

Southwest Regional Office CLEAN WATER PROGRAM

| Application Type | New |
|------------------|--------|
| Wastewater Type | Sewage |
| Facility Type | SRSTP |

NPDES PERMIT FACT SHEET INDIVIDUAL SFTF/SRSTP

| Application No. | PA0255921 |
|------------------|-----------|
| APS ID | 1042426 |
| Authorization ID | 1360275 |

| oplicant Name | Mr. Dean A. Gearhart | Facility Name | Gerhart SRSTP |
|----------------------|-----------------------------|------------------|---------------------------|
| oplicant Address | 573 E Portersville Road | Facility Address | 106 Muller Hill Road |
| | Portersville, PA 16051-2117 | | Zelienople, PA 16063-3706 |
| oplicant Contact | Mr. Dean A. Gearhart | Facility Contact | Same as Applicant |
| oplicant Phone | (724) 713-6394 | Facility Phone | Same as Applicant |
| ient ID | 363946 | Site ID | 850496 |
| C Code | 8800 | Municipality | Marion Township |
| C Description | Private Households | County | Beaver |
| ate Application Rec | eived June 21, 2021 | WQM Required | YES |
| ate Application Acce | epted | WQM App. No. | 0421403 |

Summary of Review

The applicant proposes to construct a 400 GPD single residence sewage treatment plant to replace a malfunctioning on-lot system at an existing 3 bedroom home in Marion Township, Beaver County.

WQM Permit 0421403 will be issued concurrently with this NPDES Permit. The discharge is to UNT to Muntz Run, which is classified as at WWF located in State Watershed 20-C.

The WQM Permit approves the construction of sewage facilities consisting of:

- A Singulair Bio-Kinetic Model 960-500 treatment tank utilizing the extended aeration process
- A Hydro-Kinetic Bio-Film Reactor (HKBFR)
- A Model AT 1500 UV disinfection system

BOD5, TSS, and Fecal Coliform limitations were imposed based upon the Department's SOP – New and Reissuance Individual SFTF NPDES Permits. Proposed effluent limits and monitoring requirements can be found on page 4 of this document.

Technology-based effluent limits for pH will be imposed based upon State Regulation 95.2(1).

Sampling frequency for all parameters is 1/year which is consistent with the Department's SOP - New and Reissuance of SFTF Individual NPDES Permit Applications.

For SFTFs / SRSTPs with UV disinfection systems, it is not necessary to require UV intensity or transmittance monitoring in the permit.

| Approve | Deny | Signatures | Date |
|---------|------|---|---------------|
| X | | William C. Mitchell, E.I.T. / Project Manager | July 27, 2021 |
| Х | | Christopher J. Kriley, P.E. / Program Manager | July 27, 2021 |

Summary of Review

Sewage discharges with design flows < 2,000 gpd do not require monitoring for Total Nitrogen and Total Phosphorus in new and reissued permits.

The applicant does not use eDMR and current policy does not require eDMR to be used for SRSTPs.

Act 537 Planning was approved for this project on May 21, 2021.

The Act – 14 PL 834 Municipal Notification were provided by the June 7, 2021 letters and no comments were received.

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.

| ischarge, Receiving Waters and Water Supply Informat | ion | |
|--|-------------------------------|------------------|
| | | |
| Outfall No. 001 | Design Flow (MGD) | 0.0004 |
| Latitude 40° 46' 44.00" | Longitude | -80° 09' 38.00" |
| Quad Name | Quad Code | |
| Wastewater Description: Sewage Effluent | | |
| Unnamed Tributary to Muntz Run | | |
| Receiving Waters (WWF) | Stream Code | 63822 |
| NHD Com ID 126223515 | _ RMI | 0.46 |
| Drainage Area 0.44 | Yield (cfs/mi ²) | 0.00668 |
| Q ₇₋₁₀ Flow (cfs) 0.00294 | Q ₇₋₁₀ Basis | USGS StreamStats |
| Elevation (ft) 967 | Slope (ft/ft) | |
| Watershed No. 20-C | Chapter 93 Class. | WWF |
| Existing Use | Existing Use Qualifier | |
| Exceptions to Use | Exceptions to Criteria | |
| Assessment Status Attaining Use(s) | | |
| Cause(s) of Impairment | | |
| Source(s) of Impairment | | |
| TMDL Status | Name | |
| Background/Ambient Data | Data Source | |
| pH (SU) | dia Oddice | |
| Temperature (°F) | | |
| Hardness (mg/L) | | |
| Other: | | |
| Nearest Downstream Public Water Supply Intake B | Beaver Falls Municipal Author | rity |
| PWS Waters Beaver River | Flow at Intake (cfs) | . |
| PWS RMI | Distance from Outfall (mi) | |

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" (362-0400-001), SOPs and/or BPJ.

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

| | Effluent Limitations | | | | Monitoring Requirements | | | |
|-----------------------------|--------------------------|-------------------|-----------------|-----------------------|-------------------------|---------------------|--------------------------|----------------|
| Parameter | Mass Units (lbs/day) (1) | | | Concentrations (mg/L) | | | Minimum ⁽²⁾ | Required |
| raiailletei | Average Monthly | Average Weekly | Minimum | Annual Average | Maximum | Instant. Maximum | Measurement Frequency | Sample Type |
| Flow (MGD) | 0.0004 Annl Avg | XXX | XXX | XXX | XXX | XXX | 1/year | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 Inst Min | XXX | XXX | 9.0 | 1/year | Grab |
| 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 | XXX | 1/year | Grab |

Compliance Sampling Location: Outfall # 001

Other Comments: New Permit Issuance

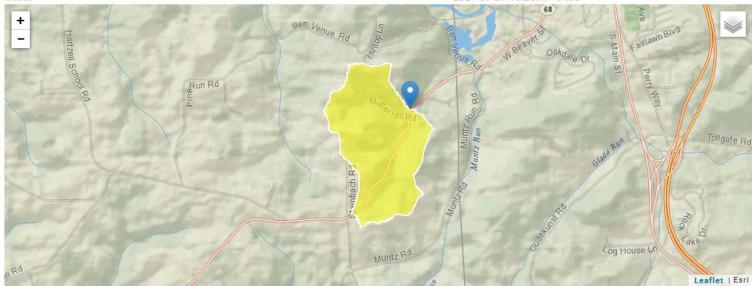
StreamStats Report

Region ID: Workspace ID:

Clicked Point (Latitude, Longitude):

Time:

PA PA20210727172031553000 40.77890, -80.16043 2021-07-27 13:20:47 -0400



| Basin Characteristics | | | |
|-----------------------|---|-------|--------------|
| Parameter Code | Parameter Description | Value | Unit |
| DRNAREA | Area that drains to a point on a stream | 0.44 | square miles |
| ELEV | Mean Basin Elevation | 1170 | feet |

Low-Flow Statistics Parameters [Low Flow Region 4]

| Parameter Code | Parameter Name | Value | Units | Min Limit | Max Limit |
|----------------|----------------------|-------|--------------|-----------|-----------|
| DRNAREA | Drainage Area | 0.44 | square miles | 2.26 | 1400 |
| ELEV | Mean Basin Elevation | 1170 | 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 | 0.0108 | ft^3/s |
| 30 Day 2 Year Low Flow | 0.0216 | ft^3/s |
| 7 Day 10 Year Low Flow | 0.00294 | ft^3/s |
| 30 Day 10 Year Low Flow | 0.00669 | ft^3/s |
| 90 Day 10 Year Low Flow | 0.0142 | 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.

USGS Data Disclaimer: Unless otherwise stated, all data, metadata and related materials are considered to satisfy the quality standards relative to the purpose for which the data were collected. Although these data and associated metadata have been reviewed for accuracy and completeness and approved for release by the U.S. Geological Survey (USGS), no warranty expressed or implied is made regarding the display or utility of the data for other purposes, nor on all computer systems, nor shall the act of distribution constitute any such warranty.

USGS Software Disclaimer: This software has been approved for release by the U.S. Geological Survey (USGS). Although the software has been subjected to rigorous review, the USGS reserves the right to update the software as needed pursuant to further analysis and review. No warranty, expressed or implied, is made by the USGS or the U.S. Government as to the functionality of the software and related material nor shall the fact of release constitute any such warranty. Furthermore, the software is released on condition that neither the USGS nor the U.S. Government shall be held liable for any damages resulting from its authorized or unauthorized use.

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

Application Version: 4.6.1

StreamStats Services Version: 1.2.22 NSS Services Version: 2.1.2