

Application Type Renewal  
Facility Type Municipal  
Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0244066  
APS ID 1028735  
Authorization ID 1336608

**Applicant and Facility Information**

Applicant Name	<u>Bedminster Municipal Authority Bucks County</u>	Facility Name	<u>Pennland Farms STP</u>
Applicant Address	<u>442 Elephant Road</u> <u>Perkasie, PA 18944-4163</u>	Facility Address	<u>442 Elephant Road</u> <u>Perkasie, PA 18944-4163</u>
Applicant Contact	<u>Jay Heacock</u>	Facility Contact	<u>Michael Sullivan</u>
Applicant Phone	<u>(215) 249-3320</u>	Facility Phone	<u>(215) 795-1636</u>
Client ID	<u>25898</u>	Site ID	<u>648406</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Bedminster Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Bucks</u>
Date Application Received	<u>December 14, 2020</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>Permit Renewal.</u>		

**Summary of Review**

The permittee request approval for the renewal of a National Pollutant Discharge Elimination System (NPDES) Individual permit application to discharge 0.06 MGD of treated sewage from Pennland Farms sewage treatment plant (STP) to Deep Run Creek, which is a designated Trout Stocking Fishes, Migratory Fishes (TSF, MF) under chapter 93 in 3-E, Perkiomen Creek watershed.

The treatment process consists of an influent screen, influent meter, influent flow equalization and pumping, two tank SBR system, effluent flow equalization, filtration, UV for disinfection, effluent monitoring and sludge digestion. The plant is also equipped with a chemical feed system (aluminum sulfate) for phosphorus removal.

10 tons of approximate sludge is hauled to Delcora WWTP

Disinfection in the pervious permit was noted as TRC even though UV is used as disinfectant. Therefore, TRC in this renewal is replaced by UV.

There are no changes in the waste characteristics, flow, and/or stream designation since the last renewal. Therefore, all permit parameters are carried over in this renewal.

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>Vasantha</i> Vasantha Palakurti / Environmental Engineering Specialist	February 5, 2021
		Pravin C. Patel, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.06
Latitude	40° 22' 43.04"	Longitude	-75° 10' 51.15"
Quad Name		Quad Code	
Wastewater Description: Sewage Effluent			
Receiving Waters	Deep Run (WWF)	Stream Code	
NHD Com ID	26030756	RMI	
Watershed No.	2-D	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	NUTRIENTS, SILTATION		
Source(s) of Impairment	MUNICIPAL POINT SOURCE DISCHARGES, REMOVAL OF RIPARIAN VEGETATION		
TMDL Status		Name	

Changes Since Last Permit Issuance: There are no changes in the waste characteristics, flow, and/or stream designation since the last renewal.

Treatment Facility Summary				
<b>Treatment Facility Name:</b> Pennland Farms STP				
<b>WQM Permit No.</b>	<b>Issuance Date</b>			
0919402	September 3, 2019			
<b>Waste Type</b>	<b>Degree of Treatment</b>	<b>Process Type</b>	<b>Disinfection</b>	<b>Avg Annual Flow (MGD)</b>
Sewage	Secondary With Phosphorus Reduction	Sequencing Batch Reactor	Ultraviolet	0.06
<b>Hydraulic Capacity (MGD)</b>	<b>Organic Capacity (lbs/day)</b>	<b>Load Status</b>	<b>Biosolids Treatment</b>	<b>Biosolids Use/Disposal</b>
0.09		Not Overloaded	Aerobic Digestion	Landfill

Changes Since Last Permit Issuance: Influent screen mechanism was installed to prevent rags and other potentially damaging debris in the existing influent channel.

Compliance History

DMR Data for Outfall 001 (from January 1, 2020 to December 31, 2020)

Parameter	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20
Flow (MGD) Average Monthly	0.0471	0.044	0.041	0.0418	0.0429	0.0445	0.0487	0.0459	0.0397	0.0436	0.042	0.0383
Flow (MGD) Daily Maximum	0.0623	0.0535	0.0621	0.0549	0.0607	0.0562	0.069	0.0621	1.1895	0.0608	0.0535	0.0609
pH (S.U.) Instantaneous Minimum	7.27	7.25	7.26	7.41	7.5	7.43	7.33	7.29	6.75	6.3	6.49	6.75
pH (S.U.) Instantaneous Maximum	7.91	7.81	7.83	7.98	7.91	7.91	7.77	7.7	7.61	8.12	7.94	7.93
DO (mg/L) Instantaneous Minimum	6.64	6.37	7.67	6.01	6.74	6.24	6.31	6.02	6.41	6.37	6.26	6.27
TRC (mg/L) Average Monthly	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
TRC (mg/L) Instantaneous Maximum	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010	< 0.010
CBOD5 (mg/L) Average Monthly	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 4	< 2	< 2
CBOD5 (mg/L) Instantaneous Maximum	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	2.2	5.8	< 2	< 2
TSS (mg/L) Average Monthly	4	< 1	< 1	< 1	< 1	< 1	< 2	< 1	1	< 1	< 1	1
TSS (mg/L) Instantaneous Maximum	5	1	< 1	< 1	1	< 1	2	< 1	1	< 1	< 1	1
Fecal Coliform (CFU/100 ml) Geometric Mean	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2
Total Nitrogen (mg/L) Average Monthly	< 7	< 4	< 4	< 5	< 5	< 4	< 5	< 7	8	< 7	< 6	< 7

**NPDES Permit Fact Sheet  
Pennland Farms STP**

**NPDES Permit No. PA0244066**

Total Nitrogen (mg/L) Instantaneous Maximum	< 7.31	< 4.51	< 4.58	< 5.39	< 5.35	< 4.81	< 5.68	7.67	8.19	< 8.16	< 6	< 6.9
Ammonia (mg/L) Average Monthly	< 0.8	< 0.1	< 0.1	< 0.2	< 0.3	< 0.1	< 0.1	< 0.3	0.9	< 0.1	< 0.1	< 0.5
Total Phosphorus (mg/L) Average Monthly	< 0.2	0.2	0.2	0.3	0.3	0.3	0.3	0.2	0.2	0.2	0.2	0.1
Total Phosphorus (mg/L) Instantaneous Maximum	< 0.22	0.19	0.2	0.38	0.35	0.34	0.37	0.24	0.18	0.2	0.22	0.12

**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) <sup>(1)</sup>		Concentrations (mg/L)				Minimum <sup>(2)</sup> Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Recorded
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	6.0 Inst Min	XXX	XXX	XXX	1/day	Grab
UV Intensity (mW/cm <sup>2</sup> )	XXX	XXX	XXX	Report	XXX	XXX	1/day	Grab
CBOD5	XXX	XXX	XXX	10	XXX	20	2/month	24-Hr Composite
TSS	XXX	XXX	XXX	10	XXX	20	2/month	24-Hr Composite
Fecal Coliform (CFU/100 ml)	XXX	XXX	XXX	50 Geo Mean	XXX	1000	2/month	Grab
Total Nitrogen	XXX	XXX	XXX	10	XXX	20	2/month	24-Hr Composite
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	3.0	XXX	6	2/month	24-Hr Composite
Ammonia May 1 - Oct 31	XXX	XXX	XXX	1.5	XXX	3	2/month	24-Hr Composite
Total Phosphorus	XXX	XXX	XXX	0.5	XXX	1.0	2/month	24-Hr Composite