

Application Type Renewal  
 Facility Type Non-Municipal  
 Major / Minor Minor

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0042641  
 APS ID 1002521  
 Authorization ID 1289826

**Applicant and Facility Information**

Applicant Name	<u>PA DCNR State Parks Bureau</u>	Facility Name	<u>Nockamixon State Park STP</u>
Applicant Address	<u>2808 Three Mile Run Road</u> <u>Perkasie, PA 18944-2065</u>	Facility Address	<u>1542 Mountain View Drive</u> <u>Perkasie, PA 18944</u>
Applicant Contact	<u>Anthony Giacobbe</u>	Facility Contact	<u>Obie Derr</u>
Applicant Phone	<u>(215) 453-5019</u>	Facility Phone	<u>(215) 529-7300</u>
Client ID	<u>64584</u>	Site ID	<u>452366</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Haycock Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Bucks</u>
Date Application Received	<u>June 3, 2019</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u></u>	If No, Reason	<u></u>
Purpose of Application	<u>Sewage treatment plants NPDES permit renewal.</u>		

**Summary of Review**

The applicant has submitted a renewal application for NPDES permit to discharge 0.2 MGD treated sewage through Outfall 001 into unnamed tributary of Tohickon Creek (CWF, MF).

The facility is serving Nockamixon State Park. Collection system includes Bucks County Tech vocation school, few houses, the park and cabins.

Plant contains: influent bar screen/comminutor, pre-equalization tank, dual basin SBR, post aeration equalization tank, and chlorine contact tank (sodium hypochlorite).

DEP has conducted a site visit on 7/12/19. Copy of the inspection report attached:



insp report

It is noted that the facility regularly does not receive enough BOD for the influent wastewater. Therefore, to have an effective treatment bio seeds are added as needed.

Page 7 of this fact sheet shows development of previously established limits. Since there are no changes to quality and quantity of wastewater all existing limits, and monitoring requirements are proposed in the draft permit.

Act 14 Notification:

Bucks County Commissioners and Bedminster Township has been notified by certified mail on May 9, 2019.

Approve	Deny	Signatures	Date
X		Begay Omuralieva / Environmental Engineering Specialist /s/	December 11, 2019
X		Pravin C. Patel, P.E. / Environmental Engineer Manager /s/	December 11, 2019

**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, Receiving Waters and Water Supply Information			
Outfall No.	<u>001</u>	Design Flow (MGD)	<u>0.2</u>
Latitude	<u>40° 28' 0.66"</u>	Longitude	<u>-75° 11' 14.90"</u>
Quad Name	<u>Bedminster</u>	Quad Code	<u>1544</u>
Wastewater Description: <u>Sewage Effluent from Nockamixon State Park STP</u>			
Receiving Waters	<u>Unnamed Tributary to Tohickon Creek (CWF, MF)</u>	Stream Code	<u>03153</u>
NHD Com ID	<u>26031024</u>	RMI	<u>0.4</u>
Drainage Area	<u>1.55 sq mi</u>	Yield (cfs/mi <sup>2</sup> )	<u>0.006</u>
Q <sub>7-10</sub> Flow (cfs)	<u><b>0.009</b></u>	Q <sub>7-10</sub> Basis	<u>StrteamStat*</u>
Elevation (ft)	<u>373</u>	Slope (ft/ft)	<u></u>
Watershed No.	<u>2-D</u>	Chapter 93 Class.	<u>CWF, MF</u>
Existing Use	<u>Cold Water Fishes, Migratory Fishes</u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u>None</u>	Exceptions to Criteria	<u></u>

Changes Since Last Permit Issuance: none

\* SreamStat report is attached to this factsheet

Compliance History

DMR Data for Outfall 001 (from September 1, 2018 to August 31, 2019)

Parameter	AUG-19	JUL-19	JUN-19	MAY-19	APR-19	MAR-19	FEB-19	JAN-19	DEC-18	NOV-18	OCT-18	SEP-18
Flow (MGD) Average Monthly	0.009	0.048	0.021	0.023	0.023	0.019	0.011	0.031	0.024	0.031	0.017	0.015
pH (S.U.) Instantaneous Minimum	7.4	6.7	7.2	7.4	7.4	7.4	7.5	7.3	7.3	7.4	7.3	7.3
pH (S.U.) Instantaneous Maximum	7.9	9.0	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.7	7.8
DO (mg/L) Instantaneous Minimum	7.1	6.7	7.8	6.7	6.7	5.0	< 7.1	< 6.8	6.8	7.3	6.7	6.7
TRC (mg/L) Average Monthly	0.4	0.4	0.4	0.6	0.6	0.5	0.5	0.5	0.5	0.6	0.5	0.4
CBOD5 (lbs/day) Average Monthly	2	2	1	1	1	2	1	1	0.5	0.78	0.43	0.38
CBOD5 (lbs/day) Raw Sewage Influent   Average Monthly	4	8	5	4	4	10	2	4	4	3	< 10	2
CBOD5 (mg/L) Average Monthly	21	9	4	8	8	9	7	6	2	3	2.0	3
CBOD5 (mg/L) Raw Sewage Influent   Average Monthly	46	53	23	31	31	20	16	26	17	17	< 59	32
CBOD5 (mg/L) Daily Maximum	33	21	4	14	14	11	10	12	3	5	3.0	4
TSS (lbs/day) Average Monthly	0.59	2	2	1	1	8	2	0.06	2	2	2	2
TSS (lbs/day) Raw Sewage Influent   Average Monthly	6	15	5	7	7	< 11	2	< 4	7	6	< 12	2
TSS (mg/L) Average Monthly	7	13	11	10	10	17	17	9	10	9	8	13

**NPDES Permit Fact Sheet  
Nockamixon State Park STP**

**NPDES Permit No. PA0042641**

TSS (mg/L) Raw Sewage Influent   Average Monthly	63	102	23	60	60	< 20	17	< 26	31	18	< 73	33
TSS (mg/L) Daily Maximum	9	26	13	15	15	41	29	18	16	13	13	21
Total Dissolved Solids (lbs/day) Average Quarterly			18			19			39			6
Total Dissolved Solids (mg/L) Average Quarterly			96			273			360			0.90
Fecal Coliform (CFU/100 ml) Geometric Mean	82	97	68	10	10	27	< 104	< 51	21	51	< 150	55
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	300	720	140	10	10	< 130	< 240	240	180	300	< 2000	1000
Ammonia (lbs/day) Average Monthly	0.55	1.0	2.0	2.0	2.0	1.0	0.28	0.28	0.44	0.22	< 0.07	0.11
Ammonia (mg/L) Average Monthly	7.0	9.0	10.0	3.7	3.7	3.0	2.0	< 2.0	2.0	1.0	< 0.27	0.63
Total Phosphorus (lbs/day) Average Monthly	0.08	0.18	0.19	0.46	0.46	0.17	0.06	0.07	0.10	0.01	< 0.14	0.04
Total Phosphorus (mg/L) Average Monthly	1.0	2	1.2	0.85	0.850	0.63	0.42	0.40	0.40	0.44	< 0.27	0.33

**Compliance History**

Effluent Violations for Outfall 001, from: October 1, 2018 To: August 31, 2019

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
TRC	04/30/19	Avg Mo	0.6	mg/L	0.5	mg/L
TRC	11/30/18	Avg Mo	0.6	mg/L	0.5	mg/L
TRC	05/31/19	Avg Mo	0.6	mg/L	0.5	mg/L
CBOD5	08/31/19	Avg Mo	21	mg/L	20	mg/L
CBOD5	08/31/19	Daily Max	33	mg/L	30	mg/L
Fecal Coliform	10/31/18	IMAX	< 2000	CFU/100 ml	1000	CFU/100 ml
Ammonia	06/30/19	Avg Mo	10.0	mg/L	2.0	mg/L
Ammonia	05/31/19	Avg Mo	3.7	mg/L	2.0	mg/L
Ammonia	08/31/19	Avg Mo	7.0	mg/L	2.0	mg/L
Ammonia	07/31/19	Avg Mo	9.0	mg/L	2.0	mg/L

Summary of Inspections: Facility does not receive enough BOD for treatment has to supplement.

Other Comments:

**Development of Effluent Limitations**

<b>Outfall No.</b> <u>001</u>	<b>Design Flow (MGD)</b> <u>.02</u>
<b>Latitude</b> <u>40° 28' 0.44"</u>	<b>Longitude</b> <u>-75° 11' 20.61"</u>
<b>Wastewater Description:</b> <u>Sewage Effluent</u>	

**Technology-Based Limitations**

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

Parameter	Minimum	Average Monthly	Average Weekly	IMAX	Basis
Flow (MGD)	XXX	Report	Report Max Daily	XXX	§§ 92a.27, 92a.61
CBOD5 (mg/L)	XXX	25	40 <sup>(8)</sup>	50	§92a.47
TSS (mg/L)	XXX	30	45 <sup>(8)</sup>	60	§92a.47
TRC (mg/L)	XXX	0.5	XXX	1.6	§§92a.47-48
NH3-N (mg/L)	XXX	25	XXX	50	BPJ
D.O. (mg/L)	4.0	XXX	XXX	XXX	BPJ
pH (SU)	6.0	XXX	XXX	9.0	§92a.47, §95.2
Total N (mg/L)	XXX	Report	XXX	XXX	92a.61
Total P (mg/L)	XXX	Report	XXX	XXX	92a.61
Fecal Coliform May-Sept (No./100 ml)	XXX	200 Geo Mean	XXX	1,000	§92a.47
Fecal Coliform Oct-April (No./100 ml)	XXX	2,000 Geo Mean	XXX	10,000	§92a.47

**WQBELs:**

10% Fecal Coliform Rule:

Following special requirement was added to Part C of the permit, based on the condition that discharge not direct to the Delaware River main stem:

*The seasonal effluent limitations for fecal coliform are based on Chapter 92a (§ 92a.47(4) & (5)) of DEP's regulations and Delaware River Basin Commission's (DRBC's) Water Quality Regulations at § 4.30.4.A. DEP's regulations govern the summer limits for fecal coliform while the winter limits are based on DRBC's regulations. The DRBC regulations state that during winter season from October through April, the instantaneous maximum concentration of fecal coliform organisms shall not be greater than 1,000 per 100 milliliters in more than 10 percent of the samples tested. For reporting purposes, a copy of the guidelines on the 10 percent rule is enclosed with the permit.*

**TDS:**

Based on Guidance: "Policy and Procedure for NPDES Permitting of Discharges of Total Dissolved Solids (TDS) -- 25 Pa. Code §95.10" that became effective on August 21, 2010, monitoring for TDS is included in the proposed draft. This guidance applies to all discharges of wastewater in the Commonwealth of Pennsylvania subject to regulation under Chapter 92a (NPDES Permitting, Monitoring and Compliance) and Chapter 95 (Wastewater Treatment Requirements).

**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	Daily Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6 Inst Min	XXX	XXX	9	1/day	Grab
DO	XXX	XXX	5.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	0.5	XXX	1.2	1/day	Grab
CBOD5 Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
CBOD5 Nov 1 - Apr 30	42	XXX	XXX	25	40	50	1/week	24-Hr Composite
CBOD5 May 1 - Oct 31	33	XXX	XXX	20	30	40	1/week	24-Hr Composite
TSS Raw Sewage Influent	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite
TSS	50	XXX	XXX	30	45	60	1/week	24-Hr Composite
Total Dissolved Solids	Report Avg Qrtly	XXX	XXX	Report Avg Qrtly	XXX	XXX	1/quarter	24-Hr Composite
Fecal Coliform (No./100 ml) May 1 – Oct 31	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/week	Grab
Fecal Coliform (No./100 ml) Nov 1 – Apr 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000 90% SAMPLES	1/week	Grab
Ammonia Nov 1 - Apr 30	7.0	XXX	XXX	4.0	XXX	8	1/week	24-Hr Composite
Ammonia May 1 - Oct 31	3.0	XXX	XXX	2.0	XXX	4	1/week	24-Hr Composite
Total Phosphorus	Report	XXX	XXX	Report	XXX	XXX	1/week	24-Hr Composite

\* DRBC's 10% Fecal Coliform rule (p.7 of the fact sheet)



