

Application Type	<u>Amendment</u>	WATER QUALITY MANAGEMENT PERMIT INTERNAL REVIEW AND RECOMMENDATIONS	Application No.	<u>6103403 A-2</u>
Facility Type	<u>Sewage Treatment Plant</u>		APS ID	<u>1074198</u>
WQM Type			Authorization ID	<u>1415073</u>

Applicant and Facility Information

Applicant Name	<u>Frenchcreek Township Venango County</u>	Facility Name	<u>Frenchcreek Township WWTP</u>
Applicant Address	<u>4507 Georgetown Road Franklin, PA 16323-4733</u>	Facility Address	<u>226 Pine School Road Polk, PA 16342</u>
Applicant Contact	<u>Casey Davis</u>	Facility Contact	<u>Casey Davis</u>
Applicant Phone	<u>(814) 437-6625</u>	Facility Phone	<u>(814) 437-6625</u>
Client ID	<u>74312</u>	Site ID	<u>680348</u>
SIC Code	<u>4952</u>	Municipality	<u>Polk Borough</u>
SIC Description	<u>Trans. & Utilities - Sewerage Systems</u>	County	<u>Venango</u>
PA Bulletin Date	<u></u>		
Purpose of Application	<u>Various system improvements to pretreatment, treatment, and disposal.</u>		

Internal Review and Recommendations

Project Description:

1. Construction of a new wet well facility including: three new, 470 gpm, VFD-controlled submersible raw sewage pumps and associated piping; two new influent flow meters on each of the discharge lines of the raw sewage pumps
2. Construction of a new 21'x30' headworks facility room consisting of: one new 5mm laced link fine screening unit; one new manual bar rack with 1/2" openings in the bypass channel; an adjacent 7'x7' influent composite sampler room with sampling equipment
3. Construction of new secondary treatment units with nutrient reduction infrastructure including: three 40'x25' sequencing batch reactor (SBR) ranks w/decant arm and mixing header; buildings attached to the SBR tanks housing a 21'x61' SBR pump equipment room, a 7'x21' chemical feed room, a 27'x38' UV disinfection room, a 7'x21' electrical control room for the SBR, a 10'x23' electrical control room for the UV equipment; installation of recirculation/mixing pumps, blowers and waste activated sludge (WAS) pumps; installation of a new alkalinity chem feed system and a metal salt (alum) feed system; installation of all associated piping and appurtenances
4. Construction of two new 24'x24' aerobic digester tanks to receive, treat, and store the WAS. Digester controls will be installed in the digester pump room. Includes all associated piping and equipment, and installation of a liquid sludge withdrawal pipe and manifold fill station for tanker truck transport of digester sludge to disposal.
5. Three digester blowers installed in the digester pump room. Four SBR blowers will be installed on the second floor of the building attached to the new SBR tanks in the blower room. All blowers will be outfitted with sound dampening enclosures.
6. Three positive displacement pumps installed on the first floor of the SBR control building to transport the WAS flow from the SBR tanks to the digester tanks. One positive displacement pump installed in the digester pump room to

Approve	Return	Deny	Signatures	Date
X			Jordan A. Frey, E.I.T. Jordan A. Frey, E.I.T. / Project Manager	May 24, 2023
X			Chad W. Yurisc Chad W. Yurisc, P.E. / Environmental Engineer Manager	5/24/2023
X			Justin C. Dickey Justin C. Dickey, P.E. / Program Manager	5/24/2023

Internal Review and Recommendations

transport digested sludge to the reed beds or installed manifold fill station.

7. Construction of a 6'x6' effluent aeration tank including an aeration system and auto-controlled blower synchronized to the UV disinfection system with a continuous read dissolved oxygen probe and pH analyzer.
8. Construction of a detached 7'x16' generator pad with pavilion roof and new 260kW gas generator. Transfer switch and control panel will be in the main electrical room of the digester building.
9. Two parallel open channel ultraviolet (UV) disinfection systems with all associated piping and control equipment inside the UV disinfection room.
10. Construction of two 55'x40' reed drying beds. Provisions included to construct a third bed of equal size in the future if deemed necessary.
11. Demolition of existing grit chamber, headworks building, anaerobic digester, pre-aeration tanks, Imhoff tanks, settling tanks, trickling filters, UV disinfection facilities, and miscellaneous yard piping. Relocation of electrical supply lines and yard piping.

There are currently no open violations listed in EFACTS for this permittee (5/9/2023). [5/24/2023 CWY](#)

The 1/2" openings on the manual bar screen are smaller than the minimum opening size of 1" listed in the Domestic Wasterwater Facilities Manual, section 51.131. The 5mm (approximately 3/16") openings in the mechanically cleaned screen are smaller than the minimum opening size of 5/8" listed in the same section of the Manual. Since both of these deviations from the Manual provide finer screening, at only the cost of potentially increased maintenance, the screens are acceptable as currently designed.

The project generally meets the design criteria outlined in the Department's Domestic Wastewater Facilities Manual. If properly constructed, operated and maintained these facilities should aide in protecting the public health and in meeting the limitations contained in the facility's NPDES permit. It is recommended this permit be issued.

STANDARD CONDITIONS – 12/2019 Sewerage: 1, 4, 5, 6, 7, 9, 10, 11, 12, 13, 14, 17, 20, 21, 22, 23, 25, and 27.