Pennsylvania Department of Environmental Protection

Southwest Regional Office
CLEAN WATER PROGRAM

Application Type	**Renewal**	Application No.	**PA0255661**
Wastewater Type	**Sewage**	APS ID	**1133776**
Facility Type	**SFTF**	Authorization ID	**1520786**

NPDES PERMIT FACT SHEET INDIVIDUAL SFTF/SRSTP

Applicant, Facility and Project Information

Applicant Name	**First PA Resource LLC**	Facility Name	**Plum Run Nursery SFTF**
Applicant Address	251 Beatty Lane	Facility Address	251 Beatty Lane
	Scenery Hill, PA 15360-1501		Scenery Hill, PA 15360
Applicant Contact	Nicolas Harrington	Facility Contact	Nicholas Harbin
Applicant Phone	(724) 714-8730	Facility Phone	(304) 952-3097
Client ID	297785	Site ID	841712
SIC Code	111421	Municipality	Deemston Borough
SIC Description	Nursery and Tree Production	County	Washington
Date Application Received	March 24, 2025	WQM Required	No
Date Application Accepted	March 25, 2025	WQM App. No.	

Project Description: Renewal application to discharge treated sewage effluent.

Summary of Review

First PA Resource LLC (Applicant) has applied for a renewal of the NPDES Permit No. PA0255661, this permit was previously issued by the PA Department of Environmental Protection (DEP) on August 1, 2020, the NPDES permit will expire on July 31, 2025. The application was received on March 24, 2025, therefore, the renewal application is considered late.

This treatment facility consists of 2,000 gpd septic tank with two outlets. Each outlet lead into a 100 galloon Singulair Bio-Kinetic model 960 treatment tank then a Hydro-Kinetic Bio-Film reactor all installed parallel to each other. Effluent from the HKBFR then flows through a Model AT 1500 UV disinfection system before discharging to Plum Run Creek. This NSF certified system provides flow equalization, pretreatment, aeration, clarification, and tertiary filtration.

There are no open violations by Operation's Compliance Report and the reviewed inspection reports (see page 3).

A proper evidence of the Act – 14 PL 834 Municipal Notification was provided by the applicant on March 1, 2024. No comments were received.

Permit issuance is recommended.

Approve	Deny	Signatures	Date
X		Hazim Aldalli Hazim Aldalli / Project Manager	July 3, 2025
X		Mahbuba Iasmin Mahbuba Iasmin, Ph.D., P.E. / Environmental Engineering Manager	August 5, 2025

Summary of Review
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.	001	Design Flow (MGD)	0.001600
Latitude	40º 3' 3.0"	Longitude	-80º 2' 42.0"
Quad Name	Ellsworth	Quad Code	40080A1
Wastewater Description:	Sewage Effluent		

Receiving Waters	Plum Run (TSF)	Stream Code	40724
NHD Com ID	99411338	RMI	3.51
Drainage Area	1.59	Yield (cfs/mi^2)	0.009
Q_{7-10} Flow (cfs)	0.01430	Q_{7-10} Basis	USGS StreamStats
Elevation (ft)	1165	Slope (ft/ft)	0.008
Watershed No.	19-B	Chapter 93 Class.	Trout Stocking Fishery
Existing Use		Existing Use Qualifier	
Exceptions to Use	None.	Exceptions to Criteria	None.
Assessment Status	Impaired		
Cause(s) of Impairment	ORGANIC ENRICHMENT, SILTATION		
Source(s) of Impairment	AGRICULTURE, ON-SITE TREATMENT SYSTEMS (SEPTIC SYSTEMS AND SIMILAR DECENTRALIZED SYSTEMS)		
TMDL Status		Name	

Background/Ambient Data		Data Source
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		

Nearest Downstream Public Water Supply Intake	TRI CNTY JT MUNI AUTH		
PWS Waters	MONONGAHELA RIVER	Flow at Intake (cfs)	530
PWS RMI	64.87	Distance from Outfall (mi)	>10

Changes Since Last Permit Issuance: Q_{7-10} flow, elevation, drainage area, and low flow yield were all updated (see appendix A) to match USGS Stream Stats new data.

Other Comments: DEP issued a new version (version 1.8) of its SFTF SOP on November 9, 2023.

Compliance History

Operations Compliance Check Summary Report

Facility: PLUM RUN NURSERY

NPDES Permit No.: PA00255661

Compliance Review Period: 4/1/20-4/3/25

Inspection Summary:

INSPECTED DATE	INSP TYPE	AGENCY	INSPECTION RESULT DESC
07/28/2022	Administrative/File Review	PA Dept of Environmental Protection	Violation(s) Noted
07/28/2022	Compliance Evaluation	PA Dept of Environmental Protection	No Violations Noted
11/05/2021	Administrative/File Review	PA Dept of Environmental Protection	Violation(s) Noted

Violation Summary:

VIOLATION DATE	VIOLATION TYPE	VIOLATION TYPE DESC	RESOLVED DATE	VIOLATION COMMENT
07/28/2022	92A.44	NPDES - Violation of effluent limits in Part A of permit	01/11/2024	Numerous effluent violations reported on Ed road Implementing, operational advise given in CEI of today should eliminate or reduce future effluent violations.
11/05/2021	92A.44	NPDES - Violation of effluent limits in Part A of permit	07/14/2022	Numerous effluent violation throughout 2021 of CBOD, and TSS.

Open Violations by Client ID:

No open violations for Client ID 297785

Enforcement Summary:

No enforcements executed during review period

Effluent Violation Summary:

MONPD	PARAMETER	REPORTED VALUE	PERMIT LIMIT	UNIT	STAT_BASE_CODE	FACILITY COMMENT
Nov-24	Total Suspended Solids	14.0	10.0	mg/L	Average Monthly	Equipment was checked and will be monitored until next report period
Oct-24	Total Suspended Solids	21.0	10.0	mg/L	Average Monthly	UV Bulb needed changed
Oct-24	Total Suspended Solids	21.0	20.0	mg/L	Instantaneous Maximum	Changed uv bulb
Aug-24	pH	5.14	6.0	S.U.	Instantaneous Minimum	Not over effluent amount
Jul-24	pH	5.94	6.0	S.U.	Instantaneous Minimum	Added some hydrated lime to see if that assists in lowering the PH
Aug-23	Total Suspended Solids	15.0	10.0	mg/L	Average Monthly	Initial result was high. Going to monitor the system and increase aerator runtime
Jul-23	Total Suspended Solids	15.0	10.0	mg/L	Average Monthly	Will monitor tanks if and run aerators longer. If results do not lower we will have the tanks inspected.
Nov-22	Biochemical Oxygen Demand (BOD5)	< 12.0	10.0	mg/L	Average Monthly	All blowers will be ran for now on while seasonal workers are here
Nov-22	Biochemical Oxygen Demand (BOD5)	< 66.7	20.0	mg/L	Instantaneous Maximum	All blowers will be run from now on.
Oct-22	Biochemical Oxygen Demand (BOD5)	< 12.0	10.0	mg/L	Average Monthly	we are increasing the aerator time. Seasonal workers are leaving for the year so we should start to see decreases
Sep-22	Biochemical Oxygen Demand (BOD5)	< 66.7	10.0	mg/L	Average Monthly	Still struggling with the oxygen demand we increased the runtime of the aerators but it has not lowered yet. Going to keep them running longer and see if it helps decrease
Sep-22	Biochemical Oxygen Demand (BOD5)	< 66.7	20.0	mg/L	Instantaneous Maximum	Still struggling with the oxygen demand we increased the runtime of the aerators but it has not lowered yet

Aug-22	Biochemical Oxygen Demand (BOD5)	< 66.7	10.0	mg/L	Average Monthly	Still struggling with the oxygen demand. The operator suggested only running a 2 of the aerators and that does not appear to be helping results
Aug-22	Biochemical Oxygen Demand (BOD5)	< 66.7	20.0	mg/L	Instantaneous Maximum	Going to begin running all the aerators again
Jul-22	Biochemical Oxygen Demand (BOD5)	87.0	10.0	mg/L	Average Monthly	Began running all aerators again
Jul-22	Biochemical Oxygen Demand (BOD5)	87.0	20.0	mg/L	Instantaneous Maximum	Began running all aerators again
May-22	Total Suspended Solids	14.0	10.0	mg/L	Average Monthly	Increase run time of aeration tanks
Apr-22	Total Suspended Solids	27.0	20.0	mg/L	Instantaneous Maximum	There was an increase in the total suspended solids for the month. The seasonal workers are currently at the nursery so that may be the cause for the increase. We have contacted our tank inspector to come out and see if the tank needs pumped or any additional comments added.
Nov-21	Fecal Coliform	1200	200	No./100 ml	Geometric Mean	
Sep-21	pH	3.67	6.0	S.U.	Instantaneous Minimum	
Sep-21	Total Suspended Solids	12.0	10.0	mg/L	Average Monthly	TSS the same result as the previous month. We are not exactly sure why but it appears it could be caused by low flow toilets and garbage disposals both of which we use. We will reach out to the sewer authority and see how to lower the results
Aug-21	Biochemical Oxygen Demand (BOD5)	17.7	10.0	mg/L	Average Monthly	
Aug-21	Total Suspended Solids	26.0	10.0	mg/L	Average Monthly	
Aug-21	Total Suspended Solids	26.0	20.0	mg/L	Instantaneous Maximum	TSS was a little high for this month. We are not really sure what might cause it so we are going to monitor the system and see what the next sample shows.
Jul-21	Biochemical Oxygen Demand (BOD5)	17.7	10.0	mg/L	Average Monthly	
Jul-21	Total Suspended Solids	26.0	10.0	mg/L	Average Monthly	
Jul-21	Total Suspended Solids	26.0	20.0	mg/L	Instantaneous Maximum	

Mar-21	Biochemical Oxygen Demand (BOD5)	160.0	10.0	mg/L	Average Monthly	BOD5 high from small stream septic system. Planning on increasing aeration run times
Mar-21	Biochemical Oxygen Demand (BOD5)	160.0	20.0	mg/L	Instantaneous Maximum	
Feb-21	Biochemical Oxygen Demand (BOD5)	27.0	10.0	mg/L	Average Monthly	
Feb-21	Biochemical Oxygen Demand (BOD5)	27.0	20.0	mg/L	Instantaneous Maximum	
Jan-21	Biochemical Oxygen Demand (BOD5)	15.2	10.0	mg/L	Average Monthly	

Compliance Status: Facility has no open violations at this time. Exceedances will need to be addressed with an NOV at the time of the next Compliance Evaluation Inspection.

Completed by: Amanda Illar **Completed date:** 4/3/25

Other Comments: Checking on renewal application and last two years of eDMRs, shows that permittee is in general in compliance with permit limits.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.001600
Latitude 40º 3' 3" **Longitude** -80º 2' 42"
Wastewater Description: Treated Sewage Effluent

Technology-Based Limitations

The following effluent limitations and monitoring requirements, at a minimum, will be established in all new and renewed SFTF 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 November 9, 2023).

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:

BOD_5, TSS, and Fecal limitations were imposed based upon the Department's SOP – New and Reissuance Individual SRSTP NPDES Permits, Revised November 9, 2023.

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

For SFTFs / SRSTPs with UV 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/month, and due to antibacksliding; no changes to these frequencies are made for this review pursuant with the Department's SOP - *New and Reissuance of SFTF Individual NPDES Permit Applications,* and Table 6-3 of DEP's Technical Guidance for the Development and Specification of Effluent Limitations.

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.

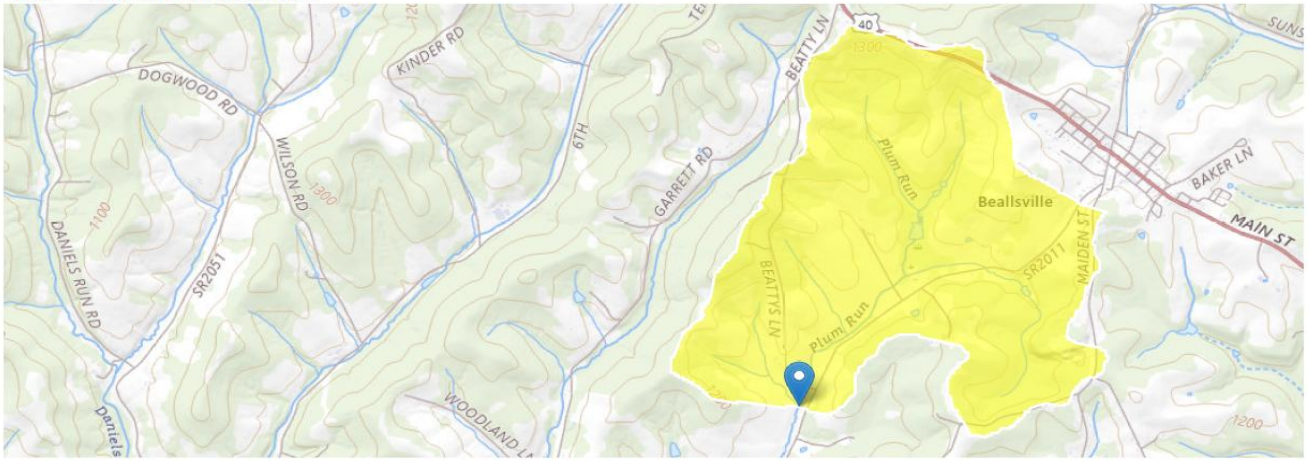
Parameter	Effluent Limitations						Monitoring Requirements	
	Mass Units (lbs/day) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Average Monthly	Average Monthly	Maximum	Instant. Maximum		
Flow (GPD)	Report	XXX	XXX	XXX	XXX	XXX	1/month	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/month	Grab
BOD5	XXX	XXX	10.0	XXX	XXX	20.0	1/month	Grab
TSS	XXX	XXX	10.0	XXX	XXX	20.0	1/month	Grab
Fecal Coliform (No./100 ml)	XXX	XXX	XXX	200 Geo Mean	XXX	XXX	1/month	Grab

Compliance Sampling Location: Outfall 001.

Appendix -A- USGS Stream Stats

StreamStats Report

Region ID: PA
Workspace ID: PA20250508122846166000
Clicked Point (Latitude, Longitude): 40.05052, -80.04536
Time: 2025-05-08 08:29:14 -0400



Collapse All

Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	1.59	square miles
ELEV	Mean Basin Elevation	1165	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	1.59	square miles	2.26	1400
ELEV	Mean Basin Elevation	1165	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	0.0465	ft^3/s
30 Day 2 Year Low Flow	0.0875	ft^3/s
7 Day 10 Year Low Flow	0.0143	ft^3/s
30 Day 10 Year Low Flow	0.0295	ft^3/s
90 Day 10 Year Low Flow	0.0586	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/)

Application Version: 4.28.1
StreamStats Services Version: 1.2.22
NSS Services Version: 2.2.1