

Southeast Regional Office CLEAN WATER PROGRAM

Application Type
Wastewater Type
Facility Type
Sewage
SRSTP

NPDES PERMIT FACT SHEET INDIVIDUAL SFTF/SRSTP

 Application No.
 PA0245305

 APS ID
 1044966

 Authorization ID
 1364392

| | Applicant, Facility ar | na Project Informati | on | |
|---|--|---------------------------|-----------------------------|--|
| Applicant Name | Stephen J Eldgredge & Melissa Novak Eldgredge | Facility Name | 2261 S Valley Rd Repair STF | |
| Applicant Address | 2261 S Valley Road | Facility Address | 2261 S Valley Road | |
| | Berwyn, PA 19312 | | Berwyn, PA 19312 | |
| Applicant Contact | Stephen & Melissa Eldgredge | Facility Contact | Stephen & Melissa Eldgredge | |
| Applicant Phone | (610) 476-2803 | Facility Phone Site ID | (610) 476-2803 850755 | |
| Client ID | 364675 | | | |
| SIC Code | 4952 | Municipality | Easttown Township | |
| SIC Description | Trans. & Utilities - Sewerage Systems | County | Chester | |
| Date Application Rec | eived July 22, 2021 | WQM Required | Yes | |
| Date Application Accepted July 22, 2021 | | WQM App. No. | 1521405 | |

Summary of Review

The applicant requests approval for NPDES Permit to discharge treated sewage from a small flow package treatment plant serving single the residence located at 2261 S Valley Road located in Berwyn, Easttown Township, Chester County. This system is to replace a failing on-lot system.

This single residence is a 4-bedroom home expected to generate 500 gpd that will discharge to an unnamed tributary to Crum Creek, Outfall No. 001. The treatment plant will consist of a 1500- gallon dual chamber septic tank, Orenco Bio-Filter & Recirculating pump to dose textile filter, Advantex AX20RTUV processing pod with denitrification and a UV disinfection. The treated effluent flows via gravity over a rip rap spreader for discharge to the stream edge via outfall #001.

Since the discharge is to High Quality receiving stream, effluent limitations and monitoring requirements are proposed based on the Antidegradation Best Available Control Technology (391-0300-002), and Standard Operating Practices.

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.

| Approve | Deny | Signatures | Date |
|---------|------|--|-----------------|
| х | | Vasantha Vasantha Palakurti / Environmental Engineering Specialist | August 20, 2021 |
| | | Pravin C. Patel, P.E. / Environmental Engineer Manager | . 9 |

Discharge and Stream Data – 2 - Receiving Waters

| Discharge, Receiving | Waters and Water Supply Information | on | | |
|---|--|---|-----------------------------|--|
| Outfall No. 001 Latitude 40° Quad Name Wastewater Descrip | 1' 7.67" otion: Treated Sewage Effluent | Design Flow (MGD) Longitude Quad Code | .0005 -75º 28' 4.22" | |
| Receiving Waters | Unnamed Tributary to Crum Creek (HQ-CWF, MF) | Stream Code | 00735 | |
| NHD Com ID Drainage Area | <u>25620410</u> 1.33 | RMI Yield (cfs/mi²) Q ₇₋₁₀ Basis Slope (ft/ft) | 0.1700 0.1 PA StreamStats | |
| Q ₇₋₁₀ Flow (cfs) Elevation (ft) | 0.163 118.63 | | | |
| Watershed No. Exceptions to Use | 3-G | Chapter 93 Class. Exceptions to Criteria | HQ-CWF, MF | |
| Assessment Status Impaired Cause(s) of Impairment CAUSE UNKNOWN, FLOW | | | | |
| Source(s) of Impair | ment URBAN RUNOFF/STORM SE | WERS, URBAN RUNOFF/S | STORM SEWERS | |

Development of Effluent Limits:

The SRSTP discharges into the Crum Creek which is designated as High Quality – Cold Water Fishes (HQCWF), Migratory Fishes (MF).

CBOD5 & NH₃-N:

Since the receiving stream is designated as HQ, DEP's Antidegradation Policy is applicable to this site. Therefore, effluent limitations of CBOD₅ (10 mg/l) and NH₃-N (5mg/l) are added to the permit. Minimum measuring frequency for all permit parameters, will be required once per year.

Flow, TSS and Fecal Coliform:

Limits for above mentioned parameters are derived from Standard Operating Procedure for New and Reissuance Small Flow Treatment Facility Individual NPDES Permit Applications (SOP No. BCW-PMT-003). Minimum measuring frequency for all permit parameters will be required once per year in accordance with the SOP.

Total Suspended Solids:

The average monthly effluent limit for TSS is 20 mg/l per ABACT. The DEP's SOP (SOP No. BCW-PMT-003) limitations are more stringent than the ABACT, therefore TSS of 10 mg/l is added to the permit.

pH:

pH (6 – 9 STD units) is added to the permit

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 | |
| Farameter | Average Monthly | Average Weekly | Minimum | Annual Average | Maximum | Instant. Maximum | Measurement Frequency | Sample Type |
| | Report | _ | | _ | | | | |
| Flow (MGD) | Annl Avg | XXX | XXX | XXX | XXX | XXX | 1/year | Estimate |
| | | | 6.0 | | | | | |
| pH (S.U.) | XXX | XXX | Inst Min | XXX | 9.0 | 9.0 | 1/year | Grab |
| CBOD5 | XXX | XXX | XXX | 10.0 | XXX | 20 | 1/year | Grab |
| TSS | XXX | XXX | XXX | 10.0 | XXX | 20 | 1/year | Grab |
| Fecal Coliform (No./100 ml) | XXX | XXX | XXX | 200 | XXX | XXX | 1/year | Grab |
| UV Intensity (mW/cm²) | XXX | XXX | XXX | Report | XXX | XXX | 1/year | Grab |
| Ammonia | XXX | XXX | XXX | 5.0 | XXX | 10 | 1/year | Grab |

Compliance Sampling Location: Outfall 001