITIATED DATE	VIOL CODE ID	PROGRAM NAME	VIOLATIONS	# OF VIOLATIONS	PENALTY AMOUNT	AMOUNT RECEIVED	TOTAL AMOUNT DUE	ENF FINAL STATUS	ENF CLOSED DATE	ENF COMMENT
418338	NOV	Notice of Violation	08/01/2023	07/31/2023		17323	WPCWP	92A.41(A)12B; 92A.41(A)5; 92A.46; CSL611A; FLOW DEVICE	6				Administrative Close Out	03/13/2024	
438128	ADORD	Administrative Order	02/04/2025	07/26/2024		20546	WPCNP	302.1202; 92A.41(A)12B; 92A.41(A)5; 92A.46; 92A.75(A); 94.12(A); CSL611; CSL611A; CSO-NMC8; CSO-NMC9; FLOW DEVICE	21						
400638	ADORD	Administrative Order	01/14/2022	01/14/2022		17291	WPCNP	302.1201; 92A.41(A)10A; 92A.41(A)4; 92A.41(A)5; 92A.44; 92A.46; CSL611; CSO-LTCP; FLOW DEVICE	26						AO for failure to operate and maintain Fayette City STP in compliance with the NPDES Permit and unlawful discharge untreated sewage to Waters of the Commonwealth.
400638	ADORD	Administrative Order	01/14/2022	01/14/2022		17292	WPCNP	302.1201; 92A.41(A)10A; 92A.41(A)4; 92A.41(A)5; 92A.44; 92A.46; CSL611; CSO-LTCP; FLOW DEVICE	26						AO for failure to operate and maintain Fayette City STP in compliance with the NPDES Permit and unlawful discharge untreated sewage to Waters of the Commonwealth.
400638	ADORD	Administrative Order	01/14/2022	01/14/2022		17281	WPCNP	302.1201; 92A.41(A)10A; 92A.41(A)4; 92A.41(A)5; 92A.44; 92A.46; CSL611	26						AO for failure to operate and maintain Fayette City STP in compliance with the NPDES Permit and unlawful discharge untreated sewage to Waters of the Commonwealth.
438128	ADORD	Administrative Order	02/04/2025	07/26/2024		17303	WPCNP	302.1202; 92A.41(A)12B; 92A.41(A)5; 92A.46; 92A.75(A); 94.12(A); CSL611; CSL611A; CSO-NMC8; CSO-NMC9; FLOW DEVICE	21						
427873	NOV	Notice of Violation	04/15/2024	04/15/2024		17336	WPCWP	302.1202; 92A.41(A)5; 92A.41(A)9; 92A.46; 92A.75(A); CSL611; CSL611A; CSO-NMC8; CSO-NMC9; FLOW DEVICE	11				Administrative Close Out	09/13/2024	
438128	ADORD	Administrative Order	02/04/2025	07/26/2024		17325	WPCWP	302.1202; 92A.41(A)12B; 92A.41(A)5; 92A.41(A)9; 92A.46; 92A.75(A); 94.12(A); CSL611; CSL611A; CSO-NMC8; CSO-NMC9; FLOW DEVICE	21						
418338	NOV	Notice of Violation	08/01/2023	07/31/2023		17280	WPCNP	92A.41(A)12B; 92A.41(A)5; 92A.46; CSL611A; FLOW DEVICE	6				Administrative Close Out	03/13/2024	
418338	NOV	Notice of Violation	08/01/2023	07/31/2023		20548	WPCNP	92A.41(A)12B; 92A.41(A)5; 92A.46; CSL611A; FLOW DEVICE	6				Administrative Close Out	03/13/2024	

NPDES Permit Fact Sheet Fayette City Borough WWTP

NPDES Permit No. PA0020702

Effluent Violation Summary:

NON_COMPLIANCE_DATE	NON_COMPLI_TYPE_DESC	NON_COMPLI_CATEGORY_DESC	PARAMETER	SAMPLE_VALUE	VIOLATION_CONDITION	PERMIT
5/30/2022	Late DMR Submission	Other Violations				
8/29/2022	Late DMR Submission	Other Violations				
10/4/2022	Late DMR Submission	Other Violations				
10/29/2022	Late DMR Submission	Other Violations				
10/29/2022	Violation of permit condition	Effluent	Fecal Coliform	> 12100	>	1000
10/29/2022	Violation of permit condition	Effluent	Fecal Coliform	> 2971	>	200
3/30/2023	Late DMR Submission	Other Violations				
5/29/2023	Late DMR Submission	Other Violations				
8/28/2023	Violation of permit condition	Effluent	Fecal Coliform	> 12100	>	1000
8/28/2023	Violation of permit condition	Effluent	Fecal Coliform	> 137	>	200
10/29/2023	Late DMR Submission	Other Violations				
4/28/2024	Violation of permit condition	Effluent	Fecal Coliform	> 12100	>	10000
4/28/2024	Violation of permit condition	Effluent	Fecal Coliform	> 41	>	2000
5/28/2024	Violation of permit condition	Effluent	Fecal Coliform	> 330	>	2000
5/28/2024	Violation of permit condition	Effluent	Fecal Coliform	> 9932	>	10000
5/28/2024	Violation of permit condition	Effluent	Total Suspended Solids	78	>	45
8/28/2024	Violation of permit condition	Effluent	Total Suspended Solids	47	>	30
8/28/2024	Violation of permit condition	Effluent	Total Suspended Solids	76	>	45
9/28/2024	Violation of permit condition	Effluent	Total Suspended Solids	48	>	30
9/28/2024	Violation of permit condition	Effluent	Total Suspended Solids	61	>	45
10/28/2024	Violation of permit condition	Effluent	Total Suspended Solids	103	>	45
10/28/2024	Violation of permit condition	Effluent	Total Suspended Solids	69	>	30
2/26/2025	Other	Other Violations				
2/26/2025	Violation of permit schedule	Other Violations				
2/28/2025	Sample collection less frequent than required	Other Violations				
2/28/2025	Violation of permit condition	Effluent	Fecal Coliform	12100	>	10000
3/31/2025	Late DMR Submission	Other Violations				
3/31/2025	Other	Other Violations				
3/31/2025	Violation of permit condition	Effluent	Fecal Coliform	> 12100	>	10000
3/31/2025	Violation of permit condition	Effluent	Fecal Coliform	> 485	>	2000
3/31/2025	Violation of permit condition	Effluent	Total Suspended Solids	106	>	45
3/31/2025	Violation of permit condition	Effluent	Total Suspended Solids	38	>	30
4/28/2025	Other	Other Violations				
4/28/2025	Violation of permit condition	Effluent	Fecal Coliform	> 349	>	2000
4/28/2025	Violation of permit condition	Effluent	Fecal Coliform	> 4902	>	10000
5/27/2025		Unauthorized Discharges				
5/27/2025	Violation of permit condition	Other Violations				
7/28/2025	Violation of permit schedule	Other Violations				
7/28/2025	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	> 18	>	25
7/28/2025	Violation of permit condition	Effluent	Carbonaceous Biochemical Oxygen Demand (CBOD5)	> 35	>	38
7/28/2025	Violation of permit condition	Effluent	Fecal Coliform	> 12100	>	1000
7/28/2025	Violation of permit condition	Effluent	Fecal Coliform	> 88	>	200
9/27/2025	Other	Other Violations				
9/28/2025		Unauthorized Discharges				
9/28/2025	Other	Other Violations				
9/28/2025	Violation of permit condition	Effluent	Fecal Coliform	> 12100	>	1000
9/28/2025	Violation of permit condition	Effluent	Fecal Coliform	> 147	>	200
10/28/2025	Other	Other Violations				
10/28/2025	Violation of permit condition	Effluent	Fecal Coliform	> 12100	>	1000
10/28/2025	Violation of permit condition	Effluent	Fecal Coliform	> 35	>	200
11/28/2025	Violation of permit condition	Other Violations				

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Fayette City Borough WWTP

NPDES Permit No. PA0020702

Unauthorized Discharges:

8221897	01/17/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP		3922417	PF	01/17/2025	Routine/Partial Inspection	STEWART, JAMES
8222097	01/27/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP		3923669	PF	01/27/2025	Routine/Partial Inspection	STEWART, JAMES
8222209	01/31/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP		3924495	PF	01/31/2025	Routine/Partial Inspection	STEWART, JAMES
8223735	01/24/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP	08/03/2025	3931812	PF	01/24/2025	Routine/Partial Inspection	DUNN, HOWARD
8223742	02/03/2025	CSL201	CSL - Unauthorized, unpermitted discharge of sewage to waters of the Commonwealth	17320	WPCWP	08/03/2025	3931844	PF	02/03/2025	Routine/Partial Inspection	DUNN, HOWARD

Compliance Status: Facility is in general non-compliance

Completed by: Howard Dunn

Completed date: 12/16/2025

Development of Effluent Limitations				
Outfall No.	001	Design Flow (MGD)	0.125	
Latitude	40° 6' 11.00"	Longitude	-79° 50' 35.00"	
Wastewater Description:	Sewage Effluent			

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
CBOD ₅	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)
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)
Total Residual Chlorine	0.5	Average Monthly	-	92a.48(b)(2)

Comments: The discharge was evaluated using WQM 7.0 Version 1.1 (Attachment 2) to evaluate CBOD₅, Ammonia Nitrogen, and Dissolved Oxygen. The modeling results show the above technology based effluent limitations are appropriate.

For existing discharges, if WQM modeling results for summer indicates that an average monthly limit of 25 mg/L (ammonia-nitrogen) is acceptable, the application manager will generally establish a year-round monitoring requirement for ammonia-nitrogen (Section I.A, Note 5, SOP No. BCW-PMT-033, Establishing Effluent Limitations for Individual Sewage Permits).

Water Quality-Based Limitations

Comments: Based upon module output files (WQM 7.0 and TRC_CALC), no WQBELs will be established at this time for this facility (Attachments 2 and 3).

Best Professional Judgment (BPJ) Limitations

Comments: A minimum Dissolved Oxygen (DO) limit of 4.0 mg/L will be established based on BPJ to ensure adequate operation and maintenance (Section I.A, Note 6, SOP No. BCW-PMT-033, Establishing Effluent Limitations for Individual Sewage Permits).

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 40 CFR 122.44 (l) 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.

The facility is not seeking to revise the previously permitted effluent limits.

Additional Considerations

Monitoring frequency for the proposed effluent limits are based upon Table 6-3, Self-Monitoring Requirements for Sewage Dischargers, from the Departments Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits (Document No. 386-0400-001).

Mass loading limits will be established for CBOD₅, TSS, NH₃-N, and where necessary Total P and Total N. In general, average monthly mass loading limits will be established for CBOD₅, TSS, NH₃-N, and where necessary Total P and Total N, and average weekly mass loading limits will be established for CBOD₅ and TSS (Section IV, SOP No. BCW-PMT-033, Establishing Effluent Limitations for Individual Sewage Permits).

For POTWs with design flows greater than 2,000 GPD and for non-municipal sewage facilities that service municipalities or portions thereof, the application manager will establish influent BOD₅ and TSS monitoring in the permit using the same frequency and sample type as is used for other effluent parameters (Section IV.E.8, SOP No BCW-PWT-002, New and Reissuance Sewage Individual NPDES Permit Applications).

Sewage dischargers will include monitoring, at a minimum, for E. Coli, in new and reissued permits, with a monitoring frequency of 1/quarter for design flows ≥ 0.05 and < 1.0 MGD per 25 Pa. Code § 92a.061, and Section I.A, Note 12, SOP No. BCW-PMT-033, Establishing Effluent Limitations for Individual Sewage Permits.

Nutrient monitoring is required 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 discharge is to waters not impaired for nutrients. A 1/quarter monitoring requirement for Total N & Total P has been added to the permit per 25 Pa. Code § 92a.61 and Section I.A, Note 7 & 8, SOP No. BCW-PMT-033, Establishing Effluent Limitations for Individual Sewage Permits.

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) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	4.0 Daily Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	26.0	41.0	XXX	25.0	40.0	50	1/week	8-Hr Composite
BOD5 Raw Sewage Influent	Report	Report	XXX	Report	Report	XXX	1/week	8-Hr Composite
TSS Raw Sewage Influent	Report	Report	XXX	Report	Report	XXX	1/week	8-Hr Composite
TSS	31.0	46.0	XXX	30.0	45.0	60	1/week	8-Hr Composite
Fecal Coliform (No./100 ml) Nov 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/week	Grab
Fecal Coliform (No./100 ml) May 1 - Oct 31	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/quarter	Grab
Total Nitrogen	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	8-Hr Composite
Ammonia-Nitrogen	Report	XXX	XXX	Report	XXX	Report	1/week	8-Hr Composite

Outfall 001, Continued (from 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	Weekly Average	Minimum	Average Monthly	Weekly Average	Instant. Maximum		
Total Phosphorus	XXX	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	8-Hr Composite

Compliance Sampling Location: Outfall 001

Other Comments: N/A

Attachment 1 – USGS StreamStats Report

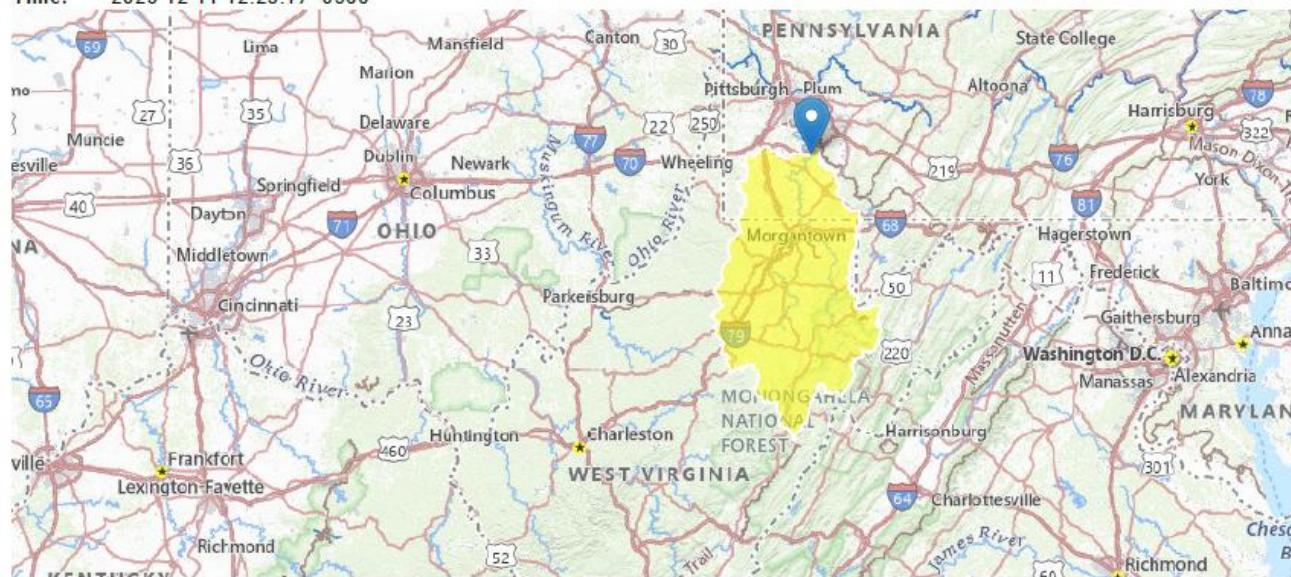
PA0020702 - StreamStats Report

Region ID: PA

Workspace ID: PA20251211172247478000

Clicked Point (Latitude, Longitude): 40.10329, -79.84501

Time: 2025-12-11 12:23:17 -0500



[Collapse All](#)

► Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	5190	square miles
ELEV	Mean Basin Elevation	1845	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	5190	square miles	2.26	1400
ELEV	Mean Basin Elevation	1845	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	687	ft^3/s
30 Day 2 Year Low Flow	912	ft^3/s
7 Day 10 Year Low Flow	400	ft^3/s
30 Day 10 Year Low Flow	468	ft^3/s
90 Day 10 Year Low Flow	696	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/>)

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Application Version: 4.29.4

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.1

Attachment 2 – WQM 7.0 Version 1.1 – Summer Period

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
19A		37185 MONONGAHELA RIVER	45.900	743.50	5190.00	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	pH	Stream Temp	pH
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C)		(°C)	
Q7-10	0.102	0.00	0.00	0.000	0.000	0.0	797.00	7.50	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
Fayette City	PA0020702	0.0000	0.1250	0.0000	0.000	20.00	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	8.38	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
19A	37185	MONONGAHELA RIVER	45.000	743.40	5190.10	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	pH	Stream Temp	pH
	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft)	(°C)		(°C)	
Q7-10	0.102	0.00	0.00	0.000	0.000	0.0	791.00	7.50	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 Hydrodynamic Outputs

<u>SWP Basin</u>			<u>Stream Code</u>			<u>Stream Name</u>						
19A			37185			MONONGAHELA RIVER						
RMI	Stream Flow	PWS With	Net Stream Flow	Disc Analysis Flow	Reach Slope	Depth	Width	W/D Ratio	Velocity	Reach Trav Time	Analysis Temp	Analysis pH
	(cfs)	(cfs)	(cfs)	(cfs)	(ft/ft)	(ft)	(ft)		(fps)	(days)	(°C)	
Q7-10 Flow												
45.900	529.38	0.00	529.38	.1934 0.00002		7.5	797	106.27	0.09	0.621	25.00	7.00
Q1-10 Flow												
45.900	338.80	0.00	338.80	.1934 0.00002		NA	NA	NA	0.06	0.970	25.00	7.00
Q30-10 Flow												
45.900	719.96	0.00	719.96	.1934 0.00002		NA	NA	NA	0.12	0.457	25.00	7.00

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	5		

WQM 7.0 Wasteload Allocations

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>
19A	37185	MONONGAHELA RIVER

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
45.900 Fayette City		11.08	50	11.08	50	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
45.900 Fayette City		1.37	25	1.37	25	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)		
45.90 Fayette City		25	25	25	25	3	3	0	0

WQM 7.0 D.O.Simulation

<u>SWP Basin</u>	<u>Stream Code</u>	<u>Stream Name</u>		
19A	37185	MONONGAHELA RIVER		
<u>RMI</u> 45.900	<u>Total Discharge Flow (mgd)</u> 0.125	<u>Analysis Temperature (°C)</u> 24.998	<u>Analysis pH</u> 7.000	
<u>Reach Width (ft)</u> 797.000	<u>Reach Depth (ft)</u> 7.500	<u>Reach WDRatio</u> 106.267	<u>Reach Velocity (fps)</u> 0.089	
<u>Reach CBOD5 (mg/L)</u> 2.01	<u>Reach Kc (1/days)</u> 0.004	<u>Reach NH3-N (mg/L)</u> 0.01	<u>Reach Kn (1/days)</u> 1.028	
<u>Reach DO (mg/L)</u> 8.378	<u>Reach Kr (1/days)</u> 0.210	<u>Kr Equation</u> O'Connor	<u>Reach DO Goal (mg/L)</u> 5	
<u>Reach Travel Time (days)</u> 0.621	<u>Subreach Results</u>			
TravTime (days)	CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)	
0.062	2.01	0.01	7.54	
0.124	2.01	0.01	7.54	
0.186	2.01	0.01	7.54	
0.248	2.01	0.01	7.54	
0.310	2.01	0.01	7.54	
0.372	2.00	0.01	7.54	
0.435	2.00	0.01	7.54	
0.497	2.00	0.01	7.54	
0.559	2.00	0.01	7.54	
0.621	2.00	0.00	7.54	

WQM 7.0 Effluent Limits

<u>SWP Basin</u>		<u>Stream Code</u>	<u>Stream Name</u>				
	19A	37185	MONONGAHELA RIVER				
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)
45.900	Fayette City	PA0020702	0.000	CBOD5	25		
				NH3-N	25	50	
				Dissolved Oxygen			3

Attachment 3 – TRC CALC

TRC_CALC

TRC EVALUATION							
Input appropriate values in A3:A9 and D3:D9							
530	= Q stream (cfs)		0.5	= CV Daily			
0.125	= 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	CFC Calculations			
TRC	1.3.2.iii	WLA_afc = 874.331	1.3.2.iii	WLA_cfc = 852.396			
PENTOXSD TRG	5.1a	LTAMULT_afc = 0.373	5.1c	LTAMULT_cfc = 0.581			
PENTOXSD TRG	5.1b	LTA_afc= 325.796	5.1d	LTA_cfc = 495.543			
Source	Effluent Limit Calculations						
PENTOXSD TRG	5.1f		AML MULT = 1.231				
PENTOXSD TRG	5.1g		AVG MON LIMIT (mg/l) = 0.500		BAT/BPJ		
			INST MAX LIMIT (mg/l) = 1.635				
WLA_afc	$(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))...\\...+Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)$						
LTAMULT_afc	$\text{EXP}((0.5*\text{LN}(cvh^2+1))-2.326*\text{LN}(cvh^2+1)^{0.5})$						
LTA_afc	wla_afc*LTAMULT_afc						
WLA_cfc	$(.011/e(-k*CFC_tc)) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))...\\...+Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)$						
LTAMULT_cfc	$\text{EXP}((0.5*\text{LN}(cvd^2/no_samples+1))-2.326*\text{LN}(cvd^2/no_samples+1)^{0.5})$						
LTA_cfc	wla_cfc*LTAMULT_cfc						
AML MULT	$\text{EXP}(2.326*\text{LN}(cvd^2/no_samples+1)^{0.5})-0.5*\text{LN}(cvd^2/no_samples+1))$						
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)						