pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0254151**
Facility Type	**Industrial**	APS ID	**992556**
Major / Minor	**Minor**	Authorization ID	**1272166**

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

Applicant and Facility Information

Applicant Name	**Sprague Energy, LLC**	Facility Name	**Bridge Street Bulk Plant**
Applicant Address	1045 W Chestnut Street	Facility Address	44 Bridge Street
	Washington, PA 15301-4136		Washington, PA 15301-5306
Applicant Contact	Camden Zappi	Facility Contact	Same as Applicant
Applicant Phone	(724) 705-7027	Facility Phone	Same as Applicant
Client ID	321124	Site ID	590661
SIC Code	5171	Municipality	Washington City
SIC Description	Wholesale Trade - Petroleum Bulk Stations and Terminals	County	Washington
Date Application Received	May 3, 2019	EPA Waived?	No
Date Application Accepted	May 6, 2019	If No, Reason	TMDL

Purpose of Application: Renewal of NPDES Permit Coverage

Summary of Review

The Department received an NPDES permit renewal application from Coen Energy, LLC on May 3, 2019 for coverage of the Coen Energy Bridge Street Bulk Plant. The Department later received an NPDES permit name change application on June 3, 2019 to change the name of Coen Energy, LLC to Sprague Energy, LLC. The Sprague Energy Bridge Street Bulk Plant is a petroleum distribution facility with a SIC code of 5171, Petroleum Bulk Station and Terminals.

The primary operations at this facility involve receipt of home heating oil in bulk quantities and subsequent sale and delivery to residential and commercial clients in smaller quantities. The facility handles, stores, and distributes petroleum products in the form of gasoline, diesel and heating oil. The site receives products by common carrier via tanker trunk. The products are stored on site in underground storage tanks and aboveground storage tanks.

The facility includes one 300-square foot office building, which houses the Veeder Root automatic tank gauging (ATG) equipment's controls. The site also includes a 2,300 square foot storage shed, which has a roof and three sides. The storage shed does not contain any petroleum products. Additionally, a small shed, which houses remediation equipment, is located along the southern property boundary. The eastern portion of the facility consist of a gravel-covered storage yard. Coen Energy leases the gravel yard area to PPC lubricants, along with the warehouse space adjoining the facility to the west. The facility includes a loading rack and unloading area, which is associated with six ASTs and is located to the southeast of the site buildings. An unmanned card lock filling station is located in the northwest corner of the facility adjacent to the bulk plant and outside of the gated/restricted entrance to the bulk plant. Three USTs and two dispensing area are associated with the filling station. The site also has a groundwater remediation system to treat contaminated groundwater.

The site has two outfalls that both discharge to Catfish Creek, designated in 25 PA Code Chapter 93 as a Warm Water Fishery. Outfall 001 discharges stormwater from the paved area near the dispensers. Outfall 002 discharges treated groundwater from the treatment system combined with collected stormwater from the loading dock areas.

Approve	Deny	Signatures	Date
X		Adam Olesnanik / Environmental Engineering Specialist	6-4-19
✓		Michael E. Fifth, P.E. / Environmental Engineer Manager	6/12/19

Summary of Review

The treatment system was installed because soil and groundwater beneath the facility have been historically impacted due to a release associated with a past UST system. An approximate 120-foot-long interceptor trench was installed directly downgradient to the existing ASTs at the site. The trench was installed to depth ranging from 3 to 6 feet below ground surface in order to contain all groundwater flowing toward Catfish Creek. Overland flow in the gravel area adsorbs into the subsurface between the ASTs and the interceptor location. A soil dike was installed along Catfish Creek to allow further adsorption into the subsurface. A collection sump exists in the interceptor trench that contains a submersible pump that is controlled by a float system. The system consists of the submersible pump to empty the collected groundwater in the interceptor trench, which is then pumped to a treatment shed containing an oil/water separator, particulate filters and granular activated carbon units prior to discharge to Catfish Creek. Oil and coarse solids are collected by the separator which is equipped with two chambers for solids and oil. Oil is periodically manually removed from the oil/water separator and drained to a tote utilized for storage prior to disposal. Groundwater is then automatically pumped from the oil/water separator by a transfer pump through two 50-micron particulate filters for fine solids removal. The water then passes through two granular activated carbon units arranged in series and is subsequently discharge via Outfall 002 to Catfish Creek. Stormwater that accumulates in a nearby loading dock is pumped into the oil/water separator on an as-needed basis to keep the dock loading area clear.

The permittee has no open violations.

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 10' 37.16"	Longitude	-80º 15' 37.12"
Quad Name	Washington West	Quad Code	1703
Wastewater Description:	Stormwater		
Receiving Waters	Catfish Creek (WWF)	Stream Code	37132
NHD Com ID	99694618	RMI	0.4800
Drainage Area	4.26	Yield (cfs/mi^2)	0.0115
Q_{7-10} Flow (cfs)	0.0489	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1016	Slope (ft/ft)	0.001
Watershed No.	20-F	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Metals, Nutrients, Organic Enrichment/Low D.O., Siltation, Total Suspended Solids (TSS)		
Source(s) of Impairment	Acid Mine Drainage, Agriculture, Combined Sewer Overflows, Habitat Modification - Other Than Hydromodification, Urban Runoff/Storm Sewers		
TMDL Status	Final	Name	Chartiers Creek, Watershed
Nearest Downstream Public Water Supply Intake	West View Municipal Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	4,730
PWS RMI	972	Distance from Outfall (mi)	>40

Discharge, Receiving Waters and Water Supply Information

Outfall No.	002	Design Flow (MGD)	0.0072
Latitude	40º 10' 37.40"	Longitude	-80º 15' 39.20"
Quad Name	Washington West	Quad Code	1703
Wastewater Description:	Groundwater Cleanup Discharge		

Receiving Waters	Catfish Creek (WWF)	Stream Code	37132
NHD Com ID	99694618	RMI	0.0400
Drainage Area	4.26	Yield (cfs/mi^2)	0.0115
Q_{7-10} Flow (cfs)	0.0489	Q_{7-10} Basis	USGS Streamstats
Elevation (ft)	1016	Slope (ft/ft)	0.001
Watershed No.	20-F	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	Metals, Nutrients, Organic Enrichment/Low D.O., Siltation, Total Suspended Solids (TSS)		
Source(s) of Impairment	Acid Mine Drainage, Agriculture, Combined Sewer Overflows, Habitat Modification - Other Than Hydromodification, Urban Runoff/Storm Sewers		
TMDL Status	Final	Name	Chartiers Creek Watershed

Nearest Downstream Public Water Supply Intake	West View Municipal Authority		
PWS Waters	Ohio River	Flow at Intake (cfs)	4,730
PWS RMI	972	Distance from Outfall (mi)	>40

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0
Latitude 40º 10' 37.16" **Longitude** -80º 15' 37.12"
Wastewater Description: Stormwater

Technology-Based Limitations

Stormwater Technology Limits
Outfall 001 will be subject to PAG-03 General Stormwater Permit conditions as a minimum requirement because the outfall receives stormwater. The SIC code for the site is 5171 and the corresponding appendix of the PAG-03 that would apply to the facility is Appendix L. The reporting requirements applicable to stormwater discharges are shown in Table 1 below.

Table 1: PAG-03 Appendix (L) Monitoring Requirements

Parameter	Max Daily Concentration	Measurement Frequency	Sample Type
Total Suspended Solids (TSS)	Monitor and Report	1/6 Months	Grab
Oil and Grease	Monitor and Report	1/6 Months	Grab

Water Quality-Based Limitations

Stormwater WQBELs
Water quality analyses are typically performed under low-flow (Q7-10) conditions. Stormwater discharges occur at variable rates and frequencies but not however during Q7-10 conditions. Since the discharges from Outfall 001 is composed entirely of stormwater, a formal water quality analysis cannot be accurately conducted. Accordingly, water quality-based effluent limitations based on water quality analyses are not proposed.

Total Maximum Daily Loads

Discharges from the site are located within the Chartiers Creek Watershed for which the Department has developed a TMDL. The TMDL was finalized in April 2003 and establishes waste load allocations for the discharge of aluminum, iron and manganese within the watershed. The metal impairments result from acid drainage from abandoned coal mines. Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency'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 the water quality criteria 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 in order to restore and maintain the quality of the state's water resources (USEPA 1991a).

Only one non-mining point source located in the Chartiers Creek watershed is permitted to discharge iron, aluminum or manganese. It was assumed that discharges from all other point sources do not contain aluminum, iron, and manganese since they are not permitted to discharge these metals. Therefore, these points source were not considered as potential sources of the metal impairments in the Chartiers Creek watershed. In other words, if it is determined that a site is discharging wastewater containing these parameters, the site must meet the instream criterion values for these parameters at the point of discharge. However, in this case the only discharge from Outfall 001 is stormwater, therefore, no limitations for aluminum, iron and manganese will be imposed at Outfall 001 based on the Charters Creek Watershed TMDL.

Anti-Backsliding

Previous limits at Outfall 001 can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l) and are displayed below in Table 2. A Part C condition is included in the Draft Permit requiring a Corrective Action Plan when there are two consecutive exceedances of the benchmark values; therefore, the monitoring frequency will be reduced to semiannual sampling and the average quarterly monitoring will be removed.

Table 2: Limitations in the Current Permit

Parameter	Average Quarterly	Max Daily Concentration	Measurement Frequency	Sample Type
Flow	Report	Report	2/quarter	Estimate
Total Suspended Solids (TSS)	Report	Report	2/quarter	Grab
Oil and Grease	Report	Report	2/quarter	Grab
Nitrate-Nitrite	Report	Report	2/quarter	Grab
pH	Between 6.0 and 9.0 S.U.		2/quarter	Grab

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for Outfall 001 are displayed in Table 3 below, they are the most stringent values from the above effluent limitation development. As discussed, the Draft Permit requires a Corrective Action Plan when there are two consecutive exceedances of the benchmark values, which are also included in the Part C condition. The benchmark values are displayed below in Table 3. These values are not effluent limitations, an exceedance of the benchmark value is not a violation. As described above, 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 3: Proposed Effluent Monitoring Requirements

Parameter	Max Daily Concentration	Benchmark Values (mg/L)	Measurement Frequency	Sample Type
Flow	Report	XXX	1/6 Months	Estimate
Total Suspended Solids (TSS)	Report	100	1/6 Months	Grab
Oil and Grease	Report	30	1/6 Months	Grab
Nitrate-Nitrite	Report	XXX	1/6 Months	Grab
pH	Between 6.0 and 9.0 S.U.	XXX	1/6 Months	Grab

Development of Effluent Limitations

Outfall No. 002 **Design Flow (MGD)** 0.0072
Latitude 40º 10' 39.40" **Longitude** -80º 15' 39.20"
Wastewater Description: Groundwater Cleanup Discharge

Technology-Based Limitations

Outfall 002 will be subject to PAG-05 General Petroleum Product Contaminated Groundwater Remediation Permit conditions as a minimum requirement because the outfall receives discharge from a groundwater remediation system. The reporting requirements applicable to groundwater remediation system discharges are shown in Table 4 below.

Table 4: PAG-05 Effluent Limitations

Parameter	Effluent Limitations				Monitoring Requirements	
	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Measurement Frequency	Required Sample Type
Flow (MGD)	XXX	Report	Report	XXX	2/month	Measured
pH (S.U.)	6.0	XXX	XXX	9.0	2/month	Grab
TSS	XXX	30	XXX	75	2/month	Grab
Oil and Grease	XXX	15	XXX	30	2/month	Grab
Dissolved Iron	XXX	XXX	XXX	7.0	1/year	Grab
Benzene	XXX	0.001	XXX	0.0025	2/month	Grab
Total BTEX	XXX	0.1	XXX	0.25	2/month	Grab
MTBE	XXX	Report	XXX	Report	2/month	Grab

Water Quality-Based Limitations

Toxics Screening Analysis – Procedures for Evaluating Reasonable Potential and Developing WQBELs

DEP's procedures for evaluating reasonable potential are as follows:

1. For IW discharges, the design flow to use in modeling is the average flow during production or operation and may be taken from the permit application.

2. Perform a Toxics Screening Analysis to identify toxic pollutants of concern. All toxic pollutants whose maximum concentrations, as reported in the permit application or on DMRs, are greater than the most stringent applicable water quality criterion are pollutants of concern. [This includes pollutants reported as "Not Detectable" or as "<MDL" where the method detection limit for the analytical method used by the applicant is greater than the most stringent water quality criterion]. List all toxic pollutants of concern in a Toxics Screening Analysis section of the fact sheet (see Attachment B).

3. For any outfall with an applicable design flow, perform PENTOXSD modeling for all pollutants of concern. Use the maximum reported value from the application form or from DMRs as the input concentration for the PENTOXSD model run.

4. Compare the actual WQBEL from PENTOXSD with the maximum concentration reported on DMRs or the permit application. Use WQN data or another source to establish the existing or background concentration for naturally occurring pollutants, but generally assume zero background concentration for non-naturally occurring pollutants.

    - Establish limits in the draft permit where the maximum reported concentration equals or exceeds 50% of the WQBEL. Use the average monthly and maximum daily limits for the permit as recommended by PENTOXSD. Establish an IMAX limit at 2.5 times the average monthly limit.

- For non-conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 25% - 50% of the WQBEL.

- For conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 10% - 50% of the WQBEL.

The information described above including the maximum reported discharge concentrations, the most stringent water quality criteria, the pollutant-of-concern (reasonable potential) determinations, the calculated WQBELs, and the WQBEL/monitoring recommendations are collected on a spreadsheet titled "Toxics Screening Analysis." (Attachment B). No parameters were selected as pollutants of concern for PENTOXSD modeling, therefore no WQBELs are required based on the water quality analysis.

Total Maximum Daily Loads

Discharges from the site are located within the Chartiers Creek Watershed for which the Department has developed a TMDL. The TMDL was finalized in April 2003 and establishes waste load allocations for the discharge of aluminum, iron and manganese within the watershed. The metal impairments result from acid drainage from abandoned coal mines. Section 303(d) of the Clean Water Act and the U.S. Environmental Protection Agency'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 the water quality criteria 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 in order to restore and maintain the quality of the state's water resources (USEPA 1991a).

Only one non-mining point source located in the Chartiers Creek watershed is permitted to discharge iron, aluminum or manganese. It was assumed that discharges from all other point sources do not contain aluminum, iron, and manganese since they are not permitted to discharge these metals. Therefore, these points source were not considered as potential sources of the metal impairments in the Chartiers Creek watershed. In other words, if it is determined that a site is discharging wastewater containing these parameters, the site must meet the instream criterion values for these parameters at the point of discharge. However, in this case aluminum, iron and manganese are not evaluated as pollutants of concern in the NPDES permit application for discharge form groundwater treatment systems, therefore, no limitations for aluminum, iron and manganese will be imposed at Outfall 002 based on the Charters Creek Watershed TMDL.

Anti-Backsliding

Previous limits at Outfall 002 can be used pursuant to EPA's anti-backsliding regulation, 40 CFR 122.44(l) and are displayed below in Table 5.

Table 5: limitations in the Current Permit

Parameter	Effluent Limitations				Monitoring Requirements	
	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Measurement Frequency	Required Sample Type
Flow (MGD)	XXX	Report	Report	XXX	2/month	Measured
pH (S.U.)	6.0	XXX	XXX	9.0	2/month	Grab
TSS	XXX	30	XXX	75	2/month	Grab
Oil and Grease	XXX	15	XXX	30	2/month	Grab
Dissolved Iron	XXX	XXX	XXX	7.0	1/year	Grab
Benzene	XXX	0.001	XXX	0.0025	2/month	Grab
Total BTEX	XXX	0.1	XXX	0.25	2/month	Grab
MTBE	XXX	Report	XXX	Report	2/month	Grab

Proposed Effluent Limitations and Monitoring Requirements

The proposed effluent monitoring requirements for Outfall 002 are displayed in Table 6 below, they are the most stringent values from the above effluent limitation development.

Table 6: limitations in the Current Permit

Parameter	Effluent Limitations				Monitoring Requirements	
	Minimum	Average Monthly	Daily Maximum	Instant. Maximum	Measurement Frequency	Required Sample Type
Flow (MGD)	XXX	Report	Report	XXX	2/month	Measured
pH (S.U.)	6.0	XXX	XXX	9.0	2/month	Grab
TSS	XXX	30	XXX	75	2/month	Grab
Oil and Grease	XXX	15	XXX	30	2/month	Grab
Dissolved Iron	XXX	XXX	XXX	7.0	1/year	Grab
Benzene	XXX	0.001	XXX	0.0025	2/month	Grab
Total BTEX	XXX	0.1	XXX	0.25	2/month	Grab
MTBE	XXX	Report	XXX	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 **B**)
☐	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:

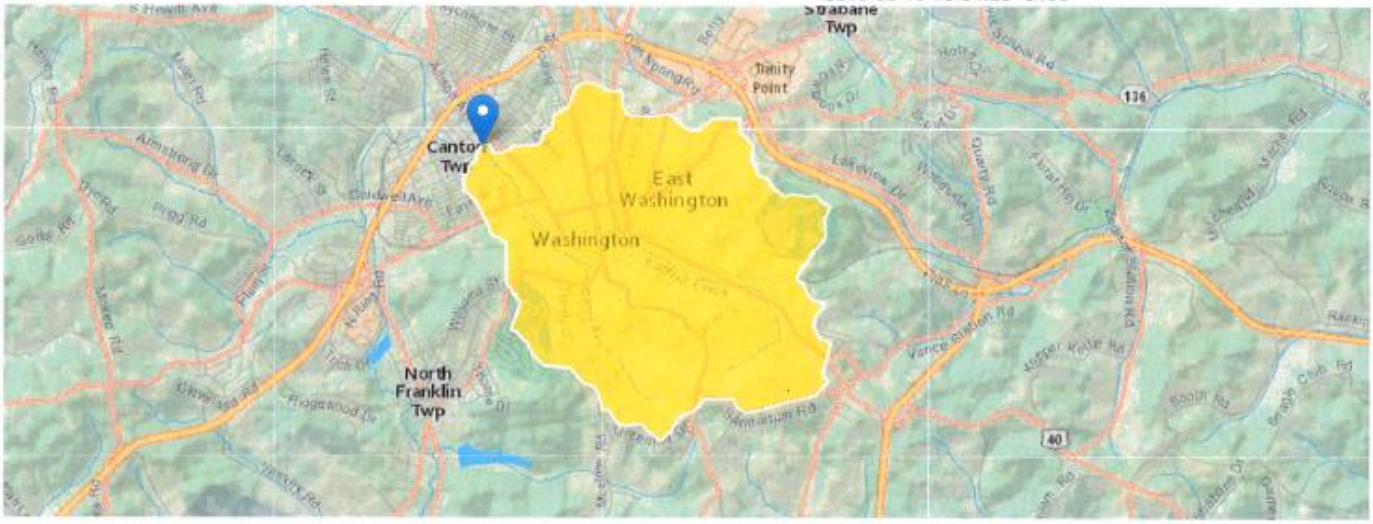
Attachments

Attachment A: StreamStats Drainage Area
Attachment B: Toxics Screening Analysis for Outfall 002

Attachment A:
StreamStats Drainage Area

StreamStats Report

Region ID:	PA
Workspace ID:	PA20190516175404036000
Clicked Point (Latitude, Longitude):	40.17696, -80.26034
Time:	2019-05-16 13:54:23 -0400



Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	4.26	square miles
ELEV	Mean Basin Elevation	1192.6	feet

Low-Flow Statistics Parameters [Low Flow Region 4]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	4.26	square miles	2.26	1400
ELEV	Mean Basin Elevation	1192.6	feet	1050	2580

Low-Flow Statistics Flow Report [Low Flow Region 4]

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

Statistic	Value	Unit	SE	SEp
7 Day 2 Year Low Flow	0.146	ft^3/s	43	43
30 Day 2 Year Low Flow	0.262	ft^3/s	38	38
7 Day 10 Year Low Flow	0.0489	ft^3/s	66	66
30 Day 10 Year Low Flow	0.0939	ft^3/s	54	54
90 Day 10 Year Low Flow	0.179	ft^3/s	41	41

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/)

Attachment B:
Toxic Screening Analysis for Outfall 002

TOXICS SCREENING ANALYSIS
WATER QUALITY POLLUTANTS OF CONCERN
VERSION 2.6

CLEAR FORM

Facility: **Coen Energy Bridge Street Bulk Plant**
NPDES Permit No.: **PA0254151**
Outfall: **002**
Analysis Hardness (mg/L): **100**
Discharge Flow (MGD): **0.0072**
Analysis pH (SU): **7**
Stream Flow, Q_{7-10} (cfs): **0.0489**

Parameter		Maximum Concentration in Application or DMRs (µg/L)	Most Stringent Criterion (µg/L)	Candidate for PENTOXSD Modeling?	Most Stringent WQBEL (µg/L)	Screening Recommendation
Dissolved Iron		11.9	300	No		
Benzene	<	1	1.2	No		
Ethylbenzene	<	1	530	No		
Toluene	<	1	330	No		
MTBE		23	N/A	No		
Total Xylenes	<	3	210	No		