

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0290441
APS ID 1057997
Authorization ID 1387066

Applicant, Facility and Project Information

Applicant Name	<u>Sandra & William Thornton</u>	Facility Name	<u>Sandra & William Thornton SRSTP 2</u>
Applicant Address	<u>262 Red Mills Road</u> <u>Pine Bush, NY 12566-6218</u>	Facility Address	<u>16414 Route 226</u> <u>Albion, PA 16401</u>
Applicant Contact	<u>William Thornton</u>	Facility Contact	<u></u>
Applicant Phone	<u>(814) 450-2298</u>	Facility Phone	<u></u>
Applicant E Mail	<u></u>	Facility E Mail	<u></u>
Client ID	<u>142557</u>	Site ID	<u>852145</u>
Municipality	<u>Conneaut Township</u>	County	<u>Erie</u>
SIC Code	<u>8800</u>	SIC Code	<u>4952</u>
SIC Description	<u>Private Households</u>	SIC Description	<u>Trans. & Utilities - Sewerage Systems</u>
Date Application Received	<u>February 23, 2022</u>	WQM Required	<u>Concurrently pending</u>
Date Application Accepted	<u>March 24, 2022</u>	WQM App. No.	<u>2522405</u>
Project Description	<u>A new facility to treat a four bed-room residence domestic wastes</u>		

Summary of Review

Being retained by the applicant are additional permitted facilities of the same size are 620 feet further east and across Route 226.

Design load is greater than the Planning approval. Discussed with Donna Ulan Smith on March 24, 2022 and the change approved as insignificant (1 bedroom addition to a single residence).

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
X		<i>William H. Mentzer</i> William H. Mentzer, P.E. Environmental Engineering Specialist	April 19, 2022
X		Justin C. Dickey Justin C. Dickey, P.E. Environmental Engineer Manager	April 25, 2022

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 DP	<u>41° 52' 40.00"</u>	Longitude DP	<u>-80° 29' 31.30"</u>
Latitude NHD	<u>41° 52' 46.45"</u>	Longitude NHD	<u>-80° 29' 33.69"</u>
Quad Name	<u>East Springfield</u>	Quad Code	<u>0302</u>
Wastewater Description: <u>Treated single residence domestic wastes</u>			
Receiving Waters	<u>Unnamed Tributary to Ashtabula Creek</u>	Stream Code	<u>unknown</u>
NHD Com ID	<u>128582185</u>	RMI	<u>0.12</u>
Drainage Area	<u>0.1</u>	Yield (cfs/mi ²)	<u>0</u>
Q ₇₋₁₀ Flow (cfs)	<u>0</u>	Q ₇₋₁₀ Basis	<u>Dry stream</u>
Elevation (ft)	<u>946</u>	Slope (ft/ft)	<u>0.01</u>
Watershed No.	<u>15-A</u>	Chapter 93 Class.	<u>CWF, MF</u>
Existing Use	<u>statewide</u>	Existing Use Qualifier	<u>none</u>
Exceptions to Use	<u>none</u>	Exceptions to Criteria	<u>none</u>
Comments	<u>Dry stream discharge to a pond on tributary 63614 0.04 mile above the pond outlet at RMI 0.77 At .03-square mile drainage and 930.00-foot elevation.</u>		
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	_____		
Source(s) of Impairment	_____		
TMDL Status	_____	Name	_____
Background/Ambient Data	_____	Data Source	_____
pH (SU)	_____		_____
Temperature (°F)	_____		_____
Hardness (mg/L)	_____		_____
Other:	_____		_____
Nearest Downstream Public Water Supply Intake	<u>State of Ohio</u>		
PWS Waters	<u>Ashtabula Creek</u>	Flow at Intake (cfs)	<u>NA</u>
PWS RMI	<u>0</u>	Distance from Outfall (mi)	<u>1.6</u>

Changes Since Last Permit Issuance: NA

Other Comments: Stream data starts at the Ohio Border

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) ⁽¹⁾		Concentrations (mg/L)				Minimum ⁽²⁾ Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Annual Average	Maximum	Instant. Maximum		
Flow (GPD)	Report Annl Avg	XXX	XXX	XXX	XXX	XXX	1/year	Estimate
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	Upon Request	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 after disinfection

Other Comments: See AMR for UV radiation requirements.

Phosphorus Comments

No phosphorus requirements are proposed as the design is for less than 1-MGD.

Upstream permitted and not installed sewage treatment facilities under General NPDES permit PAG048660 and Individual WQM permit 2500404 do not include any phosphorus restrictions even though the discharge is to an unnamed tributary to Ashtabula Creek in Lake Erie Watershed 15-A and Drainage Basin X. The Department's Water Quality Stream list refers to the Great Lakes Water Quality Agreement (GLWQA),

The Lake Erie Basin water quality is regulated through GLWQA and International Joint Commission (IJC). Municipal Facilities discharging at least 1-MGD are limited to 1-mg/L phosphorus. Non-municipal and industrial waste discharges do not have a phosphorus requirement.

Design Manual: Onsite Wastewater Treatment and Disposal Systems, EPA 625/1-80-012, October 1980

6.6.3 Phosphorus Removal

Segregation, chemical precipitation and sorption.

Precipitation will remove orthophosphates with reduced removal of polyphosphates and organic phosphorus.

Iron and aluminum and calcium salts are used. Calcium salts are used with pH adjustment, Chemicals are added in a mixing tank after a septic tank and before a intermittent sand filter.

Treated effluent quality is site specific dependent on orthophosphate concentration and polyphosphate and organic phosphorus septic tank conversion to orthophosphate. The manual does not address facility size and automation.