

Application Type New
Wastewater Type Sewage
Facility Type SRSTP

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

Application No. PA0284882
APS ID 1064056
Authorization ID 1397358

Applicant, Facility and Project Information

Applicant Name	<u>Lori Hendrickson</u>	Facility Name	<u>Gordon Properties SRSTP</u>
Applicant Address	<u>128 Sunset Drive</u> <u>Beaver Falls, PA 15010-6842</u>	Facility Address	<u>60 Fenzell Road</u> <u>Freedom, PA 15042</u>
Applicant Contact	<u>Lori Hendrickson</u>	Facility Contact	<u>Same as Applicant</u>
Applicant Phone	<u>(724) 312-0837</u>	Facility Phone	<u>Same as Applicant</u>
Client ID	<u>370204</u>	Site ID	<u>857527</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>May 23, 2022</u>	WQM Required	<u>Yes</u>
Date Application Accepted	<u>May 24, 2022</u>	WQM App. No.	<u>0422400</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 a 400 GPD single residence sewage treatment plant to replace a malfunctioning on-lot system at an existing 3-bedroom home in New Sewickley Township, Beaver County.


WQM Permit 0422400 will be issued concurrently with this NPDES Permit. The discharge is to an existing storm sewer inlet which flows through buried storm sewer pipes to UNT of Pine Run, which is classified as at WWF located in State Watershed 20-C.

The Site Plan (attached to the application) and the zoom in section on the plan shows an average of 50 feet of 3 in schedule 40 pipe that will deliver the effluent to the point of discharge (storm sewer inlet), which is located on the applicant property and eventually discharges to Tributary 36570 To Pine Run (see page 3).

Checking on the effluent pump specs and operation, the CPEH5 pump will generate a 65 inch of head that can travel a 100 ft max. using a 1 1/2 Ø pipe. The pipe diameter listed on the Site plan is 3 inches (which is consistent with the DEP Small Facilities Manual, Dec. 2006) which should deliver the produced head to the discharge point about 50 ft of distance.

The grade of ¼ inch per 1 foot listed on the Site Plan would be applicable to the discharge pipe to ensure gravity for the pumped effluent.

Sampling should be grabbed after disinfection. Sampling point is prescribed under -F- on page 2 of the Owner's Manual (see page 12 of the WQM application).

Approve	Deny	Signatures	Date
X		 Hazim Aldalli / Environmental Engineering Specialist	June 9, 2022
X		 Christopher Kriley, P.E. / Program Manager	June 9, 2022

Summary of Review

Current policy does not require eDMR to be used for SRSTPs.

Act 537 Planning was approved for this project on May 19, 2022.

The Act – 14 PL 834 Municipal Notification were provided by the September 5 and 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.

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>0.0004</u>
Latitude	<u>40° 42' 3.61"</u>	Longitude	<u>-80° 12' 25.77"</u>
Quad Name	<u>Baden</u>	Quad Code	<u>40080F2</u>
Wastewater Description:		<u>Sewage Effluent</u>	
Receiving Waters	<u>Unnamed Tributary to Pine Run (WWF)</u>	Stream Code	<u>36570</u>
NHD Com ID	<u>99678376</u>	RMI	<u>0.505</u>
Drainage Area (mi ²)	<u>0.0597</u>	Yield (cfs/mi ²)	<u>0.004</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.000247</u>	Q ₇₋₁₀ Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u>1139</u>	Slope (ft/ft)	<u></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)</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>NEW SEWICKLEY TWP MUNI AUTH</u>		
PWS Waters	<u>Ohio River</u>	Flow at Intake (cfs)	<u>5880</u>
PWS RMI	<u></u>	Distance from Outfall (mi)	<u>5.04</u>

Changes Since Last Permit Issuance: None.

Other Comments: None.

Treatment Facility Summary				
Treatment Facility Name: Gordon Prop. STP				
WQM Permit No.		Issuance Date		
0422400		Processing		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Septic Tank, Sand Filter	Ultraviolet	0.0004
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0004	---	Not Overloaded	Septic Tank	-----

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

Development of Effluent Limitations

Outfall No. <u>001</u>	Design Flow (MGD) <u>0.0004</u>
Latitude <u>40° 42' 3.61"</u>	Longitude <u>-80° 12' 25.77"</u>
Wastewater Description: <u>Sewage Effluent</u>	

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 (Premier Tech EC7-500-C-P) technical specs, this treatment unit can achieve the stringent limits imposed since it is included in the facility's design manual, and NSF approved.

Special application for the Dry condition was set in the Engineers Report & Project Narrative document attached to the WQM application.

For SFTFs / 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.

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.

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

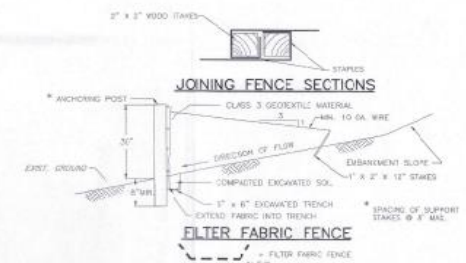
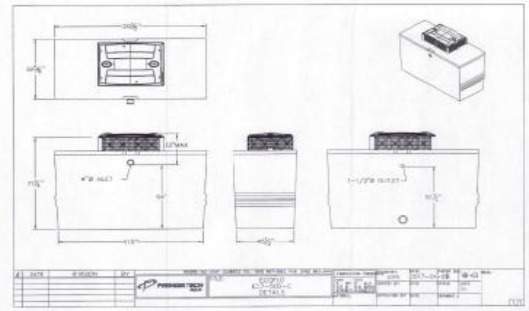
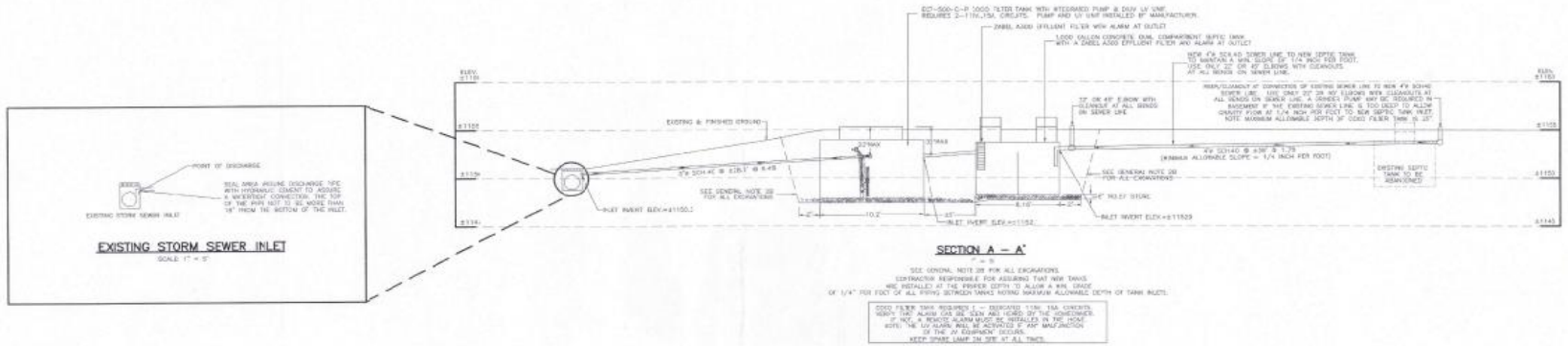
Proposed Effluent Limitations and Monitoring Requirements

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



PREMIER TECH PUMP AND UV UNIT PREINSTALLED BY MANUFACTURER
UNIT REQUIRED 2 - 1000-10-A CIRCUITS

INSTALL TANKS SUCH THAT THE EC7-500-C-P INLET IS NO DEEPER THAN 33" FROM GROUND SURFACE
PREMIER TECH-DIUV CLASSIC KIT FOR TANK INTEGRATION PREINSTALLED BY MANUFACTURER

ALL DISTURBED AREAS TO BE RESTORED TO ORIGINAL CONTOUR AND GRADE. ALL TRENCHES AND VULNERABILITY TO BE STOCKPILED AND REDUCED AFTER CONSTRUCTION OF TRENCH IS COMPLETE. ALL DISTURBED AREAS TO BE SEEDED WHEN FINISHED WITH PERM-DOT FORMULA @ 45 SPECIFIED BY PERM-DOT FORM 408, SECTION 804 AS FOLLOWS:
 FORMULA 0 - PERENNIAL, RHIZOMED-RED PERENNIAL-TURFGRASS
 @ 100 LBS/ACRE
 APPLICATION RATE = 100 LBS/ACRE
 FERTILIZATION APPLICATION RATE = 675 LBS/ACRE
 LIMING RATE = 1.24 LBS/1000
 MULCH TYPE = STRAW
 MULCHING RATE = 2.52 TONS/ACRE
 SEEDING SEASONS SPACES PERMANENT SEEDING = 5/15 TO 6/1 TO 8/1 TO 10/15
 RECOMBINATION - RESEED AND RE-SOIL ALL AREAS THAT EXCEED OR BRUSH OUT DUE TO ANY AND ALL RAIN OR STORM EVENTS. FILLION WATERSHED #7 FOR SEEDING AND MULCH APPLICATIONS.
 FILTER FABRIC FENCE MUST BE INSTALLED AT EXISTING LEVEL GRADE. BOTH ENDS OF EACH FENCE SECTION MUST BE EXTENDED AT LEAST 8 FEET UPWARD AT 45 DEGREE TO THE MAIN FENCE. SEEDMENT MUST BE REINFORCED WHERE ACCUMULATIONS REACH 1/2 THE ABOVE GROUND HEIGHT OF THE FENCE. ANY FENCE SECTIONS WHICH HAVE BEEN UNDERSHOWN OR TOPPED MUST BE IMMEDIATELY REPLACED WITH A ROCK FIBER (SULET).

N O T E S (ALSO SEE GENERAL NOTES ON DWG. 1 OF 2)
 1. ALL TRENCHES AND VULNERABILITY TO BE STOCKPILED AND REDUCED AFTER CONSTRUCTION OF TRENCH IS COMPLETE. ALL DISTURBED AREAS TO BE SEEDED WHEN FINISHED WITH PERM-DOT FORMULA @ 45 SPECIFIED BY PERM-DOT FORM 408, SECTION 804 AS FOLLOWS:
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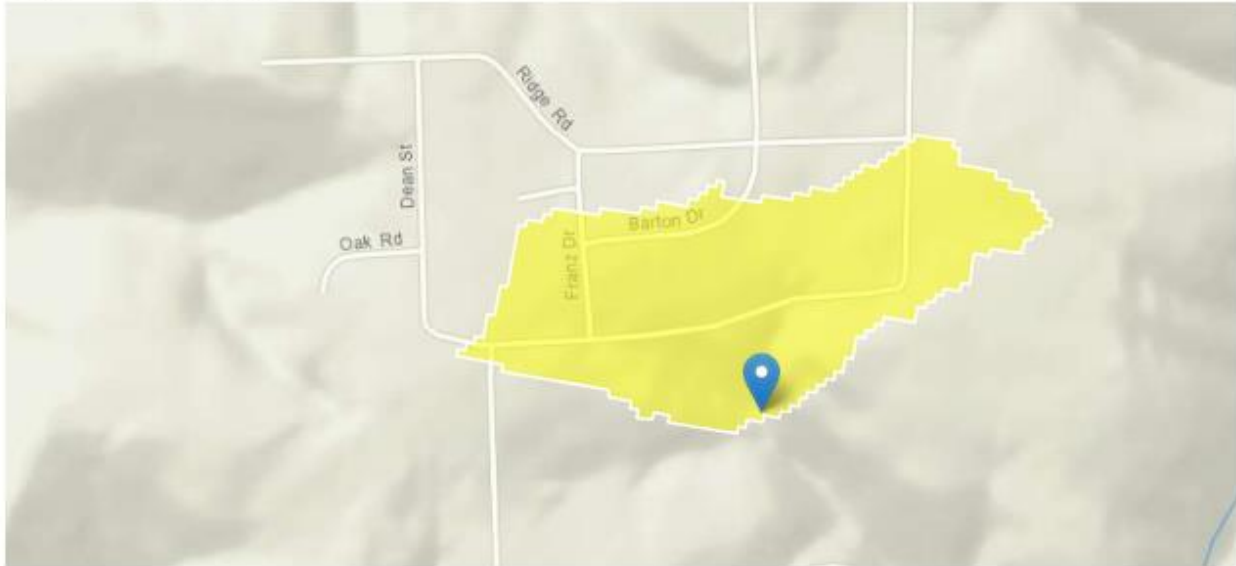
INSTALL/CONTRACTOR RESPONSIBLE FOR REMOVAL AND DISPOSAL OF ANY EXISTING STORM OR SEWER RELATED MATERIAL THAT MAY BE REQUIRED TO BE REMOVED TO INSTALLATION OF NEW SEWAGE SYSTEM. ANY REMOVAL MUST BE CONDUCTED PER ALL REGULATIONS AND ORDINANCES FOR DISPOSAL OF SUCH MATERIAL.
 THE PROPERTY OWNER AND DEVELOPER BY ACCEPTING AND/OR CONTRACTING THIS SYSTEM NECESSARY AND FULLY FINANCED BY GORDON TWP. THE OWNER AND DEVELOPER SHALL BE RESPONSIBLE FOR THE INSTALLATION AND OPERATION OF THIS SYSTEM. ANY ADDITIONAL ADJUSTMENTS OR ADDITIONAL EQUIPMENT THAT MAY BE NEEDED IS THE RESPONSIBILITY OF THE OWNER OF THE SYSTEM.
 SEE CONSTRUCTION NOTES FOR ADDITIONAL DETAILS.

CALL BEFORE YOU DIG!
 PENNSYLVANIA LAW ENFORCES CONSTRUCTION AND WORKING SAFELY ORGANIZATION - 800-4-A-DIG
 PA 1 POWER INC. 1-800-242-1776

DESCRIPTION	ISSUED	DATE	BY
GORDON PROPERTY NEW SEWICKLEY TWP., BEAVER CO.	AS SHOWN	NOVEMBER 2002	AS SHOWN
SINGLE RESIDENCE SEWAGE TREATMENT PLANT SYSTEM DETAILS	2 OF 2		
ADVANCED TREATMENT, INC. 207 WEST 10TH STREET, BEAVER PA 15004-0002			

StreamStats Report

Region ID: PA
 Workspace ID: PA20220603003839331000
 Clicked Point (Latitude, Longitude): 40.70055, -80.20620
 Time: 2022-06-02 20:38:59 -0400



[+ Collapse All](#)

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	0.0597	square miles
ELEV	Mean Basin Elevation	1139	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	0.0597	square miles	2.26	1400
ELEV	Mean Basin Elevation	1139	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	0.00108	ft ³ /s
30 Day 2 Year Low Flow	0.00238	ft ³ /s
7 Day 10 Year Low Flow	0.000247	ft ³ /s
30 Day 10 Year Low Flow	0.00065	ft ³ /s
90 Day 10 Year Low Flow	0.00151	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: 4.9.0

StreamStats Services Version: 1.2.22

NSS Services Version: 2.2.0