

 Application Type
 Renewal

 Facility Type
 Industrial

 Major / Minor
 Minor

# NPDES PERMIT FACT SHEET INDIVIDUAL INDUSTRIAL WASTE (IW) AND IW STORMWATER

Application No.PA0060305APS ID1048215Authorization ID1370300

## **Applicant and Facility Information**

Applicant Name	PA DCNR	Facility Name	Mt. Pisgah State Park		
Applicant Address	28 Entrance Road	Facility Address	28 Entrance Road		
	Troy, PA 16947-8506		Troy, PA 16947-8506		
Applicant Contact	Layne Nolan (lanolan@pa.gov)	Facility Contact	Derek Parks (dparks@pa.gov)		
Applicant Phone	(570) 297-2734	Facility Phone	(570) 297-2734		
Client ID	52524	Site ID	245442		
SIC Code	4941	Municipality	West Burlington Township		
SIC Description	Trans. & Utilities - Water Supply	County	Bradford		
Date Application Recei	ved September 20, 2021	EPA Waived?	Yes		
Date Application Accept	ted September 27, 2021	If No, Reason			
Durnage of Application	Application for the renewal of a		for industrial wasts		
Purpose of Application	Application for the renewal of a	an individual INPDES Permit			

## Summary of Review

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.

This existing NPDES permit (PA0060305) is for the discharge of filter backwash to Mill Creek. The only treatment currently is approved under WQM Permit No. 0880206 and is achieved by a 1000-gallon settling tank. This NPDES permit will be terminated upon the completion of WQM Permit 0880206 A-1. That amendment permits the installation of a filter backwash infiltration system that will utilize components of the existing sewage WWTP to infiltrate the effluent in lieu of discharging.

Approve	Deny	Signatures	Date
x		Jonathan P. Peterman	
~		Jonathan P. Peterman / Project Manager	October 13, 2022
x		Nickolas W. Hartranft	
~		Nicholas W. Hartranft, P.E. / Environmental Engineer Manager	October 17, 2022

Discharge, Receiving Waters and Water Supply Information							
Outfall No. 001			Design Flow (MGD)	0.0002			
Latitude 41º 4	8' 18.94	1"	Longitude	-76º 40' 16.93"			
Quad Name Eas	st Troy		Quad Code	0432			
Wastewater Descrip	otion:	IW Process Effluent witho	out ELG				
Receiving Waters	Mill C	reek (TSF)	Stream Code	30718			
NHD Com ID	66400	)299	RMI	4.51 (for Mill Creek)			
Drainage Area	10.5 r	mi² (@Mill Creek)	Yield (cfs/mi²)	0.0042			
Q <sub>7-10</sub> Flow (cfs)	0.044	1	Q7-10 Basis	USGS StreamStats			
Elevation (ft)	1102		Slope (ft/ft)	Undetermined			
Watershed No.	4-C		Chapter 93 Class.	TSF			
Existing Use	None		Existing Use Qualifier	N/A			
Exceptions to Use	None		Exceptions to Criteria	None			
Assessment Status		Attaining Use(s)					
Cause(s) of Impairn	nent	N/A					
Source(s) of Impair	ment	N/A					
TMDL Status		N/A	Name N/A				
Nearest Downstrea	m Publi	c Water Supply Intake	Danville Municipal Authority				
PWS Waters	Susquel	hanna River	Flow at Intake (cfs)	1740			
PWS RMI	124		Distance from Outfall (mi)	Approx. 180			

Changes Since Last Permit Issuance: None.

Other Comments: The backwash discharge only occurs approximately three times per month for 20 minutes at a time. The discharge is to a vegetative area a few hundred feet from Mill Creek and likely evaporates or infiltrates prior to reaching Mill Creek.

## **Treatment Facility Summary**

#### Treatment Facility Name: Mt. Pisgah State Park

WQM Permit No.	Issuance Date	Comments
0880206	01/14/81	Original permit.
0880206 A-1	6/7/22	A pool filter backwash treatment and infiltration disposal system.

Changes Since Last Permit Issuance: Previously, the treatment of the filter backwash, as approved under WQM Permit No. 0880206 was provided by a 1000-gallon settling tank and discharged. The pool filter backwash will now be infiltrated and an NPDES permit will no longer be required after construction is completed.

Other Comments: None.

## **Existing Effluent Limitations and Monitoring Requirements**

#### Monitoring **Effluent Limitations** Requirements Mass Units Parameter (lbs/day)<sup>(1)</sup> Concentrations (mg/L) Minimum<sup>(2)</sup> Required Average Average Sample Average Instant. Measurement Monthly Weekly Minimum Monthly Maximum Maximum Frequency Туре Report Daily Flow (MGD) Max XXX XXX XXX XXX Estimate Report 1/day XXX XXX 6.0 XXX 9.0 XXX 1/week pH (S.U.) Grab Total Residual Chlorine (TRC) XXX 1.2 XXX XXX 0.5 XXX 1/week Grab **Total Suspended** Solids 30 XXX XXX XXX XXX 60 1/month Grab 8.0 Aluminum, Total XXX XXX XXX 4.0 Daily Max XXX 1/year Grab 4.0 XXX XXX XXX 2.0 Daily Max XXX Iron, Total 1/year Grab Manganese, 2.0 Total XXX XXX XXX 1.0 Daily Max XXX 1/year Grab

## Existing Limits – Outfall 001

\*The existing effluent limits for Outfall 001 were based on a design flow of 0.0002 MGD.

#### **Development of Effluent Limitations**

Outfall No.	001	
Latitude	41º 48' 21.80	)"
Wastewater D	escription:	IW Process Effluent without ELG

Design Flow (MGD) \_ Longitude

0.0002

-76° 40' 11.90"

## **Technology-Based Limitations**

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

Parameter	Limit (mg/l) (Average Monthly)	Limit (mg/l) (Daily Maximum)	Federal Regulation	State Regulation
рН	6-9 at all times	-	§133.102(c)	§95.2
TRC	0.5	-	-	§92a.48

Parameter	Limit (mg/l) (Average Monthly)	Limit (mg/l) (Daily Maximum)	Basis
TSS	30	60	
Iron (Total)	2.0	4.0	These limits are derived from Guidance Document
Aluminum (Total)	4.0	8.0	(392-2183-003) Technology-Based Control
Manganese (Total)	1.0	2.0	Requirements for Water Treatment Plant.
TRC	0.5	1.0	

### Water Quality-Based Limitations

To establish whether or not water-quality based effluent limitations (WQBELs) are required, the Department models instream conditions. In order to determine limitations for toxics, the Department utilizes the Toxics Management Spreadsheet (TMS). The use of a WQM7.0 or TMS analysis is not required for this discharge.

#### **Best Professional Judgment (BPJ) Limitations**

Comments: None needed beyond the technology-based limitations noted above.

#### Anti-Backsliding

In accordance with 40 CFR 122.44(I)(1) and (2), this permit does not contain effluent limitations, standards, or conditions that are less stringent than the previous permit.

#### **Chesapeake Bay**

In accordance with the Phase III WIP Chesapeake Bay Strategy this facility has been identified previously by DEP as "insignificant dischargers" by virtue of having gross effluent discharges that do not exceed 75 lbs/day of TN or 25 lbs/day of TP. For these non-significant IW facilities, monitoring and reporting of TN and TP will be required throughout the permit term in renewed or amended permits anytime the facility has the potential to introduce a net TN or TP increase to the load contained within the intake water used in processing. No nutrient monitoring is required for this facility.

## 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 the abovementioned 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) and/or BPJ.

## Proposed Limits - Outfall 001, Effective Period: Permit Effective Date through Permit Expiration Date

			Effluent	Limitations	6	Monitoring Requirements		
Parameter		Units ay) <sup>(1)</sup>		Concentra	Minimum <sup>(2)</sup>	Required		
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum	Measurement Frequency	Sample Type
		Report Daily						
Flow (MGD)	Report	Max	XXX	XXX	XXX	XXX	1/day	Estimate
pH (S.U.)	xxx	xxx	6.0	xxx	9.0	XXX	1/week	Grab
Total Residual Chlorine (TRC)	xxx	xxx	xxx	0.5	xxx	1.2	1/week	Grab
Total Suspended Solids	ххх	XXX	xxx	30	xxx	60	1/month	Grab
Aluminum, Total	XXX	XXX	XXX	4.0	8.0 Daily Max	xxx	1/year	Grab
Iron, Total	XXX	XXX	XXX	2.0	4.0 Daily Max	xxx	1/year	Grab
Manganese, Total	XXX	XXX	XXX	1.0	2.0 Daily Max	xxx	1/year	Grab

\*The proposed effluent limits for Outfall 001 were based on a design flow of 0.0002 MGD.

The existing monitoring frequencies and sample types for the abovementioned parameters are consistent with water treatment plant wastewater discharges and the *Technical Guidance for the Development and Specification of Effluent Limitations* (362-0400-001) Table 6-4. The existing requirements will remain.

## Flow

The existing reporting of average monthly and daily max flows is consistent with similar facilities and will remain.

## pН

CFR Title 40 §133.102(c) and 25 PA Code §95.2(1) provide the basis of effluent limitations for pH.

## Total Suspended Solids (TSS), Total Aluminum, Total Manganese, and Total Iron

The existing technology-based effluent limits for these parameters have been implemented in accordance with DEP Guidance Document (392-2183-003) *Technology-Based Control Requirements for Water Treatment Plants* and shall remain.

## **Total Residual Chlorine (TRC)**

The Guidance Document (392-2183-003) stipulates that the monthly average limit for TRC should be 0.5 mg/L, but it also stipulates that the technology limit for TRC is required by former Section 93.5 of Title 25 of the Departments Regulations. It also refers to Section 93.5 and the Implementation Guidance for Total Residual Chlorine (TRC) Regulation for details on how to impose TRC limitations. The TRC model evaluation was conducted using the existing technology-based limit of 0.5 mg/l and the results indicate that the existing limit is protective of water quality. The existing TRC effluent limits will remain.

## **Compliance History**

**<u>Summary of Inspections</u>** -The last inspection of the facility was conducted on 5/11/21 by the Department which reveals that there were no issues and the facility was operating normally.

<u>WMS Query Summary</u> - A WMS Query was run at *Reports* - *Violations & Enforcements* – *Open Violations for Client Report* to determine whether there are any unresolved violations associated with the client that will affect issuance of the permit (per CSL Section 609). This query revealed no open violations for this facility. There were open violations for PA DCNR statewide, but this should not affect the issuance of this particular permit.

## **Compliance History**

## DMR Data for Outfall 001 (from September 1, 2021 to August 31, 2022)

Parameter	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21	NOV-21	OCT-21	SEP-21
Flow (MGD)								0.00020	0.00020	0.00020	0.00020	0.00020
Average Monthly	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002		0	0	0	0	0
Flow (MGD)								0.00020	0.00020	0.00020	0.00020	0.00020
Daily Maximum	0.0002	0.0002	0.0002	0.0002	0.0002	0.0002		0	0	0	0	0
pH (S.U.)												
Minimum	8.1	8.0	7.9	8.0	8.0	7.8		8.1	8.0	8.0	8.2	7.9
pH (S.U.)												
Maximum	8.2	8.2	8.1	8.2	8.0	7.8		8.1	8.0	8.0	8.2	8.1
TRC (mg/L)												
Average Monthly	0.12	0.11	0.09	0.11	0.10	0.09		0.08	0.10	0.09	0.11	0.12
TRC (mg/L)												
Instantaneous												
Maximum	0.15	0.13	0.11	0.12	0.10	0.09		0.08	0.10	0.09	0.11	0.16
TSS (mg/L)												
Average Monthly	< 8	< 8	< 8	< 8	< 8	< 15		< 15	< 15	< 15	6	< 5
TSS (mg/L)												
Instantaneous												
Maximum	< 8	< 8	< 8	< 8	< 8	< 15		< 15	< 15	< 15	6	< 5
Total Aluminum												
(mg/L)												
Average Monthly									0.30			
Total Aluminum												
(mg/L)												
Daily Maximum									0.30			
Total Iron (mg/L)												
Average Monthly									0.10			
Total Iron (mg/L)												
Daily Maximum									0.10			
Total Manganese												
(mg/L)									0.40			
Average Monthly									0.12			
Total Manganese												
(mg/L)									0.40			
Daily Maximum									0.12			

	Tools and References Used to Develop Permit
	WQM for Windows Model (see Attachment )
	Toxics Management Spreadsheet (see Attachment)
	TRC Model Spreadsheet (see Attachment)
	Temperature Model Spreadsheet (see Attachment)
	Water Quality Toxics Management Strategy, 361-0100-003, 4/06.
	Technical Guidance for the Development and Specification of Effluent Limitations, 362-0400-001, 10/97.
	Policy for Permitting Surface Water Diversions, 362-2000-003, 3/98.
	Policy for Conducting Technical Reviews of Minor NPDES Renewal Applications, 362-2000-008, 11/96.
	Technology-Based Control Requirements for Water Treatment Plant Wastes, 362-2183-003, 10/97.Technical Guidance for Development of NPDES Permit Requirements Steam Electric Industry, 362-2183-004, 12/97.
	Pennsylvania CSO Policy, 385-2000-011, 9/08.
$\square$	Water Quality Antidegradation Implementation Guidance, 391-0300-002, 11/03.
	Implementation Guidance Evaluation & Process Thermal Discharge (316(a)) Federal Water Pollution Act, 391-2000-002, 4/97.
$\square$	Determining Water Quality-Based Effluent Limits, 391-2000-003, 12/97.
	Implementation Guidance Design Conditions, 391-2000-006, 9/97.
	Technical Reference Guide (TRG) WQM 7.0 for Windows, Wasteload Allocation Program for Dissolved Oxygen and Ammonia Nitrogen, Version 1.0, 391-2000-007, 6/2004.
	Interim Method for the Sampling and Analysis of Osmotic Pressure on Streams, Brines, and Industrial Discharges, 391-2000-008, 10/1997.
	Implementation Guidance for Section 95.6 Management of Point Source Phosphorus Discharges to Lakes, Ponds, and Impoundments, 391-2000-010, 3/99.
	Technical Reference Guide (TRG) PENTOXSD for Windows, PA Single Discharge Wasteload Allocation Program for Toxics, Version 2.0, 391-2000-011, 5/2004.
	Implementation Guidance for Section 93.7 Ammonia Criteria, 391-2000-013, 11/97.
	Policy and Procedure for Evaluating Wastewater Discharges to Intermittent and Ephemeral Streams, Drainage Channels and Swales, and Storm Sewers, 391-2000-014, 4/2008.
$\square$	Implementation Guidance Total Residual Chlorine (TRC) Regulation, 391-2000-015, 11/1994.
	Implementation Guidance for Temperature Criteria, 391-2000-017, 4/09.
	Implementation Guidance for Section 95.9 Phosphorus Discharges to Free Flowing Streams, 391-2000-018, 10/97.Implementation Guidance for Application of Section 93.5(e) for Potable Water Supply Protection Total Dissolved Solids, Nitrite-Nitrate, Non-Priority Pollutant Phenolics and Fluorides, 391-2000-019, 10/97.
	Field Data Collection and Evaluation Protocol for Determining Stream and Point Source Discharge Design Hardness, 391-2000-021, 3/99.
	Implementation Guidance for the Determination and Use of Background/Ambient Water Quality in the Determination of Wasteload Allocations and NPDES Effluent Limitations for Toxic Substances, 391-2000-022, 3/1999.
$\boxtimes$	Design Stream Flows, 391-2000-023, 9/98.
	Field Data Collection and Evaluation Protocol for Deriving Daily and Hourly Discharge Coefficients of Variation (CV) and Other Discharge Characteristics, 391-2000-024, 10/98.
	Evaluations of Phosphorus Discharges to Lakes, Ponds and Impoundments, 391-3200-013, 6/97.
$\boxtimes$	Pennsylvania's Chesapeake Bay Tributary Strategy Implementation Plan for NPDES Permitting, 4/07.
	SOP:
	Other:



