

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

**NPDES PERMIT FACT SHEET
INDIVIDUAL SFTF/SRSTP**

Application No. PA0285218
APS ID 1098457
Authorization ID 1457710

Applicant, Facility and Project Information

| | | | |
|---------------------------|--|------------------|---|
| Applicant Name | <u>Jeffrey D Seivers</u> | Facility Name | <u>Seivers Properties SRSTP</u> |
| Applicant Address | <u>246 Blackwoods Road</u> <u>Freedom, PA 15042-9645</u> | Facility Address | <u>246 Blackwoods Road</u> <u>Freedom, PA 15042-9645</u> |
| Applicant Contact | <u>Jeffrey Seivers</u> | Facility Contact | <u>Same as Applicant</u> |
| Applicant Phone | <u>(724) 494-7667</u> | Facility Phone | <u>Same as Applicant</u> |
| Client ID | <u>380237</u> | Site ID | <u>867586</u> |
| SIC Code | <u>8800</u> | Municipality | <u>New Sewickley Township</u> |
| SIC Description | <u>Private Households</u> | County | <u>Beaver</u> |
| Date Application Received | <u>October 5, 2023</u> | WQM Required | <u>Yes</u> |
| Date Application Accepted | <u>October 13, 2023</u> | WQM App. No. | <u>0423403, processing.</u> |
| Project Description | <u>Application for a new NPDES permit authorize a discharge of a treated Sewage.</u> | | |

Summary of Review

The applicant proposes to construct 500 GPD (1.25 EDUs) Single Residence Sewage Treatment Plant (SRSTP) that will serve an existing four-bedroom dwelling in New Sewickley Township, Beaver County. The proposed SRSTP will replace an existing malfunctioning on-lot system.

WQM Permit 2623400 will be issued concurrently with the final issuance of the NPDES Permit.

The discharge is directly to UNT to Snake Run which is classified as WWF and located in State Watershed 20-C.



This NPDES permit is being issued to approve the operation and discharge of treated sewage effluent from a Single Residence Sewage Treatment Plant (SRSTP) Module 16 consisting of:

- Two in series two compartments septic tanks with a total volume of 1600 gallons.
- One EC7-500-P-P Ecoflo Coco Filter with 0.5 HP Ecoflo integrated pump.
- A DiUV AT 2500 UV Disinfection System preinstalled by the manufacturer.

The Site Plan (attached to the application) shows an average of 200 feet of a schedule 40 PVC pipe that will deliver the effluent from the dwelling to the point of discharge, which is located adjacent to the applicant property (see page 7).

Act 537 Planning was approved for this project on October 2, 2023. The facility has on-lot malfunctions, and therefore, stream discharge is proposed.

A Public Notice indicating that the application was received, was published in the PA Bulletin on December 2, 2023.

| Approve | Deny | Signatures | Date |
|---------|------|---|------------------|
| X | |  Hazim Aldalli / Environmental Engineering Specialist | January 18, 2024 |
| X | |  Christopher Kriley, P.E. / Program Manager | January 22, 2024 |

Summary of Review

The Act – 14 PL 834 Municipal Notifications were provided by the May 19, 2023 letters and no comments were received.

The applicant has no open, nor unresolved violations.

Permit issuance is recommended.

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 and Stream Data – 2 - Receiving Waters and PWS

| Discharge, Receiving Waters and Water Supply Information | | | |
|--|---|------------------------------|-------------------------|
| Outfall No. | <u>001</u> | Design Flow (MGD) | <u>0.0005</u> |
| Latitude | <u>40° 42' 22.82"</u> | Longitude | <u>-80° 13' 0.2"</u> |
| Quad Name | <u>Baden</u> | Quad Code | <u>40080F2</u> |
| Wastewater Description: <u>Sewage Effluent</u> | | | |
| Receiving Waters | <u>Unnamed Tributary to Snake Run (WWF)</u> | Stream Code | <u>36565</u> |
| NHD Com ID | <u>99678162</u> | RMI | <u>0.0900</u> |
| Drainage Area | <u>0.25</u> | Yield (cfs/mi ²) | <u>0.0057</u> |
| Q ₇₋₁₀ Flow (cfs) | <u>0.00142</u> | Q ₇₋₁₀ Basis | <u>USGS StreamStats</u> |
| Elevation (ft) | <u>1112</u> | Slope (ft/ft) | <u>0.006</u> |
| Watershed No. | <u>20-G</u> | Chapter 93 Class. | <u>WWF</u> |
| Existing Use | <u></u> | Existing Use Qualifier | <u></u> |
| Exceptions to Use | <u>None.</u> | Exceptions to Criteria | <u>None.</u> |
| Assessment Status | <u>Attaining Use(s): Aquatic Life</u> | | |
| Cause(s) of Impairment | <u></u> | | |
| Source(s) of Impairment | <u></u> | | |
| TMDL Status | <u></u> | Name | <u></u> |
| Background/Ambient Data | | Data Source | |
| pH (SU) | <u></u> | | <u></u> |
| Temperature (°F) | <u></u> | | <u></u> |
| Hardness (mg/L) | <u></u> | | <u></u> |
| Other: | <u></u> | | <u></u> |
| Nearest Downstream Public Water Supply Intake | <u>CENTER TWP WATER AUTH</u> | | |
| PWS Waters | <u>Ohio River</u> | Flow at Intake (cfs) | <u>4730</u> |
| PWS RMI | <u>13.13</u> | Distance from Outfall (mi) | <u>>15.0</u> |

Changes Since Last Permit Issuance: N/A. This is a new permit.

Other Comments: None.

| Treatment Facility Summary | | | | |
|---|-----------------------------------|----------------------|----------------------------|-------------------------------|
| Treatment Facility Name: Seivers Properties SRSTP. | | | | |
| WQM Permit No. | | Issuance Date | | |
| 0423403 | | Processing | | |
| Waste Type | Degree of Treatment | Process Type | Disinfection | Avg Annual Flow (MGD) |
| Sewage | Tertiary | Extended Aeration | Ultraviolet | 0.0005 |
| Hydraulic Capacity (MGD) | Organic Capacity (lbs/day) | Load Status | Biosolids Treatment | Biosolids Use/Disposal |
| 0.0005 | 0.90 | Not Overloaded | Aerobic Tank | None/Semi Annual Cleaning |

Changes Since Last Permit Issuance: N/A (New Facility).

Development of Effluent Limitations

| | | | |
|--------------------|----------------|--------------------------|---------------|
| Outfall No. | 001 | Design Flow (MGD) | 0.0005 |
| Latitude | 40° 42' 22.82" | Longitude | -80° 13' 0.2" |

Wastewater Description: Treated Sewage Effluent.

Technology-Based Limitations (TBELs)

The following effluent limitations and monitoring requirements, at a minimum, will be established in all new and renewed SRSTP permits based on the requirements of DEP’s “Standard Operating Procedure (SOP) for Clean Water Program New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Application” (SOP No. BCW-PMT-003, Version 1.8, Final, November 9, 2012, Revised May 17, 2019).

| Parameter | Avg | IMAX | Sample Type | Frequency: SFTFs | Frequency: SRSTPs |
|-----------------------------|---|----------|---------------------------------------|---------------------|----------------------|
| Flow (GPD) | Report | XXX | Estimate (SRSTPs) Measured (SFTFs) | 1/month | 1/year |
| BOD5 (mg/L) | 10 | 20 | Grab | 1/month | 1/year |
| TSS (mg/L) | 10 | 20 | Grab | 1/month | 1/year |
| pH* | 6.0 S.U. Inst. Min. | 9.0 S.U. | Grab | 1/month | 1/year |
| TRC (mg/L) | Report for SRSTPs; Use TRC Spreadsheet to determine WQBELs or 0.02 mg/L for SFTFs | | Grab | 1/month | 1/year |
| Fecal Coliform (No./100 ml) | 200 Geometric Mean** (SFTFs) / Average (SRSTPs) | | Grab | 1/month | 1/year |

* Technology-Based effluent limits for pH will be imposed based upon Federal Regulation 133.102(c) and State Regulation 95.2(1).

** Use the Geometric Mean if the Sampling Frequency is at least 1/month. Use Annual Average, Semi-Annual Average or Quarterly Average if the Sampling Frequency is less than 1/month.

Additional Considerations:

After checking on the proposed treatment plant technical specs, this treatment unit can achieve the stringent limits imposed since it is included within the plant’s design manual, and it is NSF approved.

BOD₅ limitations will be imposed instead of CBOD₅ which reflect the most stringent limitation amongst the Technology-Based Effluent Limitations and based upon the Department’s SOP – New and Reissuance Individual SRSTP NPDES Permits, and per DEP’s Small Treatment Facilities Manual (Nov. 2023).

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

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

Sewage discharges with design flows < 2,000 gpd do not require monitoring for Total Nitrogen and Total Phosphorus in new and reissued permits per Department’s *SOP- New and Reissuance of SRSTP Individual NPDES Permit Applications*. Therefore, no nutrient monitoring will be imposed at Outfall 001.

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

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

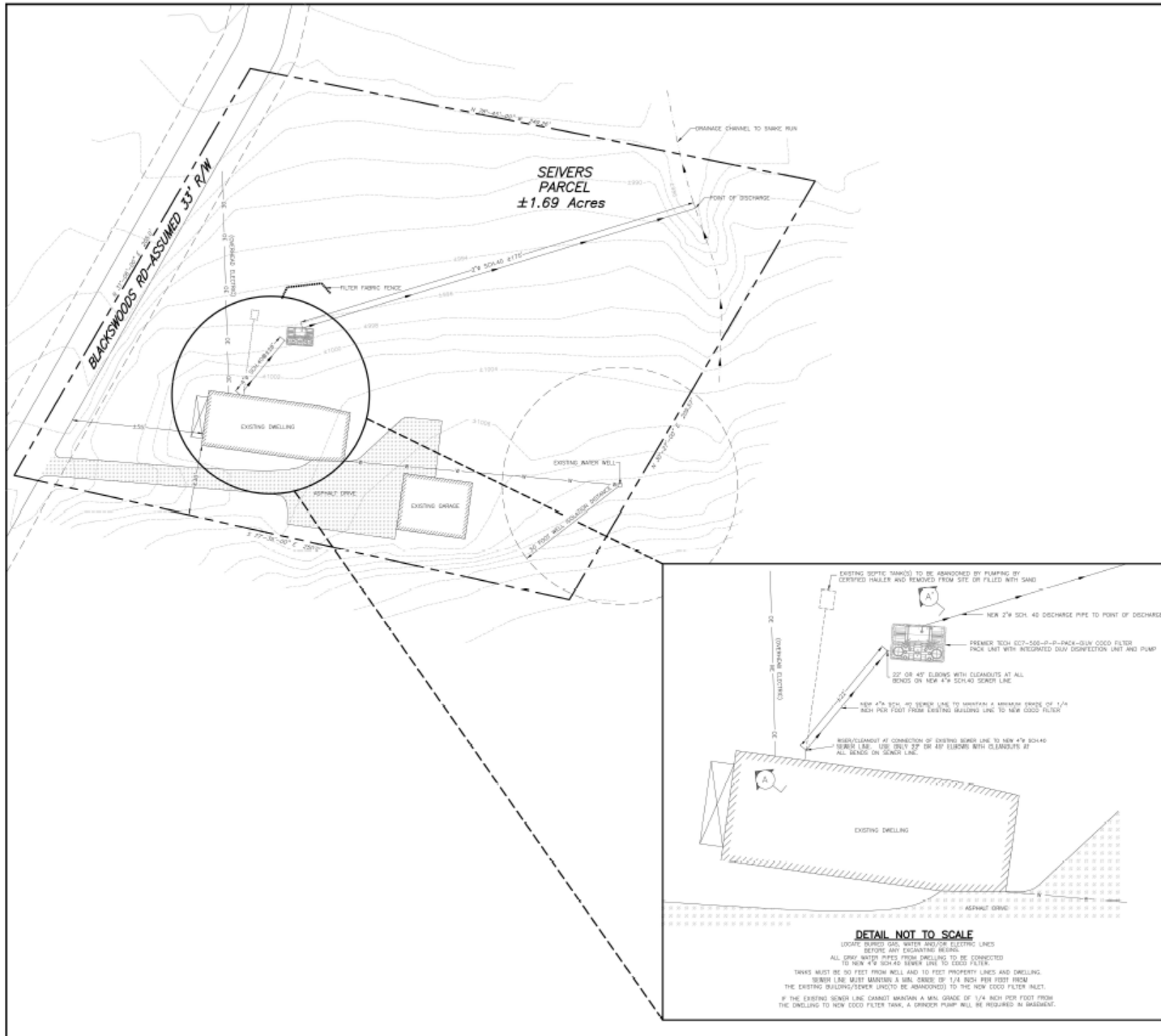
Proposed Effluent Limitations and Monitoring Requirements

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.

| Parameter | Effluent Limitations | | | | | | Monitoring Requirements | |
|-----------------------------|----------------------|----------------|-----------------------|----------------|---------------|------------------|-------------------------------|----------------------|
| | Mass Units (lbs/day) | | Concentrations (mg/L) | | | | Minimum Measurement Frequency | Required Sample Type |
| | Annual Average | Average Weekly | Minimum | Annual Average | Maximum | Instant. Maximum | | |
| Flow (MGD) | Report | XXX | XXX | XXX | XXX | XXX | 1/year | Estimate |
| pH (S.U.) | XXX | XXX | 6.0 Inst. Min | XXX | 9.0 Inst. Max | XXX | 1/year | Grab |
| BOD5 | XXX | XXX | XXX | 10 | XXX | 20 | 1/year | Grab |
| TSS | XXX | XXX | XXX | 10 | XXX | 20 | 1/year | Grab |
| Fecal Coliform (No./100 ml) | XXX | XXX | XXX | 200 | XXX | XXX | 1/year | Grab |

Compliance Sampling Location: Outfall 001.



THE PROPERTY OWNER AND DEVELOPER BY ACCEPTING AND/OR CONSTRUCTING THIS SYSTEM INDEFINITE AND HOLD HARMLESS ADVANCED TREATMENT, INC. FROM ANY LIABILITY RESULTING FROM ACTIVITIES COVERED BY INSTALLATION AND OPERATION OF THIS SYSTEM. ANY ADDITIONAL MODIFICATIONS OR ADDITIONAL EQUIPMENT THAT MAY BE NEEDED IS THE RESPONSIBILITY OF THE OWNER OF THE SYSTEM.

GENERAL NOTES

- ALL COMPONENTS INDICATED IN SEWERAGE FACILITIES PLANNING MODULE, PART 1 (EMPHASIS) AND PART 2 (WATER QUALITY MANAGEMENT AND STANDARDS) AND SPECIFICATIONS CONFORM TO CURRENT PROVISIONS OF COMMONWEALTH OF PA CODE TITLE 28 ENVIRONMENTAL PROTECTION/CHAPTER 153. (SEE PA MANUAL ENTITLED "SMALL FLOW TREATMENT FACILITIES MANUAL" DATED SEPTEMBER 2, 2008)
- REFERENCED CODES, REGULATIONS AND SPECIFICATIONS:
 - A.S.T.M. TEST METHOD 1511-01
 - O.S.H.A. CODE OF FEDERAL REGULATIONS TITLE 29, PART 1926
 - UNIFORM P.C. EXCAVATION TRENCHING AND SHIELDING
 - PA DOT TEST METHOD 516
 - A.S.T.M. TEST 3-98
 - PA DOT PUBLICATION 408, SECTION 703
- NEW SEWERAGE TOWNSHIP, SENIOR COUNTY BUILDING AND GRADING CODES
- DOORING/PUMP TANKER SHOWN OR REQUIRED MUST BE LOCATED AS SHOWN ON DRAWINGS
- WATER SUPPLY LINE UNDER PRESSURE MUST BE 10 FEET (INCLUDING BUILDING SLOPE) FROM ALL COMPONENTS OF THE SYSTEM
- INSTALLER RESPONSIBLE FOR CONDUCTING ALL UTILITIES BEFORE ANY EXCAVATION ACTIVITIES BEGIN. INSTALLER ALSO RESPONSIBLE FOR INSTALLING DUCTS/CONDUITS IN ALL TANKS
- PA ONE-CALL FOR UTILITY LOCATION (800) 242-1776
- PROPERTY LINES, IF SHOWN, WERE PROVIDED BY THE PROPERTY OWNER AND ARE SHOWN HERE FOR REFERENCE ONLY. THE OWNER AND INSTALLER ARE RESPONSIBLE FOR VERIFYING ANY SHOWN PROPERTY LINES AND OFFSETS.
- TO AVOID SOIL EROSION, THE INSTALLER WILL STAKE THE TOPSOIL FROM THE EXCAVATION, EXPOSED SURFACE WATER AROUND THE SITE AND REVERSE AND RESEED USING A PA DOT TYPE 9 SEED AFTER CONSTRUCTION.
- INSTALLER TO VERIFY ALL WIRING IS SEWAGE SYSTEM IS BELOW FROST LINE AND METHOD TO LEAD WIRING IS NECESSARY.
- REFER TO CONSTRUCTION NOTES AND DESIGN CALCULATIONS FOR MATERIALS
- CONTRACTOR SHALL VERIFY ALL DIMENSIONS AND EXISTING CONDITIONS IN THE FIELD AND SHALL ADVISE ARCHITECT IMMEDIATELY IN WRITING, IN CASE OF ANY DISCREPANCIES, OMISSIONS, ERRORS, OR ALTERATIONS OF ANY CONDITIONS PRIOR TO PROCEEDING WITH ANY PHASE OF THE WORK.
- OWNER RESPONSIBLE FOR NOTIFYING DESIGNER BEFORE CONSTRUCTION BEGINS TO ARRANGE FOR ANY INSPECTIONS THAT MAY BE REQUIRED BY THE DEP.
- ALL TANKS MUST HAVE LOCKABLE ACCESS EXTENDED TO AND EXPOSED AT THE SURFACE. TANKS TO HAVE NEAR WATER TANKS MUST BE AND MAINTAINED AT 1/4" THE BUILDING BEARING AND DISTANCES OF PROPERTY LINES (IF SHOWN) WERE PROVIDED BY THE PROPERTY OWNER AND ARE NOT PROVIDED AS PART OF THE SEWER SYSTEM DESIGN. IF IN THE PROPERTY OWNER'S RESPONSIBILITY TO VERIFY THAT ALL COMPONENTS OF THE SYSTEM AS SHOWN ON THESE DRAWINGS ARE LOCATED ON ALLOWED PROPERTY LINES, SIMONS AT SITE TO BE USED AS REFERENCE POINTS ONLY.
- NOTE: CLEANOUTS SHALL BE PROVIDED AT INTERVALS OF NOT MORE THAN 50 FEET ON SEWER LINES OF 4 INCH DIAMETER OR LESS AND 100 FEET MORE THAN 100 FEET FOR LARGER SIZES. BEHIND SEPTIC TANKS, CLEANOUTS SHALL BE PROVIDED AT ALL BENDS BEHIND SEPTIC TANKS. 90° ELBOWS NOT PERMITTED SEWER LINES FROM DWELLING TO TANKS. 90° BENDS CAN BE MADE WITH TWO 45° ELBOWS.
- ALL DRAIN WATER AND SEWER LINES FROM DWELLING MUST BE CONNECTED AND DIRECTED TO THE NEW TANK.
- A CLEAROUT MUST BE LOCATED AT THE JUNCTION OF THE BUILDING DRAIN AND SEWER. THE INSTALLATION CONTRACTOR IS RESPONSIBLE FOR MEETING SPECIFICATIONS AND COMPLIANCE AS STATED IN THE MANUAL, ENTITLED OVERSIGHTS FOR FIELD INSTALLATION & OPERATION OF SMALL FLOW TREATMENT FACILITIES. THE GRADE OF THE BUILDING SEWER SHALL BE AT LEAST 1/8" INCH PER FOOT HOWEVER, THE GRADE OF THE 10 FEET OF BUILDING SEWER IMMEDIATELY PRECEDING THE TREATMENT TANK MAY NOT EXCEED 1/4" INCH PER FOOT.
- THE PROPERTY OWNER IS RESPONSIBLE FOR ASSURING THAT THE TANKS ARE SHOWN AT THE PROPER DEPTHS TO MEET SEWER LINES FROM ANY BUILDING. SEWER LINES MUST BE SET AT 1/8" DROPS PER FOOT. LONGER SEWER LINES MUST BE CONSTRUCTED AT 1/4" DROPS PER FOOT FOR ADDITIONAL FEET.
- THE PROPERTY OWNER AND DEVELOPER BY ACCEPTING AND/OR CONSTRUCTING THIS SYSTEM INDEFINITE AND HOLD HARMLESS ADVANCED TREATMENT, INC. FROM ANY LIABILITY RESULTING FROM ACTIVITIES COVERED BY INSTALLATION AND OPERATION OF THIS SYSTEM AND ANY ADDITIONAL MODIFICATIONS OR ADDITIONAL EQUIPMENT THAT MAY BE REQUIRED.
- PRIVATE BARRIERS OR WELLS SEWER THIS AND ADJACENT BARRELS.
- AEROBIC UNIT, IF SPECIFIED, MUST HAVE THE Aerator REMOVED AND CLEANED IF NECESSARY DURING THE DRILLING FOR 5 DAYS OR MORE, THEN REINSTALLED WHEN RESIDENT RETURNS.

CALL BEFORE YOU DIG!

PENNSYLVANIA LAW REQUIRES 3 WORKING DAYS NOTICE FOR CONSTRUCTION PHASE AND 10 WORKING DAYS IN DESIGN PHASE - STOP-CALL

PA 1 SYSTEM, INC.
1-800-242-1776

DESCRIPTION

SEIVERS PROPERTY
 NEW SEWICKLEY TWP., BEAVER CO.

SITE PLAN

ADVANCED TREATMENT, INC.
 3015 WHITE OAK DRIVE, LISBON, PA 15042 (724)550-6442

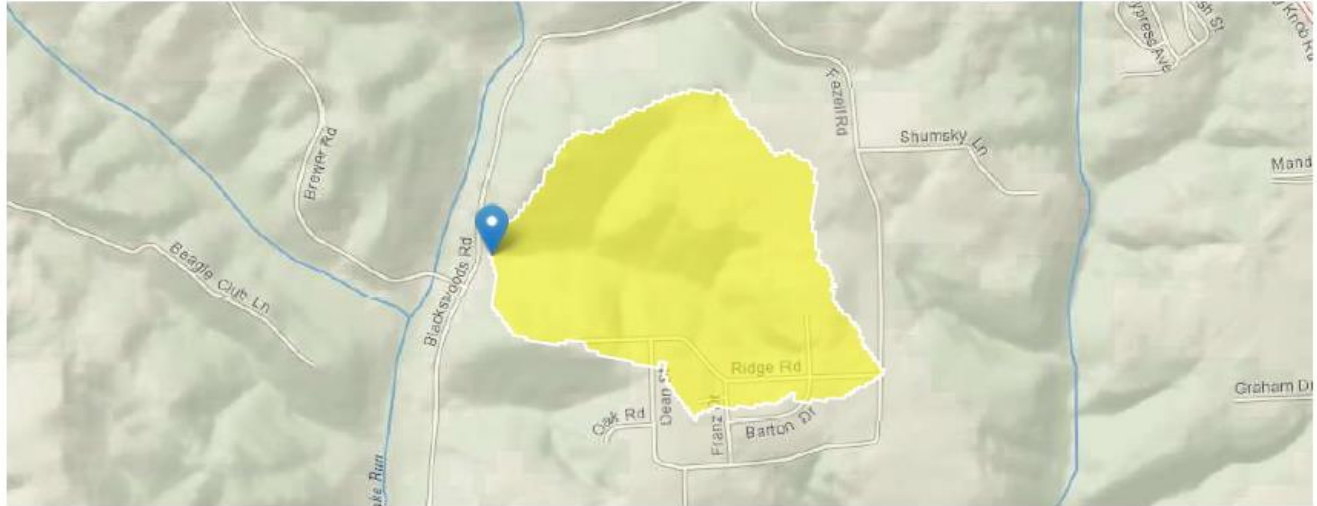
DATE: MAY 28, 2020
 SCALE: 1" = 20' UNLESS NOTED
 SHEET NO: 1 OF 2

DRYAN: ASD
 CHECKED: DRAN
 DRAWN: DRAN
 DESIGNED: DRAN
 PROJECT: SEIVERS PROPERTY

PA 1 SYSTEM, INC. logo and seal.

StreamStats Report

Region ID: PA
 Workspace ID: PA20231218195414536000
 Clicked Point (Latitude, Longitude): 40.70672, -80.21665
 Time: 2023-12-18 14:54:35 -0500



[+ Collapse All](#)

Basin Characteristics

| Parameter Code | Parameter Description | Value | Unit |
|----------------|---|-------|--------------|
| DRNAREA | Area that drains to a point on a stream | 0.25 | square miles |
| ELEV | Mean Basin Elevation | 1112 | feet |

Low-Flow Statistics

Low-Flow Statistics Parameters [Low Flow Region 4]

| Parameter Code | Parameter Name | Value | Units | Min Limit | Max Limit |
|----------------|----------------------|-------|--------------|-----------|-----------|
| DRNAREA | Drainage Area | 0.25 | square miles | 2.26 | 1400 |
| ELEV | Mean Basin Elevation | 1112 | 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 | 0.00543 | ft ³ /s |
| 30 Day 2 Year Low Flow | 0.0111 | ft ³ /s |
| 7 Day 10 Year Low Flow | 0.00142 | ft ³ /s |

| Statistic | Value | Unit |
|-------------------------|---------|--------------------|
| 30 Day 10 Year Low Flow | 0.00336 | ft ³ /s |
| 90 Day 10 Year Low Flow | 0.00723 | ft ³ /s |

Low-Flow Statistics Citations

Stuckey, M.H.,2006, Low-flow, base-flow, and mean-flow regression equations for Pennsylvania streams: U.S. Geological Survey Scientific Investigations Report 2006-5130, 84 p. (<http://pubs.usgs.gov/sir/2006/5130/>)

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Application Version: 4.19.2
StreamStats Services Version: 1.2.22
NSS Services Version: 2.3.2