pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southcentral Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0266792**
Wastewater Type	**Sewage**	APS ID	**1092154**
Facility Type	**SRSTP**	Authorization ID	**1446081**

NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**Alexandra Creany And Richard Davis**	Facility Name	**Creany & Davis Residence**
Applicant Address	179 Atlas Drive	Facility Address	179 Atlas Drive
	Hollidaysburg, PA 16648		Hollidaysburg, PA 16648
Applicant Contact	Alexandra Creany	Facility Contact	Alexandra Creany
Applicant Phone	(814) 322-6149	Facility Phone	(814) 322-6149
Client ID	366974	Site ID	834103
SIC Code	8811	Municipality	Frankstown Township
SIC Description	Services - Private Households	County	Blair
Date Application Received	June 20, 2023	WQM Required	
Date Application Accepted	June 26, 2023	WQM App. No.	

Project Description: This is an application for NPDES renewal.

Approve	Deny	Signatures	Date
X		Nicholas Hong, P.E. / Environmental Engineer Nick Hong (via electronic signature)	August 1, 2023
x		Daniel W. Martin, P.E. / Environmental Engineer Manager Maria D. Bebenek for	September 19, 2023
x		Maria D. Bebenek, P.E. / Environmental Program Manager Maria D. Bebenek	September 19, 2023

Summary of Review

The application submitted by the applicant requests a NPDES renewal permit for the Creany and Davis residence located at 179 Atlas Drive, Hollidaysburg, PA 16648 in Blair County, municipality of Frankstown Township. The existing permit became effective on June 1, 2019 and expires(d) on May 31, 2024. The application for renewal was received by DEP Southcentral Regional Office (SCRO) on June 20, 2023.

The purpose of this Fact Sheet is to present the basis of information used for establishing the proposed NPDES permit effluent limitations. The Fact Sheet includes a description of the facility, a description of the facility's receiving waters, a description of the facility's receiving waters attainment/non-attainment assessment status, and a description of any changes to the proposed monitoring/sampling frequency. Section 6 provides the justification for the proposed NPDES effluent limits derived from technology based effluent limits (TBEL), water quality based effluent limits (WQBEL), total maximum daily loading (TMDL), antidegradation, anti-backsliding, and/or whole effluent toxicity (WET). A brief summary of the outlined descriptions has been included in the Summary of Review section.

The subject facility is a 0.0005 MGD (500 gpd) treatment facility. The applicant does not anticipate any proposed upgrades to the treatment facility in the next five years. The NPDES application has been processed as a Small Flow Treatment Facility due to the type of sewage and the design flow rate for the facility. The applicant disclosed the Act 14 requirement to Blair County and Frankstown Township and the notice was mailed by the parties on July 5, 2023. A planning approval letter was not necessary as the facility is neither new or expanding.

Utilizing the DEP's web-based Emap-PA information system, the receiving waters has been determined to be Trib 16304 To Frankstown Branch Juniata River. The sequence of receiving streams that the Trib 16304 To Frankstown Branch Juniata River discharges into are Frankstown Branch Juniata River, Juniata River, and the Susquehanna River which eventually drains into the Chesapeake Bay. Due to the low flow rate generated by the facility, the subject site is not subject to the Chesapeake Bay implementation requirements. The receiving water has protected water usage for warm water fishes (WWF) and migratory fishes (MF). No Class A Wild Trout fisheries are impacted by this discharge. The absence of high quality and/or exceptional value surface waters removes the need for an additional evaluation of anti-degradation requirements.

The Trib 16304 To Frankstown Branch Juniata River is a Category 2 stream listed in the 2022 Integrated List of All Waters (formerly 303d Listed Streams). This stream is an attaining stream that supports aquatic life. The receiving waters is not subject to a total maximum daily load (TMDL) plan to improve water quality in the subject facility's watershed.

The existing permit and proposed permit differ as follows:

- **There are no changes to the monitoring frequency or effluent requirements.**

Sludge use and disposal description and location(s): Sewage sludge/biosolids disposed by Ken Wertz Hauling and Septic Service, Inc.

The proposed permit will expire five (5) years from the effective date.

Based on the review in this report, it is recommended that the permit be drafted. 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.

Any additional information or public review of documents associated with the discharge or facility may be available at PA DEP Southcentral Regional Office (SCRO), 909 Elmerton Avenue, Harrisburg, PA 17110. To make an appointment for file review, contact the SCRO File Review Coordinator at 717.705.4700.

1.0 Applicant

1.1 General Information

This fact sheet summarizes PA Department of Environmental Protection's review for the NPDES renewal for the following subject facility.

Facility Name:	Creany & Davis Residence
NPDES Permit #	PA0266792
Physical Address:	179 Atlas Drive Hollidaysburg, PA 16648
Mailing Address:	179 Atlas Drive Hollidaysburg, PA 16648
Contact:	Alexandra Creany Homeowner Xamc23x@yahoo.com
Consultant:	There was not a consultant utilized for this NPDES renewal.

1.2 Permit History

Permit submittal included the following information.

- NPDES Application
- Effluent Sample Data

2.0 Treatment Facility Summary

2.1.1 Site location

The physical address for the facility is 179 Atlas Drive, Hollidaysburg, PA 16648. A topographical and an aerial photograph of the facility are depicted as Figure 1 and Figure 2.

Figure 1: Topographical map of the subject facility

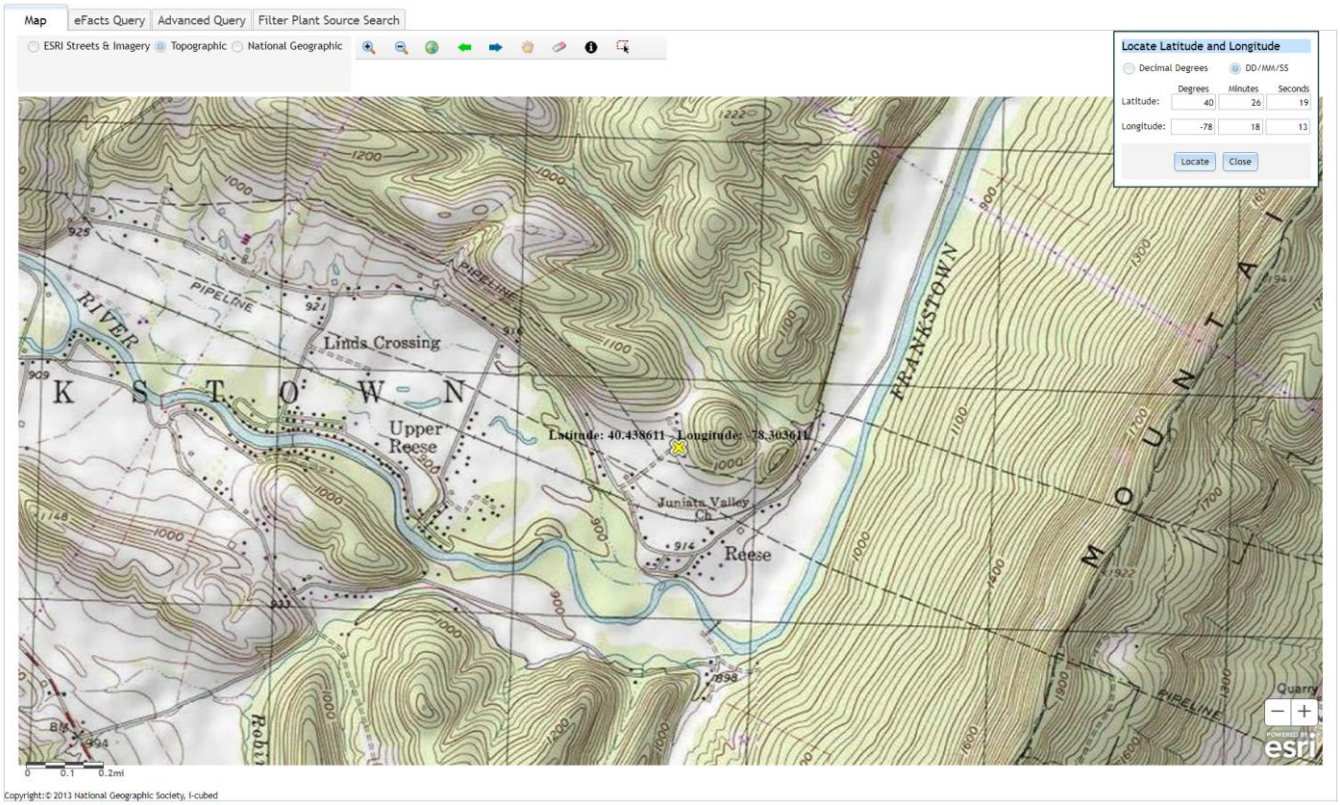
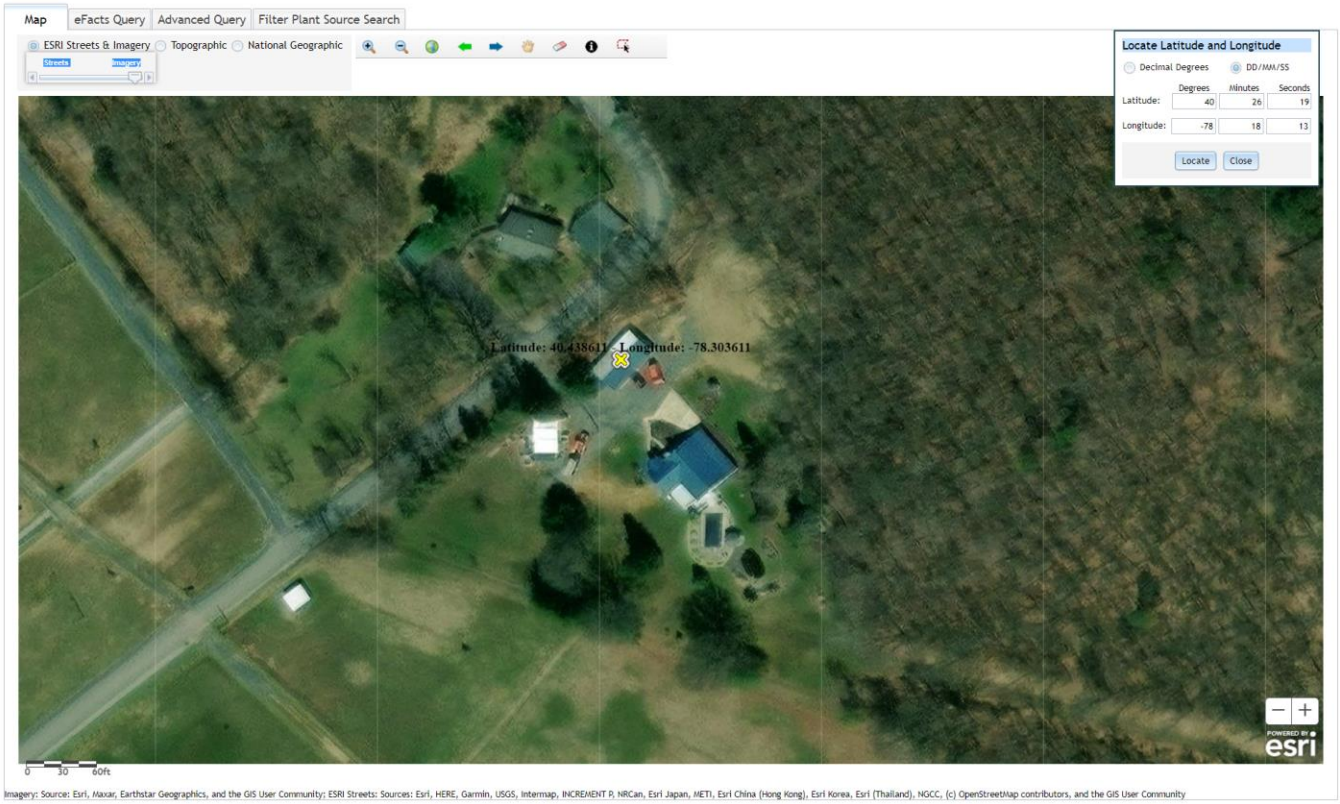


Figure 2: Aerial Photograph of the subject facility



2.2 Description of Wastewater Treatment Process

The subject facility is a 0.0005 MGD (500 gpd) design flow facility. The subject facility treats wastewater using a Norweco Singular 960 aerobic treatment unit, a Norweco Hydro-Kinetic Biofilm Reactor, and a Salcor uv disinfection unit prior to discharge through the outfall. The facility is being evaluated for flow, BOD5, TSS, and fecal coliform. The existing permits limits for the facility is summarized in Section 2.4.

The treatment process is summarized in the table.

Treatment Facility Summary				
Treatment Facility Name: Sfs Alexandra Creany and Richard Davis				
Waste Type	**Degree of Treatment**	**Process Type**	**Disinfection**	**Avg Annual Flow (MGD)**
Sewage	Tertiary	Norweco Singulair Biofilm Reactor	Ultraviolet	0.0005
Hydraulic Capacity (MGD)	**Organic Capacity (lbs/day)**	**Load Status**	**Biosolids Treatment**	**Biosolids Use/Disposal**
0.0005		Not Overloaded		

2.3 Facility Outfall Information

The facility has the following outfall information for wastewater.

Outfall No.	001	**Design Flow (MGD)**	.0005
Latitude	40º 26' 19.00"	**Longitude**	-78º 18' 13.00"
Wastewater Description:	Sewage Effluent		

The subject facility discharge will be to a dry swale. The point of first use was examined by DEP during the planning approval process.

2.4 Existing NPDES Permits Limits

The existing NPDES permit limits are summarized in the table.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. A. For Outfall 001 , **Latitude** 41º 26' 19.00" , **Longitude** 78º 18' 13.00" , **River Mile Index** 0.34 , **Stream Code** 16304

Receiving Waters: Unnamed Tributary to Bigger Run (HQ-CWF, MF)

Type of Effluent: Sewage Effluent

1. The permittee is authorized to discharge during the period from **Permit Effective Date** through **Permit Expiration Date**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
BOD5	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	1000	1/year	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 001

Note: For the current permit, the effective date was June 1, 2019 and the permit expiration date will be May 31, 2024. It does not appear in the above screenshot of the current permit. The dates were inadvertently not included in the current NPDES permit. The correct coordinates on latitude should be 40º 26' 19.00"

3.0 Facility NPDES Compliance History

3.1 Summary of Inspections

A summary of the most recent inspections during the existing permit review cycle is as follows.

The DEP inspector noted the following during the inspection.

07/27/2021: DEP visited the residence but no one was available. The UV light appeared to be in working order. The discharge pipe outfall is located in a small swale along the edge of the driveway. The outfall area looked clear. There was no discharge during the visit.

08/06/2021: The previous owner was Patty Leamer. This inspection report was performed during the Leamer ownership. The NPDES permit for this facility required the homeowner to: (a) check the UV light monthly - sample the discharge and analyze for CBOD5, TSS, and Fecal Coliform yearly - have the treatment system inspected yearly (b) submit an Annual Maintenance Report (AMR) to the DEP yearly. The DEP had no record of receiving AMRs for the 2019-2020 and 2020-2021 monitoring periods.

More recent inspection reports were not available in DEP computer files.

3.2 Summary of Monitoring Data

The table summarizes sampling data from 2021 and 2023.

The yellow highlight represents non-compliance with NPDES permit limits.

Sampling Results			
Date	CBOD	TSS	Fecal Coliform
	mg/l	mg/l	MPN/100 mL
NPDES Permit Limits	10	10	200
12/2/2021	8.71	13	69
7/13/2023	<3	<4	870.4
Note:			
Yellow highlight represents non-compliance with NPDES permit limits			
The IMAX for fecal coliform is 1000 MPN/100 mL. The annual average limit is 200 MPN/100 mL.			

3.3 Non-Compliance- Enforcement Actions

A summary of the non-compliance enforcement actions for the current permit cycle is as follows:

Beginning on June 1, 2019 to August 1, 2023, there were no observed enforcement actions.

3.4 Summary of Biosolids Disposal

A summary of the biosolids disposed of from the facility is as follows.

On May 20, 2022, sewage sludge/biosolids was disposed by Ken Wertz Hauling and Septic Service, Inc.

3.5 Open Violations

No open violations existed as of August 2023.

4.0 Receiving Waters and Water Supply Information Detail Summary

4.1 Receiving Waters

The receiving waters has been determined to be Trib 16304 To Frankstown Branch Juniata River. The sequence of receiving streams that the Trib 16304 To Frankstown Branch Juniata River discharges into are Frankstown Branch Juniata River, Juniata River, and the Susquehanna River which eventually drains into the Chesapeake Bay.

4.2 Public Water Supply (PWS) Intake

The closest PWS to the subject facility is Mifflintown MA (PWS ID #4340008) located approximately 93 miles downstream of the subject facility on the Juniata River. Based upon the distance and the flow rate of the facility, the PWS should not be impacted.

4.3 Class A Wild Trout Streams

Class A Wild Trout Streams are waters that support a population of naturally produced trout of sufficient size and abundance to support long-term and rewarding sport fishery. DEP classifies these waters as high-quality coldwater fisheries.

The information obtained from EMAP suggests that no Class A Wild Trout Fishery will be impacted by this discharge.

4.4 2022 Integrated List of All Waters (303d Listed Streams)

Section 303(d) of the Clean Water Act requires States to list all impaired surface waters not supporting uses even after appropriate and required water pollution control technologies have been applied. The 303(d) list includes the reason for impairment which may be one or more point sources (i.e. industrial or sewage discharges) or non-point sources (i.e. abandoned mine lands or agricultural runoff and the pollutant causing the impairment such as metals, pH, mercury or siltation).

States or the U.S. Environmental Protection Agency (EPA) must determine the conditions that would return the water to a condition that meets water quality standards. As a follow-up to listing, the state or EPA must develop a Total Maximum Daily Load (TMDL) for each waterbody on the list. A TMDL identifies allowable pollutant loads to a waterbody from both point and non-point sources that will prevent a violation of water quality standards. A TMDL also includes a margin of safety to ensure protection of the water.

The water quality status of Pennsylvania's waters uses a five-part categorization (lists) of waters per their attainment use status. The categories represent varying levels of attainment, ranging from Category 1, where all designated water uses are met to Category 5 where impairment by pollutants requires a TMDL for water quality protection.

The receiving waters is listed in the 2022 Pennsylvania Integrated Water Quality Monitoring and Assessment Report as a Category 2 waterbody. The surface waters is an attaining stream that supports aquatic life. The designated use has been classified as protected waters for warm water fishes (WWF) and migratory fishes (MF).

4.5 Low Flow Stream Conditions

Water quality modeling estimates are based upon conservative data inputs. The data are typically estimated using either a stream gauge or through USGS web based StreamStats program. The NPDES effluent limits are based upon the combined flows from both the stream and the facility discharge.

A conservative approach to estimate the impact of the facility discharge using values which minimize the total combined volume of the stream and the facility discharge. The volumetric flow rate for the stream is based upon the seven-day, 10-year low flow (Q710) which is the lowest estimated flow rate of the stream during a 7 consecutive day period that occurs once in 10 -year time period. The facility discharge is based upon a known design capacity of the subject facility.

eMAP does not show a stream along Atlas Drive. However, StreamStats does show a stream (blue lines) along Atlas Drive. Since the stream is presumably small, StreamStats was not able to estimate a Q710. The low flow stream estimates were based upon the stream along Trib 16304 To Frankstown Branch Juniata River.

The low flow yield and the Q710 for the subject facility was estimated as shown below.

The low flow yield is 0.0728 $ft^3/s/mi^2$ and the Q710 is 0.0364 ft^3/s.

4.6 Summary of Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	.0005
Latitude	40º 26' 19"	Longitude	-78º 18' 13"
Quad Name		Quad Code	
Wastewater Description:	Sewage Effluent		
Receiving Waters	Unnamed Tributary of Frankstown Branch Juniata River (WWF, MF)	Stream Code	16304
NHD Com ID	65608596	RMI	0.34
Drainage Area	0.5	Yield (cfs/mi^2)	0.0728
Q_{7-10} Flow (cfs)	0.0364	Q_{7-10} Basis	StreamStats
Elevation (ft)	947	Slope (ft/ft)	
Watershed No.	11-A	Chapter 93 Class.	WWF, MF
Existing Use	Same as Chapter 93 class.	Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Attaining Use(s) supports aquatic life		
Cause(s) of Impairment	Not applicable		
Source(s) of Impairment	Not applicable		
TMDL Status	Not applicable	Name	

Background/Ambient Data		Data Source
pH (SU)	Not appl.	
Temperature (°F)	Not appl.	
Hardness (mg/L)	Not appl.	
Other:		

Nearest Downstream Public Water Supply Intake	Mifflintown MA		
PWS Waters	Juniata River	Flow at Intake (cfs)	
PWS RMI	37	Distance from Outfall (mi)	93

5.0: Overview of Presiding Water Quality Standards

5.1 General

There are at least six (6) different policies which determines the effluent performance limits for the NPDES permit. The policies are technology based effluent limits (TBEL), water quality based effluent limits (WQBEL), antidegradation, total maximum daily loading (TMDL), anti-backsliding, and whole effluent toxicity (WET) The effluent performance limitations enforced are the selected permit limits that is most protective to the designated use of the receiving waters. An overview of each of the policies that are applicable to the subject facility has been presented in Section 6.

5.2.1 Technology-Based Limitations

TBEL treatment requirements under section 301(b) of the Act represent the minimum level of control that must be imposed in a permit issued under section 402 of the Act (40 CFR 125.3). Small flow treatment facilities are confined to permit limitations

promulgated by the Small Flow Treatment Facilities Manual (Document # 36-0300-002) and the SOP- New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Application (Revised May 17, 2019).

Parameter	Avg Mo	IMAX	Sample Type	Frequency: SRSTPs
Flow (GPD)	Report	XXX	Estimate	1/year
BOD5 (mg/l)	10	20	Grab	1/year
TSS (mg/l)	10	20	Grab	1/year
TRC (mg/l)	Report for SRSTPs		Grab	1/month
Fecal Coliform (No/100 ml)	200 Geometric Mean		Grab	1/year

5.3 Water Quality-Based Limitations

WQBEL are based on the need to attain or maintain the water quality criteria and to assure protection of designated and existing uses (PA Code 25, Chapter 92a.2). The subject facility that is typically enforced is the more stringent limit of either the TBEL or the WQBEL.

Determination of WQBEL is calculated by spreadsheet analysis or by a computer modeling program developed by DEP. DEP permit engineers utilize the following computing programs for WQBEL permit limitations: (1) MS Excel worksheet for Total Residual Chorine (TRC); (2) WQM 7.0 for Windows Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen Version 1.1 (WQM Model) and (3) Toxics using DEP Toxics Management Spreadsheet for Toxics pollutants.

The modeling point nodes utilized for this facility are summarized below.

General Data 1	*(Modeling Point #1)*	*Units*
Stream Code	16304	
River Mile Index	0.34	miles
Elevation	947	feet
Latitude	40.438611	
Longitude	-78.303611	
Drainage Area	0.5	sq miles
Low Flow Yield	0.0728	cfs/sq mile

5.3.1 Water Quality Modeling 7.0

The facility is not subject to water quality modeling.

5.3.2 Toxics Modeling

The facility is not subject to toxics modeling.

5.3.3 Whole Effluent Toxicity (WET)

The facility is not subject to WET.

5.4 Total Maximum Daily Loading (TMDL)

5.4.1 TMDL

The goal of the Clean Water Act (CWA), which governs water pollution, is to ensure that all of the Nation's waters are clean and healthy enough to support aquatic life and recreation. To achieve this goal, the CWA created programs designed to regulate and reduce the amount of pollution entering United States waters. Section 303(d) of the CWA requires states to assess their waterbodies to identify those not meeting water quality standards. If a waterbody is not meeting standards, it is listed as impaired and reported to the U.S. Environmental Protection Agency. The state then develops a plan to clean up the impaired waterbody. This plan includes the development of a Total Maximum Daily Load (TMDL) for the pollutant(s) that were found to be the cause of the water quality violations. A Total Maximum Daily Load (TMDL) calculates the maximum amount of a specific pollutant that a waterbody can receive and still meet water quality standards.

A TMDL for a given pollutant and waterbody is composed of the sum of individual wasteload allocations (WLAs) for point sources and load allocations (LAs) for nonpoint sources and natural background levels. In addition, the TMDL must include an implicit or explicit margin of safety (MOS) to account for the uncertainty in the relationship between pollutant loads and the quality of the receiving waterbody. The TMDL components are illustrated using the following equation:

$$TMDL = \Sigma WLAs + \Sigma LAs + MOS$$

Pennsylvania has committed to restoring all impaired waters by developing TMDLs and TMDL alternatives for all impaired waterbodies. The TMDL serves as the starting point or planning tool for restoring water quality.

5.4.1.1 Local TMDL

The subject facility does not discharge into a local TMDL.

5.4.1.2 Chesapeake Bay TMDL Requirement

The Chesapeake Bay Watershed is a large ecosystem that encompasses approximately 64,000 square miles in Maryland, Delaware, Virginia, West Virginia, Pennsylvania, New York and the District of Columbia. An ecosystem is composed of interrelated parts that interact with each other to form a whole. All of the plants and animals in an ecosystem depend on each other in some way. Every living thing needs a healthy ecosystem to survive. Human activities affect the Chesapeake Bay ecosystem by adding pollution, using resources and changing the character of the land.

Most of the Chesapeake Bay and many of its tidal tributaries have been listed as impaired under Section 303(d) of the federal Water Pollution Control Act ("Clean Water Act"), 33 U.S.C. § 1313(d). While the Chesapeake Bay is outside the boundaries of Pennsylvania, more than half of the State lies within the watershed. Two major rivers in Pennsylvania are part of the Chesapeake Bay Watershed. They are (a) the Susquehanna River and (b) the Potomac River. These two rivers total 40 percent of the entire Chesapeake Bay watershed.

The overall management approach needed for reducing nitrogen, phosphorus and sediment are provided in the Bay TMDL document and the Phase I, II, and III WIPs which is described in the Bay TMDL document and Executive Order 13508.

The Bay TMDL is a comprehensive pollution reduction effort in the Chesapeake Bay watershed identifying the necessary pollution reductions of nitrogen, phosphorus and sediment across the seven Bay watershed jurisdictions of Delaware, Maryland, New York, Pennsylvania, Virginia, West Virginia and the District of Columbia to meet applicable water quality standards in the Bay and its tidal waters.

The Watershed Implementation Plans (WIPs) provides objectives for how the jurisdictions in partnership with federal and local governments will achieve the Bay TMDL's nutrient and sediment allocations.

Phase 3 WIP provides an update on Chesapeake Bay TMDL implementation activities for point sources and DEP's current implementation strategy for wastewater. The latest revision of the supplement was September 13, 2021.

The Chesapeake Bay TMDL (Appendix Q) categorizes point sources into four sectors:

- Sector A- significant sewage dischargers;
- Sector B- significant industrial waste (IW) dischargers;
- Sector C- non-significant dischargers (both sewage and IW facilities); and

- Sector D- combined sewer overflows (CSOs).

All sectors contain a listing of individual facilities with NPDES permits that were believed to be discharging at the time the TMDL was published (2010). All sectors with the exception of the non-significant dischargers have individual wasteload allocations (WLAs) for TN and TP assigned to specific facilities. Non-significant dischargers have a bulk or aggregate allocation for TN and TP based on the facilities in that sector that were believed to be discharging at that time and their estimated nutrient loads.

Cap Loads will be established in permits as Net Annual TN and TP loads (lbs/yr) that apply during the period of October 1 – September 30. For facilities that have received Cap Loads in any other form, the Cap Loads will be modified accordingly when the permits are renewed.

Offsets have been incorporated into Cap Loads in several permits issued to date. From this point forward, permits will be issued with the WLAs as Cap Loads and will identify Offsets separately to facilitate nutrient trading activities and compliance with the TMDL.

Based upon the supplement the subject facility has been categorized as a Sector C discharger. The supplement defines Sector C as a non-significant dischargers include sewage facilities (Phase 4 facilities: ≥ 0.2 MGD and < 0.4 MGD and Phase 5 facilities: > 0.002 MGD and < 0.2 MGD), small flow/single residence sewage treatment facilities (≤ 0.002 MGD), and non-significant IW facilities, all of which may be covered by statewide General Permits or may have individual NPDES permits.

At this time, there are approximately 850 Phase 4 and 5 sewage facilities, approximately 715 small flow sewage treatment facilities covered by a statewide General Permit, and approximately 300 non-significant IW facilities.

Due to the low flow rate generated by the facility, this facility is not subject to Sector C monitoring requirements.

5.5 Anti-Degradation Requirement

Chapter 93.4a of the PA regulations requires that surface water of the Commonwealth of Pennsylvania may not be degraded below levels that protect the existing uses. The regulations specifically state that *Existing instream water uses and the level of water quality necessary to protect the existing uses shall be maintained and protected*. Antidegradation requirements are implemented through DEP's guidance manual entitled Water Quality Antidegradation Implementation Guidance (Document #391-0300-02).

The policy requires DEP to protect the existing uses of all surface waters and the existing quality of High Quality (HQ) and Exceptional Value (EV) Waters. Existing uses are protected when DEP makes a final decision on any permit or approval for an activity that may affect a protected use. Existing uses are protected based upon DEP's evaluation of the best available information (which satisfies DEP protocols and Quality Assurance/Quality Control (QA/QC) procedures) that indicates the protected use of the waterbody.

For a new, additional, or increased point source discharge to an HQ or EV water, the person proposing the discharge is required to utilize a nondischarge alternative that is cost-effective and environmentally sound when compared with the cost of the proposed discharge. If a nondischarge alternative is not cost-effective and environmentally sound, the person must use the best available combination of treatment, pollution prevention, and wastewater reuse technologies and assure that any discharge is nondegrading. In the case of HQ waters, DEP may find that after satisfaction of intergovernmental coordination and public participation requirements lower water quality is necessary to accommodate important economic or social development in the area in which the waters are located. In addition, DEP will assure that cost-effective and reasonable best management practices for nonpoint source control in HQ and EV waters are achieved.

The subject facility's discharge will be to a non-special protection waters and the permit conditions are imposed to protect existing instream water quality and uses. Neither HQ waters or EV waters is impacted by this discharge.

5.6 Anti-Backsliding

Anti-backsliding is a federal regulation which prohibits a permit from being renewed, reissued, or modified containing effluent limitations which are less stringent than the comparable effluent limitations in the previous permit (40 CFR 122.l.1 and 40 CFR 122.l.2). A review of the existing permit limitations with the proposed permit limitations confirm that the facility is consistent with anti-backsliding requirements. The facility has proposed effluent limitations that are as stringent as the existing permit.

6.0 NPDES Parameter Details

The basis for the proposed sampling and their monitoring frequency that will appear in the permit for each individual parameter are itemized in this Section. The final limits are the more stringent of technology based effluent treatment (TBEL) requirements, water quality based (WQBEL) limits, TMDL, antidegradation, anti-degradation, or WET.

The reader will find in this section:

a) a justification of recommended permit monitoring requirements and limitations for each parameter in the proposed NPDES permit;
b) a summary of changes from the existing NPDES permit to the proposed permit; and
c) a summary of the proposed NPDES effluent limits.

6.1 Recommended Monitoring Requirements and Effluent Limitations

A summary of the recommended monitoring requirements and effluent limitations are itemized in the tables. The table is categorized by Conventional Pollutants and Disinfection.

6.1.1 Conventional Pollutants and Disinfection

Summary of Proposed NPDES Parameter Details for Conventional Pollutants and Disinfection Creany and Davis Residence, PA266792			
Parameter	**Permit Limitation Required by[1]:**	**Recommendation**	
BOD	TBEL	Monitoring:	The monitoring frequency shall be 1x/yr as a grab sample (SOP)
		Effluent Limit:	Effluent limits shall not exceed 10 mg/l as an average monthly (SOP)
		Rationale:	The monitoring frequency and the effluent limits assigned by the SOP.
TSS	TBEL	Monitoring:	The monitoring frequency shall be 1x/yr as a grab sample (SOP)
		Effluent Limit:	Effluent limits shall not exceed 10 mg/l as an average monthly (SOP)
		Rationale:	The monitoring frequency and the effluent limits assigned by the SOP.
Fecal Coliform	TBEL	Monitoring:	The monitoring frequency shall be 1x/yr as a grab sample (SOP)
		Effluent Limit:	Effluent limits shall not exceed 200 MPN as a geometric mean (SOP).
		Rationale:	The monitoring frequency and the effluent limits assigned by the SOP.
Notes:			
1 The NPDES permit was limited by (a) anti-Backsliding, (b) Anti-Degradation, (c) SOP, (d) TBEL, (e) TMDL, (f) WQBEL, or (g) WET			
2 Monitoring frequency based on flow rate of 0.0005 MGD.			
3 SOP, New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications, Revised January 13, 2015			
4 Water Quality Antidegradation Implementaton Guidance (Document # 391-0300-002)			
5 Phase 2 Watershed Implementation Plan Wastewater Supplement, Revised September 6, 2017			

6.2 Summary of Changes From Existing Permit to Proposed Permit

A summary of how the proposed NPDES permit differs from the existing NPDES permit is summarized as follows.

- There are no changes to the monitoring frequency or effluent requirements.

6.3.1 Summary of Proposed NPDES Effluent Limits

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

The proposed NPDES effluent limitations are summarized in the table below.

PART A - EFFLUENT LIMITATIONS, MONITORING, RECORDKEEPING AND REPORTING REQUIREMENTS

I. A. For Outfall 001 , **Latitude** 40º 26' 19.00" , **Longitude** 78º 18' 13.00" , **River Mile Index** 0.34 , **Stream Code** 16304

Receiving Waters: Unnamed Tributary of Frankstown Branch Juniata River (WWF, MF)

Type of Effluent: Sewage Effluent

1. The permittee is authorized to discharge during the period from **Permit Effective Date** through **Permit Expiration Date**.
2. Based on the anticipated wastewater characteristics and flows described in the permit application and its supporting documents and/or amendments, the following effluent limitations and monitoring requirements apply (see also Additional Requirements and Footnotes).

Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (MGD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
BOD5	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
TSS	XXX	XXX	XXX	10.0	XXX	20.0	1/year	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200	XXX	1000	1/year	Grab

Samples taken in compliance with the monitoring requirements specified above shall be taken at the following location(s):

at Outfall 001

6.3.2 Summary of Proposed Permit Part C Conditions

The subject facility has the following Part C conditions.

- SFTF Maintenance

StreamStats Report

Region ID: PA
Workspace ID: PA20230630155842640000
Clicked Point (Latitude, Longitude): 40.43754, -78.30656
Time: 2023-06-30 11:59:03 -0400

Creany Residence PA0266792 Modeling Point #1 June 2023

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	100	percent
DRNAREA	Area that drains to a point on a stream	0.0394	square miles
PRECIP	Mean Annual Precipitation	39	inches
ROCKDEP	Depth to rock	5.6	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	0	miles per square mile

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.0394	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	39	inches	35	50.4
STRDEN	Stream Density	0	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	5.6	feet	3.32	5.65
CARBON	Percent Carbonate	100	percent	0	99

Low-Flow Statistics Flow Report [Low Flow Region 2]

Statistic	Value	Unit

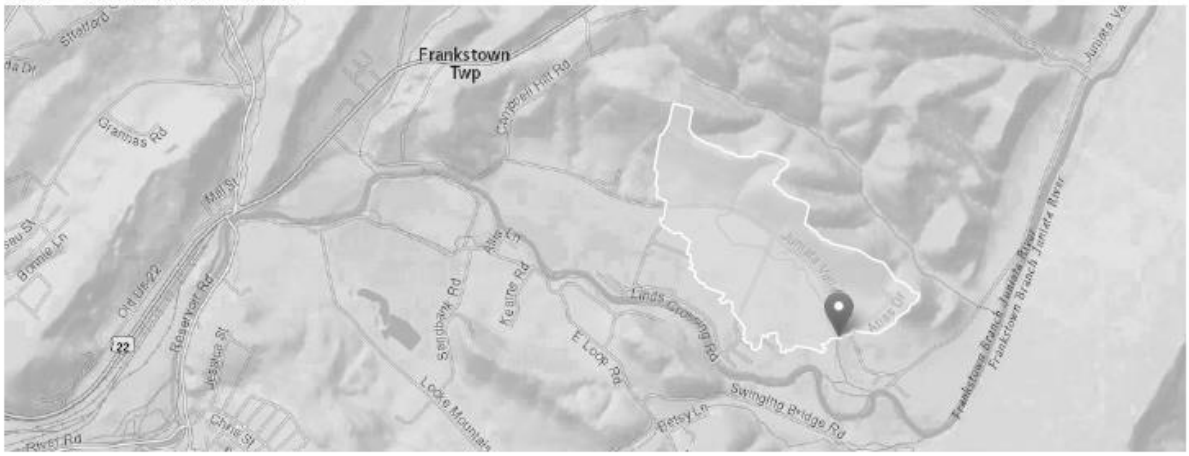
Low-Flow Statistics Citations

Application Version: 4.16.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1

REVISED

StreamStats Report

Region ID: PA
Workspace ID: PA20230703130925153000
Clicked Point (Latitude, Longitude): 40.43682, -78.30761
Time: 2023-07-03 09:09:45 -0400



Creany Residence PA0266792 Modeling Point #1 July 2023

Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
CARBON	Percentage of area of carbonate rock	100	percent
DRNAREA	Area that drains to a point on a stream	0.5	square miles
PRECIP	Mean Annual Precipitation	39	inches
ROCKDEP	Depth to rock	4.6	feet
STRDEN	Stream Density -- total length of streams divided by drainage area	2.07	miles per square mile

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 2]

Parameter Code	Parameter Name	Value	Units	Min Limit	Max Limit
DRNAREA	Drainage Area	0.5	square miles	4.93	1280
PRECIP	Mean Annual Precipitation	39	inches	35	50.4
STRDEN	Stream Density	2.07	miles per square mile	0.51	3.1
ROCKDEP	Depth to Rock	4.6	feet	3.32	5.65
CARBON	Percent Carbonate	100	percent	0	99

Low-Flow Statistics Disclaimers [Low Flow Region 2]

One or more of the parameters is outside the suggested range. Estimates were extrapolated with unknown errors.

Low-Flow Statistics Flow Report [Low Flow Region 2]

Statistic	Value	Unit
7 Day 2 Year Low Flow	0.0761	ft^3/s
30 Day 2 Year Low Flow	0.0937	ft^3/s
7 Day 10 Year Low Flow	0.0364	ft^3/s
30 Day 10 Year Low Flow	0.0456	ft^3/s
90 Day 10 Year Low Flow	0.0583	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/)

Application Version: 4.16.0
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1