pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0205028**
Facility Type	**Industrial**	APS ID	**753221**
Major / Minor	**Minor**	Authorization ID	**1295344**

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

Applicant and Facility Information

Applicant Name	**Buckeye Terminals, LLC**	Facility Name	**Buckeye Terminals, LLC Greensburg Facility**
Applicant Address	933 Brodhead Road Suite 100	Facility Address	134 BP Tank Lane
	Moon Township, PA 15108		Greensburg, PA 15601-6420
Applicant Contact	Michael Kolovich	Facility Contact	Michael KIolovich
Applicant Phone	412-299-7042	Facility Phone	412-299-7042
Client ID	241053	Site ID	244625
SIC Code	5171	Municipality	Hempfield Township
SIC Description	Wholesale Trade - Petroleum Bulk Stations And Terminals	County	Westmoreland
Date Application Received	November 4, 2019	EPA Waived?	Yes
Date Application Accepted	November 12, 2019	If No, Reason	
Purpose of Application	Renewal of NPDES permit for the discharge of industrial wastewater from Petroleum Storage and Distribution Terminal.		

Summary of Review

The Department received an NPDES permit application from Buckeye Terminals, LLC on November 4, 2019 to renew coverage of the discharge from its Buckeye Terminals Greensburg Facility in Hempfield Township of Westmoreland County. Buckeye Terminals (Buckeye) operates as a petroleum storage and distribution terminal with an SIC Code 5171 (Petroleum Bulk Stations and Terminals). The current NPDES permit was issued on May 1, 2015 and expired on April 30, 2020. The facility was previously operated by BP Products North America (BP). Water Quality Management (WQM) permits 1053264 and 1245685 were approved in 2015 and 2018 for the operation of the facility's aeration vault, API oil/water separator (OWS) and a mobile treatment system designed to treat hydrostatic testing water.

The Department and BP entered into a Consent Adjudication in 2007 regarding effluent limitations imposed in the 2005 permit. This resulted in the removal of effluent limits for aluminum, iron, benzene and total BTEX and replacement with monitoring. The facility has since implemented best management practices (BMPs) including the installation of Smart Sponge® absorbents, improved air diffusers and grass-seeding of dikes.

Wastewater generated at the facility consists of stormwater runoff from the tank farm containment area, loading rack and paved areas in and around the buildings, and hydrostatic testing water. An ethanol off-loading area is located under cover with berms at either end. Fuel is delivered to the site's loading rack via the Laurel Pipeline and used to refuel tanker trucks for delivery to local retailers. Ethanol is delivered to the site's loading rack via tanker truck. Catch basins inside of the loading rack area send any discharge to an aboveground storage tank. Water in the tank is checked for contaminants prior to

Approve	Deny	Signatures	Date
X		Lauren Nolfi, E.I.T. / Environmental Engineering Specialist	January 27, 2021
X		Michael E. Fifth, P.E. / Environmental Engineer Manager	February 5, 2021

Summary of Review

discharging. Since the last permit renewal in 2015, Buckeye has added a mobile treatment system to be used for treatment of hydrostatic testing water. Hydrostatic testing is episodic and completed approximately once every 5 years.

The facility has one outfall, Outfall 001, which discharges to an Unnamed Tributary to Jack's Run, designated in 25 PA Code Chapter 93 as a Warm Water Fisher (WWF). Wastewater enters the API OWS by gravity flow where a continuous skimmer recovers any oil present. A continuous slip stream is taken from the OWS and aerated in a separate aeration vault and returned to the separator. The overflow from the API separator discharges to Outfall 001. Accumulated sludges in the aeration vault are disposed at an offsite facility. Hydrocarbons recovered from the OWS are returned to product storage for recovery.

Public Participation

DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the *Pennsylvania Bulletin* in accordance with 25 Pa. Code § 92a.82. Upon publication in the *Pennsylvania Bulletin*, DEP will accept written comments from interested persons for a 30-day period (which may be extended for one additional 15-day period at DEP's discretion), which will be considered in making a final decision on the application. Any person may request or petition for a public hearing with respect to the application. A public hearing may be held if DEP determines that there is significant public interest in holding a hearing. If a hearing is held, notice of the hearing will be published in the *Pennsylvania Bulletin* at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0
Latitude	40º 17' 20"	Longitude	-79º 35' 0"
Quad Name	Greensburg	Quad Code	1609
Wastewater Description:	Stormwater runoff from paved areas in and around buildings and loading rack, impounded water within the tank farm containment area, and hydrostatic testing water.		
Receiving Waters	Unnamed Tributary to Jacks Run (WWF)	Stream Code	37709
NHD Com ID	69912219	RMI	0.9323
Drainage Area	0.14 mi^2	Yield (cfs/mi^2)	0.00505
Q_{7-10} Flow (cfs)	0.000707	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1066	Slope (ft/ft)	0.01174
Watershed No.	19-D	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Siltation		
Source(s) of Impairment	Highway/ Road/ Bridge Runoff (Non-Construction Related), Rural (Residential Areas)		
TMDL Status	Final	Name	Sewickley Creek Watershed
Nearest Downstream Public Water Supply Intake	Westmoreland County Municipal Authority - McKeesport		
PWS Waters	Youghiogheny River	Flow at Intake (cfs)	18.57
PWS RMI	1.37	Distance from Outfall (mi)	39.89

Changes Since Last Permit Issuance:

Buckeye added a mobile treatment system to be used for treatment of hydrostatic testing water to be discharged at Outfall 001.

Other Comments:

Outfall 001 is the discharge of stormwater runoff from paved areas in and around buildings and loading rack, impounded water within the tank farm containment area, and hydrostatic testing water, after treatment through an API oil/water separator, aeration vault, and mobile treatment system.

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

Compliance History

DMR Data for Outfall 001 (from December 1, 2019 to November 30, 2020)

Parameter	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19
Flow (MGD) Average Monthly	0.041962	0.073904	0.012526	0.003132	0.012526		0.010021	0.058873	0.056994	0.025678	0.124008	0.008768
Flow (MGD) Daily Maximum	0.065136	0.135282	0.11524	0.356993	0.111482		0.051357	0.14906	0.112735	0.06263	0.130271	0.110229
pH (S.U.) Minimum	7.8	7.7	7.8	7.7	7.3		7.9	7.8	7.9	7.7	7.8	7.9
pH (S.U.) Maximum	8.0	7.7	8.0	7.7	7.3		7.9	7.9	8.1	7.9	7.9	8.0
TSS (mg/L) Average Monthly	2.5	3.0	9.5	< 8.0	108		4.0	8.0	15	< 4.0	5	31
TSS (mg/L) Instantaneous Maximum	5.0	6.0	13.0	< 8.0	108		8.0	19.0	22	< 4.0	10	45
Oil and Grease (mg/L) Average Monthly	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8		< 4.8	< 4.8	4.8	< 4.8	< 4.8	< 4.8
Oil and Grease (mg/L) Instantaneous Maximum	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8		< 4.8	< 4.8	< 4.8	< 4.8	< 4.8	< 4.8
Total Aluminum (mg/L) Average Monthly	0.16	0.095	0.18	0.11	0.22		0.075	0.485	1.11	0.285	0.52	2.05
Total Aluminum (mg/L) Daily Maximum	0.17	0.11	0.22	0.11	0.22		0.15	0.49	1.9	0.36	0.71	2.4
Total Iron (mg/L) Average Monthly	0.24	0.135	0.275	0.19	0.36		0.15	0.59	0.83	0.029	0.60	1.9
Total Iron (mg/L) Daily Maximum	0.33	0.15	0.37	0.19	0.36		0.30	0.74	1.4	0.33	0.96	2.4
Ethylbenzene (mg/L) Average Monthly	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010		< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010
Ethylbenzene (mg/L) Daily Maximum	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010		< 0.0010	< 0.0010	< 0.0010	0.0010	< 0.0010	< 0.0010
Benzene (mg/L) Average Monthly	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010		< 0.0010	0.0010	0.0010	< 0.0010	0.0005	< 0.0010
Benzene (mg/L) Daily Maximum	< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0010		< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0011	< 0.0010

Total BTEX (mg/L) Average Monthly	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060		< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060
Total BTEX (mg/L) Daily Maximum	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060		< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060	< 0.0060
Ethanol (mg/L) Average Monthly	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20		< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Ethanol (mg/L) Daily Maximum	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20		< 0.20	< 0.20	< 0.20	< 0.20	< 0.20	< 0.20
Toluene (mg/L) Average Monthly	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010		< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0006	< 0.0010
Toluene (mg/L) Daily Maximum	< 0.0010	< 0.0010	< 0.0010	< 0.0010	< 0.0010		< 0.0010	< 0.0010	< 0.0010	< 0.0010	0.0013	< 0.0010
Total Xylenes (mg/L) Average Monthly	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030		< 0.0030	< 0.0030	0.0030	< 0.0030	< 0.0030	< 0.0030
Total Xylenes (mg/L) Daily Maximum	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030		< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030	< 0.0030

Compliance History

Effluent Violations for Outfall 001, from: December 1, 2019 to: November 30, 2020

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
TSS	07/31/20	Avg Mo	108	mg/L	30	mg/L
TSS	12/31/19	Avg Mo	31	mg/L	30	mg/L
TSS	07/31/20	IMAX	108	mg/L	75	mg/L

Summary of Inspections: Buckeye Terminals was most recently inspected on March 9, 2020 by Kristin Gearhart as a compliance evaluation. No violations were noted.

Other Comments:

A review of monitoring data from the past three years shows effluent violations for the parameter total suspended solids. Buckeye Terminals reported an average monthly concentration of 31 mg/L during the December 2019 monitoring period and an average monthly and IMAX concentration of 108 mg/L during the July 2020 monitoring period.

Monitoring data from the past three years shows the parameters aluminum and iron in exceedance of the EPA's recommended benchmark values. Reported concentrations of aluminum exceeded the benchmark values during 11 months, with a maximum reported aluminum concentration of 2.5 mg/L during July 2019. Reported concentrations of iron exceeded the benchmark values during 7 months, with a maximum reported iron concentration of 2.5 mg/L during November 2019.

Development of Effluent Limitations

Outfall No.	001	**Average Flow (MGD)**	0.048
Latitude	40º 17' 20"	**Longitude**	-79º 35' 0"

Wastewater Description: Stormwater runoff from paved areas in and around buildings and loading rack and impounded water within the tank farm containment area, and hydrostatic testing water.

Outfall 001 is the treated discharge of stormwater runoff from paved areas in and around buildings and loading rack, impounded water within the tank farm containment area, and hydrostatic testing water. Wastewater treatment consists of an API oil/ water separator, an aeration vault, and a mobile treatment system designed to treat hydrostatic testing water.

Technology-Based Limitations

Buckeye is not subject to Federal Effluent Limitation Guidelines (ELGs) as the SIC code is not listed under 40 CFR parts 405 through 471. The Department's Best Professional Judgment of Technology-Based Effluent Limitations is utilized, based on the Department's guidance (PA DEP's "Standard NPDES Permit Requirements for Petroleum Marketing Terminals", Pennsylvania's Chapter 95 regulations, and on limitations provided for dischargers of similar wastewater.

Regulatory Effluent Standards and Monitoring Requirements

Flow monitoring is required pursuant to 25 Pa. Code § 92a.61(d)(1) as indicated in Table 1.

Effluent standards for pH pursuant to 25 Pa. Code §§ 95.2(1), as indicated in Table 1, are imposed on all industrial wastes.

Effluent standards for Oil and Grease pursuant to 25 Pa. Code §§ 95.2(2)(ii), as indicated in Table 1, are imposed on all industrial oil-bearing wastewaters. As a PMT, Buckeye is also subject to the requirements of 25 Pa. Code §§ 95.2(3).

Table 1. Regulatory Effluent Standards

Parameter	Monthly Average	Daily Maximum	IMAX
Flow (MGD)	Monitor	Monitor	----
Oil and Grease (mg/L)	15.0	----	30.0
pH (S.U.)	Not less than 6.0 nor greater than 9.0 at all times		----

The Stormwater Outfalls will be subjected to the monitoring requirements in Appendix L of the PAG-03 General Stormwater Permit as a minimum requirement because the outfall receives stormwater. The SIC code for the site is 5171 and the corresponding appendix that would apply to the facility is Appendix L of the PAG-03. Appendix L reporting requirements are in Table 2 below.

Table 2: PAG-03 Appendix L Monitoring Requirements

Parameters	Average Monthly (mg/L)	Maximum Daily (mg/L)	Benchmark Values (mg/L)	Monitoring Requirements	
				Monitoring Frequency	Sample Type
Total Suspended Solids	XXX	Monitor & Report	100	1/6 Months	Grab
Oil and Grease	XXX	Monitor & Report	30	1/6 Months	Grab

Sample analysis results submitted with the NPDES permit application showed concentrations of aluminum and iron in exceedance of EPA recommended benchmark values. Buckeye reported a maximum nitrite/nitrate concentration of 0.86 mg/L, a maximum aluminum concentration of 2.1 mg/L and a maximum iron concentration of 1.64 mg/L. Concentrations of all other parameters are reported in the application to be below benchmark values.

Water Quality-Based Effluent Limitations (WQBELs)

Water quality analyses are typically performed under low-flow (Q_{7-10}) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q_{7-10} conditions. Since the discharges from Buckeye are composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations are not proposed.

Total Maximum Daily Load (TMDL)

Wastewater discharges from Buckeye Terminals are located within the Sewickley Creek Watershed, for which the Department has developed a TMDL. The Sewickley Creek Watershed was completed on April 8, 2009. Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency's ("EPA's") Water Quality Planning and Management Regulations (codified at Title 40 of the Code of Federal Regulations Part 130) require states to develop a TMDL for impaired water bodies. A TMDL establishes the amount of a pollutant that a water body can assimilate without exceeding its water quality standard for that pollutant. TMDLs provide the scientific basis for a state to establish water quality-based controls to reduce pollution from both point and non-point sources to restore and maintain the quality of the state's water resources (USEPA 1991).

Stream reaches in the Sewickley Creek watershed in southwestern Pennsylvania are included on the state's Section 303(d) list because of various impairments, including metals and sediment. The TMDL provides an in depth analysis for every river and tributary within the target watershed and its impairment sources. The document is then used to calculate minimum pollutant reductions within the watershed that are necessary to attain water quality criteria levels. Target concentrations were based on established water quality criteria of 0.75 milligrams per liter (mg/L) total aluminum, 1.5 mg/L total iron and 1.0 mg/L manganese. The reduction needed to meet minimum water quality standards was then divided between each known point and non-point pollutant source in the form of a wasteload allocation.

Buckeye discharges to a section of the watershed named "JACK2". Based on the TMDL, JACK2 is only impaired for aluminum and effluent limits for manganese and iron were not required. The Sewickley Creek TMDL did not include a waste load allocation for Buckeye Terminals, and discharges of aluminum via Outfall 001 can only be authorized to the extent that they will not cause or contribute to any violation of the water quality standards.

During the 2015 permit renewal, Buckeye objected to water quality effluent limits imposed for aluminum for the following reasons:

1. Activities at the facility remain consistent since the previous permit renewal.
2. Since taking over operations, Buckeye has consistently met the effluent limits.
3. Water quality based effluent limits were not necessary for aluminum based on the existing discharge concentrations.
4. The facility was not provided a TMDL allocation or included in the Sewickley Creek TMDL.
5. Buckeye Terminal was not given a Waste Load Allocation since it was not included in the Sewickley Creek TMDL.
6. Since the TMDL was developed, aluminum discharges at the site have reduced from 14.9 mg/L to 1.9 mg/L. This reduction of more than 87% through the implementation of sitewide BMPs significantly exceeded the required load reduction for the JACK2 segment of 31%.

DEP determined that aluminum reductions had been significant at the facility and comply with the TMDL and maintained monitoring and reporting requirements for aluminum and BMPs to ensure continued compliance with the TMDL.

Anti-Backsliding

The permit contains monitoring and reporting requirements based on the PA DEP guidance Standard NPDES Permit Requirements for Petroleum Marketing Terminals. All previously imposed effluent limitations at Outfall 001 will remain in effect for the permit renewal. Previous limits can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l).

The effluent limitations and monitoring requirements in Table 3 below are from the current permit, issued on May 1, 2015.

Table 3: Current Permit Effluent Limitations – Outfall 001					
Parameters	**Average Monthly**	**Maximum Daily**	**Units**	**Monitoring Requirements**	
				Monitoring Frequency	**Sample Type**
Flow	Monitor & Report	Monitor & Report	MGD	2/ month	Estimated
pH	Not less than 6.0 nor greater than 9.0		S.U.	2/ month	Grab
Total Suspended Solids	30.0	75.0	mg/L	2/ month	Grab
Oil and Grease	15.0	30.0	mg/L	2/ month	Grab
Ethanol	Report	Report	mg/L	2/ month	Grab
Total Aluminum	Report	Report	mg/L	2/ month	Grab
Total Iron	Report	Report	mg/L	2/ month	Grab
Ethylbenzene	Report	Report	mg/L	2/ month	Grab
Benzene	Report	Report	mg/L	2/ month	Grab
Total BTEX	Report	Report	mg/L	2/ month	Grab
Toluene	Report	Report	mg/L	2/ month	Grab
Total Xylenes	Report	Report	mg/L	2/ month	Grab

Final Effluent Monitoring and Limitations for Outfall 001

Effluent limitations applicable at Outfall 001 are the most stringent of Technology-Based Effluent Monitoring and Limitations and the current permit's effluent monitoring and limitations. The proposed effluent limitations and monitoring requirements for Outfall 001 are displayed in Tables 4 below.

A Part C condition is included in the Draft permit requiring submission of a Corrective Action Plan when there are two consecutive exceedances of the benchmark values. The benchmark values are displayed below in Table 4 and included in the Part C condition. These values are from EPA'S Multisector General Permit document and are not effluent limitations. Exceedance of the benchmark values is not a violation. If there are two consecutive exceedances of the benchmark value, a Corrective Action Plan must be conducted to evaluate site stormwater controls and BMPs. Benchmark monitoring is a feedback tool, along with routine inspections and visual assessments, for assessing the effectiveness of stormwater controls and BMPs. An exceedance of the benchmark provides permittees with an indication that the facility's controls may not be sufficiently controlling pollutants in stormwater.

Table 4: Final Permit Effluent Limitations – Outfall 001					
Parameters	**Average Monthly**	**Maximum Daily**	**Benchmark Values**	**Monitoring Requirements**	
				Monitoring Frequency	**Sample Type**
Flow (MGD)	Monitor & Report			2/ month	Estimated
pH (S.U.)	Not less than 6.0 nor greater than 9.0			S.U.	2/ month
Total Suspended Solids (mg/L)	30.0	75.0		2/ month	Grab
Oil and Grease (mg/L)	15.0	30.0		2/ month	Grab
Ethanol (mg/L)	Report	Report		2/ month	Grab
Aluminum, total (mg/L)	Report	Report	0.75	2/ month	Grab
Iron, total (mg/L)	Report	Report	1.0	2/ month	Grab
Ethylbenzene (mg/L)	Report	Report		2/ month	Grab
Benzene (mg/L)	Report	Report		2/ month	Grab
BTEX, total (mg/L)	Report	Report		2/ month	Grab
Toluene (mg/L)	Report	Report		2/ month	Grab
Xylenes, total (mg/L)	Report	Report		2/ month	Grab

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:

Attachments

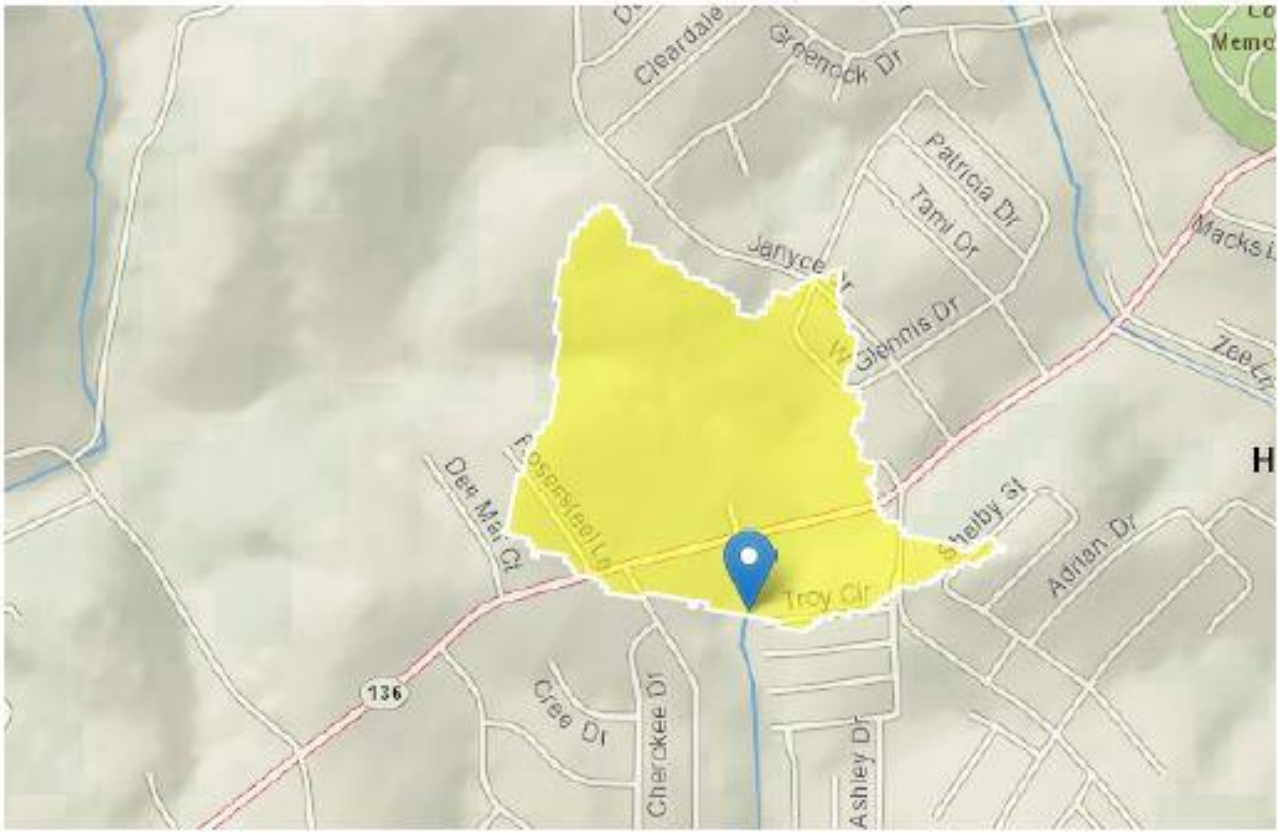
Attachment A: StreamStats Report for Outfalls 001

ATTACHMENT A:

StreamStats Report for Outfalls 001

StreamStats Report

Region ID: PA
Workspace ID: PA20201112150845308000
Clicked Point (Latitude, Longitude): 40.28598, -79.58276
Time: 2020-11-12 10:09:01 -0500



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.14	square miles
ELEV	Mean Basin Elevation	1142	feet

Low-Flow Statistics Parameters[Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.14	square miles	2.26	1400
ELEV	Mean Basin Elevation	1142	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	0.00287	ft^3/s
30 Day 2 Year Low Flow	0.00605	ft^3/s
7 Day 10 Year Low Flow	0.000707	ft^3/s
30 Day 10 Year Low Flow	0.00175	ft^3/s
90 Day 10 Year Low Flow	0.00389	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/)