pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northcentral Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0032441**
Facility Type	**Non-Municipal**	APS ID	**986192**
Major / Minor	**Minor**	Authorization ID	**1261157**

Applicant and Facility Information

Applicant Name	**PA DCNR**	Facility Name	**Black Moshannon State Park**
Applicant Address	4216 Beaver Road	Facility Address	132 Treatment Plant Road
	Philipsburg, PA 16866-9036		Philipsburg, PA 16866
Applicant Contact	Jared Fencil	Facility Contact	Jared Fencil
Applicant Phone	(814) 342-5960	Facility Phone	(814) 342-5960
Client ID	52524	Site ID	263074
Ch 94 Load Status	Not Overloaded	Municipality	Rush Township
Connection Status	No Limitations	County	Centre
Date Application Received	February 1, 2019	EPA Waived?	Yes
Date Application Accepted	February 15, 2019	If No, Reason	
Purpose of Application	Renewal of an existing NPDES permit for the discharge of treated sewage.		

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
		Derek S. Garner / Project Manager	
		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	

Discharge, Receiving Waters and Water Supply Information

Outfall No.	001	Design Flow (MGD)	0.05
Latitude	40º 55' 8.34"	Longitude	-78º 3' 35.41"
Quad Name	Black Moshannon	Quad Code	1121
Wastewater Description:	Sewage Effluent		

Receiving Waters	Black Moshannon Creek	Stream Code	25703
NHD Com ID	61831117	RMI	17.5
Drainage Area	15.39	Yield (cfs/mi^2)	0.381
Q_{7-10} Flow (cfs)	5.87	Q_{7-10} Basis	Streamgage No. 01547200
Elevation (ft)	1856	Slope (ft/ft)	n/a
Watershed No.	8-D	Chapter 93 Class.	HQ-CWF
Existing Use	n/a	Existing Use Qualifier	n/a
Exceptions to Use	n/a	Exceptions to Criteria	n/a
Assessment Status	Attaining Use(s)		
Cause(s) of Impairment	n/a		
Source(s) of Impairment	n/a		
TMDL Status	Final, 6/2/2009	Name	Moshannon Creek Watershed

Nearest Downstream Public Water Supply Intake	PA American Water Company		
PWS Waters	West Branch Susquehanna River	Flow at Intake (cfs)	679.73
PWS RMI	10.6	Distance from Outfall (mi)	140

Treatment Facility Summary

Construction and continued operation of the Black Moshannon Park Wastewater Treatment Plant is covered under WQM Permit No. 1471201, issued August 19, 1971. The facility has an average annual design flow of 0.05 MGD, a hydraulic capacity of 0.20 MGD, and an organic design capacity of 340 lbs BOD/day. Treatment at the facility consists of:

- One (1) comminutor
- Two (2) contact stabilization tanks
- Two (2) final clarifiers
- Two (2) re-aeration tanks
- One (1) chlorine contact tank (w/ liquid hypochlorite disinfection)
- One (1) tablet dechlorinator
- Two (2) aerobic sludge digester tanks (sludge wasted to drying beds)

The treated effluent is discharged via Outfall 001 to Black Moshannon Creek.

Sludge is hauled to the Clinton County Solid Waste Authority's Wayne Township Landfill.

Compliance History

The facility was last inspected on April 18, 2019 by Clarissa Alcorn, Water Quality Specialist. The inspection report noted three effluent violations that occurred in May, August, and September of 2018. All required treatment units were online and operational.

A query of eDMR data shows the following effluent violations:

Monitoring Period	Parameter	Sample Value	Violation Condition	Permit Value	Units	SBC
June 2016	Fecal Coliform	1227	>	1000	CFU/100 ml	Instantaneous Maximum
July 2016	Fecal Coliform	241	>	200	CFU/100 ml	Geometric Mean
July 2016	Dissolved Oxygen	4	<	5	mg/L	Minimum
July 2016	Fecal Coliform	1820	>	1000	CFU/100 ml	Instantaneous Maximum
August 2016	Total Residual Chlorine (TRC)	0.09	>	0.02	mg/L	Instantaneous Maximum
September 2016	Total Residual Chlorine (TRC)	0.05	>	0.02	mg/L	Instantaneous Maximum
September 2016	Dissolved Oxygen	4.7	<	5	mg/L	Minimum
October 2016	Total Suspended Solids	31	>	30	mg/L	Average Monthly
June 2017	Fecal Coliform	2419.6	>	1000	CFU/100 ml	Instantaneous Maximum
July 2017	Total Residual Chlorine (TRC)	0.04	>	0.02	mg/L	Instantaneous Maximum
July 2017	Fecal Coliform	2419.6	>	1000	CFU/100 ml	Instantaneous Maximum
September 2017	Fecal Coliform	2419.6	>	1000	CFU/100 ml	Instantaneous Maximum
May 2018	Fecal Coliform	2419.6	>	1000	CFU/100 ml	Instantaneous Maximum
August 2018	Dissolved Oxygen	4.4	<	5	mg/L	Minimum
September 2018	Fecal Coliform	2419.6	>	1000	CFU/100 ml	Instantaneous Maximum

The above eDMR data shows chronic violations in warm-weather months related to the disinfection process. The violations have been forwarded to Operations Section for further review and discussion.

There are no open violations associated with the permittee.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.05
Latitude 40º 55' 8.34" **Longitude** -78º 3' 35.41"
Wastewater Description: Sewage Effluent

Technology-Based Limitations

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

Pollutant	Limit (mg/l)	SBC	Federal Regulation	State Regulation
$CBOD_5$	25	Average Monthly	133.102(a)(4)(i)	92a.47(a)(1)
	40	Average Weekly	133.102(a)(4)(ii)	92a.47(a)(2)
Total Suspended Solids	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pH	6.0 – 9.0 S.U.	Min – Max	133.102(c)	95.2(1)
Fecal Coliform (5/1 – 9/30)	200 / 100 ml	Geo Mean	-	92a.47(a)(4)
Fecal Coliform (5/1 – 9/30)	1,000 / 100 ml	IMAX	-	92a.47(a)(4)
Fecal Coliform (10/1 – 4/30)	2,000 / 100 ml	Geo Mean	-	92a.47(a)(5)
Fecal Coliform (10/1 – 4/30)	10,000 / 100 ml	IMAX	-	92a.47(a)(5)
Total Residual Chlorine	0.02	Average Monthly	-	92a.48(b)(3)

Water Quality-Based Limitations

A “Reasonable Potential Analysis” (attached) determined the existing limits are protective of the receiving surface water.

Best Professional Judgment (BPJ) Limitations

Existing dissolved oxygen effluent limits and ammonia-n monitoring requirements are proposed to remain in the permit. These requirements are helpful in determining proper facility operation and help characterize the wastewater.

Chesapeake Bay Requirements

The facility has reported five years’ worth of total nitrogen and phosphorus sample results. A summary of the reported sample results is as follows:

Monitoring Period	Parameter	Load Units	Load Value	Load SBC	Conc. Units	Conc. Value	SBC
2015	Total Nitrogen	lbs/day	0.0018	Annual Average	mg/L	11.25	Annual Average
2016	Total Nitrogen	lbs/day	19.71	Annual Average	mg/L	19.71	Annual Average
2017	Total Nitrogen	lbs/day	0.017	Annual Average	mg/L	16.24	Annual Average
2018	Total Nitrogen	lbs/day	3.82	Annual Average	mg/L	16.98	Annual Average
AVERAGE	*Total Nitrogen*	*lbs/day*	*5.89*	*Annual Average*	*mg/L*	*16.05*	*Annual Average*

Monitoring Period	Parameter	Load Units	Load Value	Load SBC	Conc. Units	Conc. Value	SBC
2015	Total Phosphorus	lbs/day	0.0078	Annual Average	mg/L	3.953	Annual Average
2016	Total Phosphorus	lbs/day	9.326	Annual Average	mg/L	9.326	Annual Average
2017	Total Phosphorus	lbs/day	0.017	Annual Average	mg/L	3.6	Annual Average
2018	Total Phosphorus	lbs/day	0.65	Annual Average	mg/L	2.15	Annual Average
AVERAGE	*Total Phosphorus*	*lbs/day*	*2.50*	*Annual Average*	*mg/L*	*4.76*	*Annual Average*

Since the permittee has completed five years of sampling, in accordance with requirements for Phase V facilities in Phase 2 of Pennsylvania's Chesapeake Bay Watershed Implementation Plan, reporting for total nitrogen and phosphorus has been removed from the permit.

TMDL Considerations

The TMDL identifies Black Moshannon Creek as one of the few tributaries in the Moshannon Creek watershed not affected by abandoned mine drainage. Accordingly, a waste load allocation is not assigned to Black Moshannon Creek and the development of effluent limits is not impacted by the TMDL.

Anti-Backsliding

Monitoring requirements for Chesapeake Bay nutrients have been removed from the permit per anti-backsliding regulations at 40 CFR § 122.44(l)(2)(i)(B)(1), which allows for parameters to be removed from the permit based on information that was not available at the time of previous permit issuance.

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
	Average Monthly	Average Weekly	Instant. Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	XXX	XXX	XXX	XXX	XXX	Continuous	Metered
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	5.0	XXX	XXX	XXX	1/day	Grab
TRC	XXX	XXX	XXX	XXX	XXX	0.02	1/day	Grab
CBOD5	XXX	XXX	XXX	18	XXX	36	2/month	8-Hr Composite
TSS	XXX	XXX	XXX	30	XXX	60	2/month	8-Hr Composite
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
Ammonia	XXX	XXX	XXX	Report	XXX	XXX	2/month	8-Hr Composite

Compliance Sampling Location: Outfall 001

Attachments