

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

#### NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No.	PA0096521
APS ID	1066217
Authorization ID	1401004

#### **Applicant and Facility Information**

Applicant Name	PA DCNR	Facility Name	Boaters Change House STP
Applicant Address	PO Box 105	Facility Address	168 Dinnerbell Road
	Ohiopyle, PA 15470-0105		Ohiopyle, PA 15470
Applicant Contact	David Naill	Facility Contact	Same as applicant
Applicant Phone	(724) 329-8591	Facility Phone	Same as Applicant
Client ID	52524	Site ID	263222
Ch 94 Load Status	Not Overloaded	Municipality	Stewart Township
Connection Status	No Limitations	County	Fayette
Date Application Receiv	vedJune 27, 2022	EPA Waived?	Yes
Date Application Accep	ted July 7, 2022	If No, Reason	
Purpose of Application	Renewal of NPDES permit for sewage	ge discharge	

#### Summary of Review

The permittee has applied for a renewal of NPDES Permit No. PA0096521 on June 27, 2022. NPDES Permit No. PA0096521 was previously issued by the PA Department of Environmental Protection (DEP) on September 1, 2017 and expired on August 31, 2022.

Sewage from this facility is treated through two aeration tanks connected to clarifiers. After the clarifiers, the effluent flows through chlorine tablet feeders in a chlorine contact tank. After the contact tank, the effluent flows to a dechlorination tablet feeder and then a contact tank. It then discharges to Meadow Run through outfall 001. Meadow Run is classified as High Quality – Cold Water Fishes (HQ-CWF) per Chapter 93 Designated Uses.

The applicant is currently enrolled in and will continue to use eDMR.

The applicant has complied with Act 14 Notifications and no comments were received.

The permittee is currently dealing with chronic effluent violations due to their system being underloaded. The Boaters Change House STP was designed to treat an average daily flow of 10,000 GPD. Currently, during the peak season, the plant treats less than 1000 GPD. The DEP and EPA are offering technical assistance to the permittee to find ways to resolve these issues.

Approve	Deny	Signatures	Date
х		Jordan Coldsmith / Environmental Engineering Specialist	January 10, 2023
х		Манвива Iasmin, Ph.D., P.E. / Environmental Engineering Manager	January 23, 2023

#### **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 Infor	mation	
Outfall No. 001	Design Flow (MGD)	0.01
Latitude <u>39° 51' 24.32"</u>	Longitude	-79º 29' 47.85"
Quad Name Ohiopyle	Quad Code	39079G4
Wastewater Description: Sewage Effluent		
Receiving Waters <u>Meadow Run (HQ-CWF)</u>	Stream Code	38488
NHD Com ID 69921685	RMI	0.62
Drainage Area 40.9	Yield (cfs/mi <sup>2</sup> )	0.026
Q <sub>7-10</sub> Flow (cfs) <u>1.07</u>	Q7-10 Basis	USGS StreamStat
Elevation (ft) 2030	Slope (ft/ft)	
Watershed No. 19-E	Chapter 93 Class.	HQ-CWF
Existing Use	Existing Use Qualifier	
Exceptions to Use	Exceptions to Criteria	
Assessment Status Attaining Use(s)		
Cause(s) of Impairment		
Source(s) of Impairment		
TMDL Status N/A	Name N/A	
Background/Ambient Data	Data Source	
pH (SU)		
Temperature (°F)		
Hardness (mg/L)		
Other:		
Nearest Downstream Public Water Supply Intake	NORTH FAYETTE CNTY MUNI	AUTH
PWS Waters Youghiogheny River (HQ-CWF)	Flow at Intake (cfs)	
PWS RMI	Distance from Outfall (mi)	16.3

Changes Since Last Permit Issuance: None

Other Comments: N/A

#### **Treatment Facility Summary**

Treatment Facility No.	mai Obianula Stata Dark D	atora Changa Hausa		
reatment Facility Na	me: Ohiopyle State Park Bo	Daters Change House		
WQM Permit No.	Issuance Date			
2685405 A-1	12/09/1999			
	Degree of			Avg Annual
Waste Type	Treatment	Process Type	Disinfection	Flow (MGD)
	Secondary With		Chlorine With	• •
Sewage	Ammonia Reduction	Extended Aeration	Dechlorination	0.01
Hydraulic Capacity	Organic Capacity			Biosolids
(MGD)	(lbs/day)	Load Status	<b>Biosolids Treatment</b>	Use/Disposal
0.01	25	Not Overloaded	Drying	Landfill

Changes Since Last Permit Issuance: None

Other Comments: N/A

#### **Compliance History**

### **Operations Compliance Check Summary Report**

Facility: Ohiopyle State Park Boaters Change House STP

NPDES Permit No.: PA0096521

Compliance Review Period: 12/2017 - 12/2022

#### Inspection Summary:

INSP ID	INSPECTED DATE	INSP TYPE	INSPECTION RESULT DESC
3420021	08/12/2022	Administrative/File Review	No Violations Noted
<u>3420019</u>	08/12/2022	Compliance Evaluation	No Violations Noted
<u>3090521</u>	10/06/2020	Compliance Evaluation	No Violations Noted
<u>2908758</u>	07/09/2019	Routine/Partial Inspection	No Violations Noted
<u>2897739</u>	06/20/2019	Compliance Evaluation	No Violations Noted
<u>2896105</u>	06/07/2019	Routine/Partial Inspection	No Violations Noted
<u>2893461</u>	05/24/2019	Routine/Partial Inspection	No Violations Noted

#### Violation Summary:

No violations

#### Open Violations by Client ID:

Several CW violations for DCNR State Park STP's in the state.

#### Enforcement Summary:

No enforcements

#### DMR Violation Summary:

START	END	COMPLIANCE CATEGORY	PARAMETER	SAMPLE	PERMIT	UNIT OF MEA SURE	STATI STICAL BASE CODE
09/01/2022	09/30/2022	Concentration 2 Effluent Violation	Total Suspended Solids	12.0	10.0	mg/L	Average Monthly
08/01/2022	08/31/2022	Concentration 1 Effluent Violation	Dissolved Oxygen	1.96	4.0	mg/L	Minimum
08/01/2022	08/31/2022	Concentration 2 Effluent Violation	Ammonia- Nitrogen	1.65	1.5	mg/L	Average Monthly

07/01/2022	07/31/2022	Concentration 2 Effluent Violation	Total Suspended Solids	14.0	10.0	mg/L	Average Monthly
06/01/2022	06/30/2022	Concentration 1 Effluent Violation	Dissolved Oxygen	0.69	4.0	mg/L	Minimum
06/01/2022	06/30/2022	Concentration 2 Effluent Violation	Ammonia- Nitrogen	3.12	1.5	mg/L	Average Monthly
06/01/2022	06/30/2022	Concentration 3 Effluent Violation	Ammonia- Nitrogen	3.89	3.0	mg/L	Instantaneous Maximum
05/01/2022	05/31/2022	Concentration 1 Effluent Violation	Dissolved Oxygen	0.09	4.0	mg/L	Minimum
05/01/2022	05/31/2022	Concentration 3 Effluent Violation	pН	9.08	9.0	S.U.	Maximum
04/01/2022	04/30/2022	Concentration 1 Effluent Violation	Dissolved Oxygen	3.73	4.0	mg/L	Minimum
03/01/2022	03/31/2022	Concentration 1 Effluent Violation	Dissolved Oxygen	0.55	4.0	mg/L	Minimum
03/01/2022	03/31/2022	Concentration 2 Effluent Violation	Carbonaceous Biochemical Oxygen Demand (CBOD5)	18.73	15.0	mg/L	Average Monthly
03/01/2022	03/31/2022	Concentration 3 Effluent Violation	рH	9.27	9.0	S.U.	Maximum
02/01/2022	02/28/2022	Concentration 1 Effluent Violation	Dissolved Oxygen	1.49	4.0	mg/L	Minimum
02/01/2022	02/28/2022	Concentration 3 Effluent Violation	pН	9.51	9.0	S.U.	Maximum
01/01/2022	01/31/2022	Concentration 3 Effluent Violation	pН	10.37	9.0	S.U.	Maximum
12/01/2021	12/31/2021	Concentration 1 Effluent Violation	Dissolved Oxygen	0.76	4.0	mg/L	Minimum
12/01/2021	12/31/2021	Concentration 3 Effluent Violation	pН	9.53	9.0	S.U.	Maximum
11/01/2021	11/30/2021	Concentration 1 Effluent Violation	Dissolved Oxygen	0.60	4.0	mg/L	Minimum
11/01/2021	11/30/2021	Concentration 3 Effluent Violation	рН	9.52	9.0	S.U.	Maximum
10/01/2021	10/31/2021	Concentration 1 Effluent Violation	Dissolved Oxygen	3.82	4.0	mg/L	Minimum
10/01/2021	10/31/2021	Concentration 3 Effluent Violation	pН	9.58	9.0	S.U.	Maximum

09/01/2021	09/30/2021	Concentration 1 Effluent Violation	Dissolved Oxygen	2.44	4.0	mg/L	Minimum
09/01/2021	09/30/2021	Concentration 3 Effluent Violation	рН	9.11	9.0	S.U.	Maximum
08/01/2021	08/31/2021	Concentration 1 Effluent Violation	Dissolved Oxygen	2.10	4.0	mg/L	Minimum
07/01/2021	07/31/2021	Concentration 1 Effluent Violation	Dissolved Oxygen	2.68	4.0	mg/L	Minimum
07/01/2021	07/31/2021	Concentration 2 Effluent Violation	Ammonia- Nitrogen	1.66	1.5	mg/L	Average Monthly
06/01/2021	06/30/2021	Concentration 1 Effluent Violation	Dissolved Oxygen	2.72	4.0	mg/L	Minimum
05/01/2021	05/31/2021	Concentration 1 Effluent Violation	Dissolved Oxygen	2.87	4.0	mg/L	Minimum
05/01/2021	05/31/2021	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	4.10	1.6	mg/L	Instantaneous Maximum
04/01/2021	04/30/2021	Concentration 1 Effluent Violation	Dissolved Oxygen	2.0	4.0	mg/L	Minimum
04/01/2021	04/30/2021	Concentration 2 Effluent Violation	Carbonaceous Biochemical Oxygen Demand (CBOD5)	23.7	15.0	mg/L	Average Monthly
04/01/2021	04/30/2021	Concentration 3 Effluent Violation	Carbonaceous Biochemical Oxygen Demand (CBOD5)	32.9	30.0	mg/L	Instantaneous Maximum
04/01/2021	04/30/2021	Concentration 3 Effluent Violation	рН	9.37	9.0	S.U.	Maximum
03/01/2021	03/31/2021	Concentration 1 Effluent Violation	Dissolved Oxygen	0.37	4.0	mg/L	Minimum
02/01/2021	02/28/2021	Concentration 1 Effluent Violation	Dissolved Oxygen	0.21	4.0	mg/L	Minimum
02/01/2021	02/28/2021	Concentration 1 Effluent Violation	рН	3.3	6.0	S.U.	Minimum
02/01/2021	02/28/2021	Concentration 2 Effluent Violation	Carbonaceous Biochemical Oxygen Demand (CBOD5)	50.4	15.0	mg/L	Average Monthly
02/01/2021	02/28/2021	Concentration 3 Effluent Violation	Carbonaceous Biochemical Oxygen Demand (CBOD5)	77.7	30.0	mg/L	Instantaneous Maximum

01/01/2021	01/31/2021	Concentration 1 Effluent Violation	Dissolved Oxygen	0.42	4.0	mg/L	Minimum
12/01/2020	12/31/2020	Concentration 1 Effluent Violation	Dissolved Oxygen	1.9	4.0	mg/L	Minimum
12/01/2020	12/31/2020	Concentration 2 Effluent Violation	Carbonaceous Biochemical Oxygen Demand (CBOD5)	62.5	15.0	mg/L	Average Monthly
12/01/2020	12/31/2020	Concentration 3 Effluent Violation	Carbonaceous Biochemical Oxygen Demand (CBOD5)	101.0	30.0	mg/L	Instantaneous Maximum
11/01/2020	11/30/2020	Concentration 1 Effluent Violation	Dissolved Oxygen	3.9	4.0	mg/L	Minimum
10/01/2020	10/31/2020	Concentration 1 Effluent Violation	Dissolved Oxygen	3.5	4.0	mg/L	Minimum
08/01/2020	08/31/2020	Concentration 1 Effluent Violation	Dissolved Oxygen	1.93	4.0	mg/L	Minimum
08/01/2020	08/31/2020	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	6.9	1.6	mg/L	Instantaneous Maximum
07/01/2020	07/31/2020	Concentration 1 Effluent Violation	Dissolved Oxygen	3.4	4.0	mg/L	Minimum
07/01/2020	07/31/2020	Concentration 2 Effluent Violation	Ammonia- Nitrogen	2.3	1.5	mg/L	Average Monthly
07/01/2020	07/31/2020	Concentration 3 Effluent Violation	Ammonia- Nitrogen	4.4	3.0	mg/L	Instantaneous Maximum
07/01/2020	07/31/2020	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	5.9	1.6	mg/L	Instantaneous Maximum
06/01/2020	06/30/2020	Concentration 1 Effluent Violation	Dissolved Oxygen	0.8	4.0	mg/L	Minimum
06/01/2020	06/30/2020	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	4.4	1.6	mg/L	Instantaneous Maximum
05/01/2020	05/31/2020	Concentration 1 Effluent Violation	Dissolved Oxygen	0.4	4.0	mg/L	Minimum
04/01/2020	04/30/2020	Concentration 1 Effluent Violation	Dissolved Oxygen	2.4	4.0	mg/L	Minimum
04/01/2020	04/30/2020	Concentration 2 Effluent Violation	Total Residual Chlorine (TRC)	0.7	0.5	mg/L	Average Monthly
04/01/2020	04/30/2020	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	8.8	1.6	mg/L	Instantaneous Maximum
03/01/2020	03/31/2020	Concentration 1 Effluent Violation	Dissolved Oxygen	2.4	4.0	mg/L	Minimum

#### NPDES Permit Fact Sheet Boaters Change House STP

02/01/2020	02/29/2020	Concentration 1 Effluent Violation	Dissolved Oxygen	3.4	4.0	mg/L	Minimum
02/01/2020	02/29/2020	Concentration 2 Effluent Violation	Total Suspended Solids	12.0	10.0	mg/L	Average Monthly
02/01/2020	02/29/2020	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	5.0	1.6	mg/L	Instantaneous Maximum
12/01/2019	12/31/2019	Concentration 1 Effluent Violation	Dissolved Oxygen	1.9	4.0	mg/L	Minimum
12/01/2019	12/31/2019	Concentration 2 Effluent Violation	Carbonaceous Biochemical Oxygen Demand (CBOD5)	19.9	15.0	mg/L	Average Monthly
12/01/2019	12/31/2019	Concentration 3 Effluent Violation	Carbonaceous Biochemical Oxygen Demand (CBOD5)	39.6	30.0	mg/L	Instantaneous Maximum
11/01/2019	11/30/2019	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	< 2.2	1.6	mg/L	Instantaneous Maximum
08/01/2019	08/31/2019	Concentration 2 Effluent Violation	Fecal Coliform	> 245	200	No./100 ml	Geometric Mean
08/01/2019	08/31/2019	Concentration 2 Effluent Violation	Total Residual Chlorine (TRC)	0.9	0.5	mg/L	Average Monthly
08/01/2019	08/31/2019	Concentration 3 Effluent Violation	Fecal Coliform	> 6000	1000	No./100 ml	Instantaneous Maximum
08/01/2019	08/31/2019	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	2.2	1.6	mg/L	Instantaneous Maximum
07/01/2019	07/31/2019	Concentration 3 Effluent Violation	pН	9.3	9.0	S.U.	Maximum
06/01/2019	06/30/2019	Concentration 2 Effluent Violation	Ammonia- Nitrogen	3.2	1.5	mg/L	Average Monthly
06/01/2019	06/30/2019	Concentration 3 Effluent Violation	Ammonia- Nitrogen	5.3	3.0	mg/L	Instantaneous Maximum
06/01/2019	06/30/2019	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	2.20	1.6	mg/L	Instantaneous Maximum
04/01/2019	04/30/2019	Concentration 2 Effluent Violation	Total Residual Chlorine (TRC)	1.7	0.5	mg/L	Average Monthly
04/01/2019	04/30/2019	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	8.4	1.6	mg/L	Instantaneous Maximum
04/01/2019	04/30/2019	Concentration 3 Effluent Violation	рН	9.6	9.0	S.U.	Maximum
03/01/2019	03/31/2019	Concentration 1 Effluent Violation	pН	5.4	6.0	S.U.	Minimum

#### NPDES Permit Fact Sheet Boaters Change House STP

02/01/2019	02/28/2019	Concentration 2 Effluent Violation	Total Residual Chlorine (TRC)	6.0	0.5	mg/L	Average Monthly
02/01/2019	02/28/2019	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	6.8	1.6	mg/L	Instantaneous Maximum
01/01/2019	01/31/2019	Concentration 2 Effluent Violation	Total Residual Chlorine (TRC)	1.26	0.5	mg/L	Average Monthly
01/01/2019	01/31/2019	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	8.80	1.6	mg/L	Instantaneous Maximum
12/01/2018	12/31/2018	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	2.4	1.6	mg/L	Instantaneous Maximum
10/01/2018	10/31/2018	Concentration 3 Effluent Violation	pН	10.2	9.0	S.U.	Maximum
09/01/2018	09/30/2018	Concentration 2 Effluent Violation	Total Residual Chlorine (TRC)	0.91	0.5	mg/L	Average Monthly
09/01/2018	09/30/2018	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	8.8	1.6	mg/L	Instantaneous Maximum
09/01/2018	09/30/2018	Concentration 3 Effluent Violation	рН	9.7	9.0	S.U.	Maximum
08/01/2018	08/31/2018	Concentration 2 Effluent Violation	Total Residual Chlorine (TRC)	> 1.7	0.5	mg/L	Average Monthly
08/01/2018	08/31/2018	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	> 8.8	1.6	mg/L	Instantaneous Maximum
07/01/2018	07/31/2018	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	> 2.2	1.6	mg/L	Instantaneous Maximum
07/01/2018	07/31/2018	Concentration 3 Effluent Violation	рН	9.2	9.0	S.U.	Maximum
06/01/2018	06/30/2018	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	> 2.20	1.6	mg/L	Instantaneous Maximum
05/01/2018	05/31/2018	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	> 2.20	1.6	mg/L	Instantaneous Maximum
04/01/2018	04/30/2018	Concentration 2 Effluent Violation	Total Residual Chlorine (TRC)	1.7	0.5	mg/L	Average Monthly
04/01/2018	04/30/2018	Concentration 2 Effluent Violation	Total Suspended Solids	12.0	10.0	mg/L	Average Monthly
04/01/2018	04/30/2018	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	6.2	1.6	mg/L	Instantaneous Maximum
02/01/2018	02/28/2018	Concentration 3 Effluent Violation	Total Residual Chlorine (TRC)	> 2.2	1.6	mg/L	Instantaneous Maximum

#### Compliance Status:

Permittee is a state-owned facility. Operations is working with technical assistance concerning the effluent violations

Completed by: John Murphy

Completed date: 12/13/2022

#### **Compliance History**

#### DMR Data for Outfall 001 (from December 1, 2021 to November 30, 2022)

Parameter	NOV-22	OCT-22	SEP-22	AUG-22	JUL-22	JUN-22	MAY-22	APR-22	MAR-22	FEB-22	JAN-22	DEC-21
Flow (MGD)												
Average Monthly	0.0000076	0.00011	0.00022	0.0009	0.0009	0.0005	0.00017	0.00005	0.00	0.00	0.00	0.00
pH (S.U.)												
Minimum	8.41	7.80	6.81	7.42	7.31	7.69	7.79	8.29	7.77	7.86	7.59	7.67
pH (S.U.)												
Maximum	8.81	8.71	8.68	8.85	8.89	8.88	9.08	8.89	9.27	9.51	10.37	9.53
DO (mg/L)												
Minimum	7.71	6.69	4.42	1.96	4.54	0.69	0.09	3.73	0.55	1.49	5.45	0.76
TRC (mg/L)												
Average Monthly	0.03	0.018	0.009	0.02	0.05	0.03	0.04	0.011	0.04	0.03	0.003	0.0003
TRC (mg/L)												
Instantaneous	0.40	0.00	0.40	0.45		0.40	0.47	0.05	0.07	0.07		0.04
Maximum	0.13	0.09	0.13	0.15	0.98	0.40	0.47	0.05	0.37	0.07	0.04	0.01
CBOD5 (mg/L)	0.0	0.50	4.45	4.04	5.40	40.07	0.75	1.40	40.70	0.00	0.40	0.00
Average Monthly	2.6	0.56	1.45	1.64	5.19	13.37	2.75	1.42	18.73	2.30	2.12	< 0.20
CBOD5 (mg/L)												
Instantaneous	3.82	0.85	2.19	1.66	9.52	24.72	4.29	2.81	21.27	2.25	1.94	< 0.20
Maximum	3.82	0.85	2.19	1.00	9.52	24.72	4.29	2.81	21.27	2.25	1.94	< 0.20
TSS (mg/L)	8.5	< 8.0	12.0	< 8.0	14.0	< 8.0	< 8.0	< 8.0	6.0	6.0	6.0	< 6.0
Average Monthly TSS (mg/L)	6.0	< 0.0	12.0	< 0.0	14.0	< 0.0	< 0.0	< 0.0	0.0	0.0	0.0	< 0.0
Instantaneous												
Maximum	9.0	< 8.0	16.0	< 8.0	20.0	< 8.0	< 8.0	< 8.0	< 6.0	5.0	< 6.0	< 6.0
Fecal Coliform	5.0	< 0.0	10.0	< 0.0	20.0	< 0.0	< 0.0	< 0.0	< 0.0	0.0	< 0.0	< 0.0
(No./100 ml)												
Geometric Mean	< 10.0	< 10.0	34.19	17.32	31.62	< 10.0	< 10.0	< 10	10.0	10	< 10	10
Fecal Coliform	10.0	4 1010	01110	11102	01102	4 1010	4 1010		10.0	10	4.10	10
(No./100 ml)												
Instantaneous												
Maximum	< 10.0	< 10.0	400	30	100	< 10.0	< 10.0	< 10	< 10.0	10	< 10	< 10
Total Nitrogen												
(mg/L)												
Daily Maximum												102.58
Ammonia (mg/L)												
Average Monthly	0.07	0.075	0.13	1.65	1.25	3.12	0.095	0.05	0.14	0.05	0.02	0.22

#### NPDES Permit Fact Sheet Boaters Change House STP

#### NPDES Permit No. PA0096521

Ammonia (mg/L) Instantaneous												
Maximum	0.09	0.10	0.19	1.91	1.29	3.89	0.12	0.06	0.16	0.035	< 0.02	0.25
Total Phosphorus												
(mg/L)												
Daily Maximum												8.976

#### **Compliance History**

#### Effluent Violations for Outfall 001, from: January 1, 2022 To: November 30, 2022

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
рН	02/28/22	Max	9.51	S.U.	9.0	S.U.
рН	02/28/22	Max	9.51	S.U.	9.0	S.U.
рН	01/31/22	Max	10.37	S.U.	9.0	S.U.
рН	05/31/22	Max	9.08	S.U.	9.0	S.U.
рН	03/31/22	Max	9.27	S.U.	9.0	S.U.
рН	02/28/22	Max	9.51	S.U.	9.0	S.U.
DO	08/31/22	Min	1.96	mg/L	4.0	mg/L
DO	06/30/22	Min	0.69	mg/L	4.0	mg/L
DO	06/30/22	Min	0.69	mg/L	4.0	mg/L
DO	05/31/22	Min	0.09	mg/L	4.0	mg/L
DO	02/28/22	Min	1.49	mg/L	4.0	mg/L
DO	02/28/22	Min	1.49	mg/L	4.0	mg/L
DO	02/28/22	Min	1.49	mg/L	4.0	mg/L
DO	04/30/22	Min	3.73	mg/L	4.0	mg/L
DO	03/31/22	Min	0.55	mg/L	4.0	mg/L

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DO	06/30/22	Min	0.69	mg/L	4.0	mg/L
CBOD5	03/31/22	Avg Mo	18.73	mg/L	15.0	mg/L
TSS	07/31/22	Avg Mo	14.0	mg/L	10.0	mg/L
TSS	09/30/22	Avg Mo	12.0	mg/L	10.0	mg/L
Ammonia	06/30/22	Avg Mo	3.12	mg/L	1.5	mg/L
Ammonia	06/30/22	Avg Mo	3.12	mg/L	1.5	mg/L
Ammonia	06/30/22	Avg Mo	3.12	mg/L	1.5	mg/L
Ammonia	08/31/22	Avg Mo	1.65	mg/L	1.5	mg/L
Ammonia	06/30/22	IMAX	3.89	mg/L	3.0	mg/L
Ammonia	06/30/22	IMAX	3.89	mg/L	3.0	mg/L
Ammonia	06/30/22	IMAX	3.89	mg/L	3.0	mg/L

Summary of Inspections: Permittee is a state-owned facility. Effluent violations are occurring due to the facility being underloaded. <u>Operations is currently</u> working with technical assistance concerning the effluent violations.

Other Comments: N/A

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

Outfall No.	001		Design Flow (MGD)	.01
Latitude	39º 51' 24.3	2"	Longitude	-79º 29' 47.85"
Wastewater De	escription:	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 <sub>5</sub>	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	30	Average Monthly	133.102(b)(1)	92a.47(a)(1)
Solids	45	Average Weekly	133.102(b)(2)	92a.47(a)(2)
рН	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	0.5	Average Monthly	-	92a.48(b)(2)

#### Water Quality-Based Limitations

Limits for Ammonia-Nitrogen, and CBOD<sub>5</sub> in the previous permit were determined using WQM 6.3. WQM 7.0 water quality modeling was run in order to determine new limits for this permit renewal.

Total Suspended Solids (TSS) limits were 10.0 average monthly and 20.0 IMAX as in the last permit.

The following limitations were imposed in the previous permit and it was determined through WQM 7 modeling (Attachments 2 & 3), TRC Calculations, and anti-backsliding regulations that they will be reimposed for this permit.

Parameter	Parameter Limit (mg/l)		Model
TRC	0.5	Average Monthly	
TRC	1.6	IMAX	TRC-CALC
Ammonia-Nitrogen	1.5	Average Monthly	
(May 1 – Oct 31)	3.0	IMAX	WQM 7
Ammonia-Nitrogen	4.5	Average Monthly	
(Nov 1 – Apr 3)	9.0	IMAX	WQM 7
CBOD <sub>5</sub>	15.0	30.0	WQM 7

#### Anti-Backsliding

Section 402(o) of the Clean Water Act (CWA), enacted in the Water Quality Act of 1987, establishes anti-backsliding rules governing two situations. The first situation occurs when a permittee seeks to revise a Technology-Based effluent limitation based on BPJ to reflect a subsequently promulgated effluent guideline which is less stringent. The second situation addressed by Section 402(o) arises when a permittee seeks relaxation of an effluent limitation which is based upon a State treatment standard of water quality standard.

Previous limits can be used pursuant to EPA's anti-backsliding regulation 40 CFR 122.44 (I) Reissued permits. (1) Except as provided in paragraph (I)(2) of this section when a permit is renewed or reissued. Interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards, or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the

#### NPDES Permit Fact Sheet Boaters Change House STP

time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62). (2) In the case of effluent limitations established on the basis of Section 402(a)(1)(B) of the CWA, a permit may not be renewed, reissued, or modified on the basis of effluent guidelines promulgated under section 304(b) subsequent to the original issuance of such permit, to contain effluent limitations which are less stringent than the comparable effluent limitations in the previous permit.

The facility is not seeking to revise the previously permitted effluent limits.

#### Additional Considerations

Monitoring frequency for the proposed effluent limits are based upon an agreement between DCNR and DEP for DCNR Sewage Treatment Plants (Attachment 4). This agreement gives the following requirements for pH. DO, and TRC monitoring: 1/day from May to September and 3/week from October to April. This monitoring frequency will be imposed for this permit.

Sewage discharges will include monitoring, at a minimum, for *E. Coli*, in new and reissued permits, with a monitoring frequency of 1/year for facilities with design flows of 0.002 – 0.05 MGD.

An annual sampling frequency for total phosphorus and total nitrogen will be imposed per 25 PA Code §92a.61.

Boaters Change House STP is an existing facility and is not expanding. Therefore, anti-degradation requirements are not evaluated during this permit cycle.

Per DEP SOP New and Reissuance Sewage Individual NPDES Permit Applications SOP No. BCW-PMT-002, that for POTWs with design flows greater than 2,000 GPD, non-municipal sewage facilities, and other non-municipal sewage facilities where justified influent BOD5 and TSS monitoring in the permit using the same frequency and sample type as is used for effluent will be established. Given this facility's history of effluent violations and due to the technical assistance they are receiving from the EPA and DEP, The department finds it appropriate to impose influent BOD5 and TSS monitoring 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 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.

			Effluent L	imitations.			Monitoring Requirements	
Parameter	Mass Units	s (lbs/day) <sup>(1)</sup>		Concentrat	ions (mg/L)		Minimum <sup>(2)</sup>	Required
Farameter	Average Monthly	Daily Maximum	Minimum	Average Monthly	Maximum	Instant. Maximum	Measurement Frequency	Sample Type
Flow (MGD)	0.01	XXX	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.) Oct 1 - Apr 30	ххх	xxx	6.0 Inst Min	XXX	XXX	9.0	3/week	Grab
pH (S.U.)			6.0		~~~	9.0	J/Week	Grab
May 1 - Sep 30	XXX	XXX	Inst Min	XXX	XXX	9.0	1/day	Grab
DO Oct 1 - Apr 30	ххх	XXX	4.0 Inst Min	xxx	XXX	ххх	3/week	Grab
DO May 1 - Sep 30	XXX	XXX	4.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC				7000	7000		1/day	Club
Oct 1 - Apr 30	XXX	XXX	XXX	0.5	XXX	1.6	3/week	Grab
TRC May 1 - Sep 30	ххх	xxx	xxx	0.5	xxx	1.6	1/day	Grab
CBOD5	ХХХ	XXX	XXX	15.0	XXX	30.0	2/month	Grab
BOD5 Raw Sewage Influent	Report	Report	XXX	Report	XXX	xxx	2/month	Grab
TSS	Корон		7000	Корон	7000	7007	2/110/101	Oldo
Raw Sewage Influent	Report	Report	XXX	Report	XXX	XXX	2/month	Grab
TSS	ххх	XXX	XXX	10.0	XXX	20.0	2/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	ххх	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

#### Outfall 001, Continued (from Permit Effective Date through Permit Expiration Date)

		Effluent Limitations							
Parameter	Mass Units	Mass Units (Ibs/day) <sup>(1)</sup>		Concentrat	Minimum <sup>(2)</sup>	Required			
	Average Monthly	Daily Maximum	Minimum	Average Monthly	Maximum	Instant. Maximum	Measurement Frequency	Sample Type	
E. Coli (No./100 ml)	xxx	XXX	XXX	XXX	XXX	Report	1/year	Grab	
					Report				
Total Nitrogen	XXX	XXX	XXX	XXX	Daily Max	XXX	1/year	Grab	
Ammonia-Nitrogen									
Nov 1 - Apr 30	XXX	XXX	XXX	4.5	XXX	9.0	2/month	Grab	
Ammonia-Nitrogen									
May 1 - Oct 31	XXX	XXX	XXX	1.5	XXX	3.0	2/month	Grab	
·					Report				
Total Phosphorus	XXX	XXX	XXX	XXX	Daily Max	XXX	1/year	Grab	

Compliance Sampling Location: Outfall 001

Other Comments: N/A

# Attachment 1 Downstream and Upstream USGS StreamStats Report

#### StreamStats Report



Collapse All

Basin Characteristics			
Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	40.9	square miles
ELEV	Mean Basin Elevation	2030	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	40.9	square miles	2.26	1400
ELEV	Mean Basin Elevation	2030	feet	1050	2580

#### Low-Flow Statistics Flow Report [Low Flow Region 4]

PII: Prediction Interval-Lower, Plu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	SE	ASEp
7 Day 2 Year Low Flow	2.99	ft*3/s	43	43
30 Day 2 Year Low Flow	5	ft*3/s	38	38
7 Day 10 Year Low Flow	1.07	ft*3/s	66	66
30 Day 10 Year Low Flow	1.83	ft*3/s	54	54
90 Day 10 Year Low Flow	3.51	ft^3/s	41	41

Low-Flow Statistics Citations

#### StreamStats Report



Collapse All

#### > Basin Characteristics

Parameter Code	Parameter Description	Value	Unit
DRNAREA	Area that drains to a point on a stream	41.2	square miles
ELEV	Mean Basin Elevation	2026	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	41.2	square miles	2.26	1400
ELEV	Mean Basin Elevation	2026	feet	1050	2580

#### Low-Flow Statistics Flow Report [Low Flow Region 4]

PII: Prediction Interval-Lower, PIu: Prediction Interval-Upper, ASEp: Average Standard Error of Prediction, SE: Standard Error (other -- see report)

Statistic	Value	Unit	SE	ASEp	
7 Day 2 Year Low Flow	3.01	ft^3/s	43	43	
30 Day 2 Year Low Flow	5.03	ft*3/s	38	38	
7 Day 10 Year Low Flow	1.08	ft*3/s	66	66	
30 Day 10 Year Low Flow	1.84	ft*3/s	54	54	
90 Day 10 Year Low Flow	3.53	ft*3/s	41	41	

Low-Flow Statistics Citations

Attachment 2 Summer WQM7 Modeling

#### Input Data WQM 7.0

	SWP Basir			Stre	am Name		RMI		Elevati (ft)	on	Drainage Area (sq mi)	Slope (ft/ft)	PWS Withdrawal (mgd)	Apply FC
	19E	384	488 MEAD	OW RUN			0.62	20	203	0.00	40.90	0.00000	0.0	0 🗹
					S	tream Da	ta							
Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Ro Dej		Tem	<u>Tributary</u> p pH	Tem	<u>Stream</u> p pH	
cond.	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(f	t)	(°C)		(°C	)	
Q7-10	0.020	1.07	0.00	0.000	0.000	10.0	0.00		0.00	20	).00 7.	00	0.00 0.0	00
Q1-10 Q30-10		0.00 0.00	0.00 0.00	0.000 0.000	0.000									

	Dis	scharge D	ata					
Name	Permit Number	Disc	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reser Facto	ve Te or	isc emp ℃)	Disc pH
Boathouse STP	PA0096521	0.0100	0.0000	0.000	0.0	000	20.00	7.00
	Pa	rameter D	ata					
Par	ameter Name	Dis			eam onc	Fate Coef		
Fai	ameter Name	(mg	/L) (mg	/L) (m	ng/L) (	1/days)		
CBOD5		2	5.00 2	2.00	0.00	1.50		
Dissolved Ox	ygen		4.00 §	9.01	0.00	0.00		
NH3-N		2	5.00 (	0.00	0.00	0.70		

# WQM 7.0 Hydrodynamic Outputs

	SWP Basin Stream Code 19E 38488					<u>Stream Name</u> MEADOW RUN						
RMI	Stream Flow (cfs)	PWS With (cfs)	Net Stream Flow (cfs)	Disc Analysis Flow (cfs)	Reach Slope (ft/ft)	Depth (ft)	Width (ft)	W/D Ratio	Velocity (fps)	Reach Trav Time (days)	Analysis Temp (ºC)	Analysis pH
<b>Q7-1(</b> 0.620	0 Flow 1.07	0.00	1.07	. ,	0.00124	.579	21.64	37.36	0.09	0.430	20.00	7.00
<b>Q1-1</b> ( 0.620	0 Flow 0.68	0.00	0.68	.0155	0.00124	NA	NA	NA	0.07	0.550	20.00	7.00
<b>Q30-</b> 1	10 Flow 1.46	0.00	1.46	.0155	0.00124	NA	NA	NA	0.10	0.363	20.00	7.00

# WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	$\checkmark$
WLA Method	EMPR	Use Inputted W/D Ratio	
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	$\checkmark$
D.O. Saturation	90.00%	Use Balanced Technology	$\checkmark$
D.O. Goal	6		

# WQM 7.0 Wasteload Allocations

	SWP Basin 19E		m Code 8488				ream Nam ADOW RI			
	19E	3	8488			ME		UN		
NH3-N	Acute Alloc	ation	s							
RMI	Discharge	Name	Baseline Criterion (mg/L)	Baselir WLA (mg/L		Multiple Criterion (mg/L)	Multiple WLA (mg/L)		Critical Reach	Percent Reduction
0.6	20 Boathouse S	TP	16.76		50	16.76		50	0	0
NH3-N	Chronic All	ocatio	ons							
RMI	Discharge N		Baseline Criterion (mg/L)	Baseline WLA (mg/L)		Multiple Criterion (mg/L)	Multiple WLA (mg/L)		Critical Reach	Percent Reduction
0.6	20 Boathouse S	TP	1.89		25	1.89		25	0	0
	ed Oxygen				20	1.09		20	0	0
				CBOD5		NH3-N	Dis	sol	ved Oxvaen	

	RMI	Discharge Name		Multiple	Baseline	multiple	Baseline	Multiple	Critical Reach	Percent Reduction
_			(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)	(mg/L)		
	0.62 E	Boathouse STP	25	25	25	25	4	4	0	0

SWP Basin 19E	Stream Code 38488			Stream Name MEADOW RUN	
RMI	Total Discharge	e Flow (mgd	) Ana	lysis Temperature (°C)	Analysis pH
0.620	0.01	0		20.000	7.000
Reach Width (ft)	Reach De	pth (ft)		Reach WDRatio	Reach Velocity (fps)
21.637	0.57	9		37.356	0.087
Reach CBOD5 (mg/L)	Reach Kc	(1/days)	R	each NH3-N (mg/L)	Reach Kn (1/days)
2.33	0.17			0.36	0.700
Reach DO (mg/L)	Reach Kr			Kr Equation	Reach DO Goal (mg/L)
8.939	1.02	2		Tsivoglou	6
<u>Reach Travel Time (days</u> 0.430	TravTime (days) 0.043 0.086 0.129 0.172 0.215 0.258 0.301 0.344	(mg/L) 2.31 2.29 2.28 2.26 2.24 2.22 2.21 2.19	NH3-N (mg/L) 0.35 0.34 0.32 0.31 0.30 0.29 0.28	D.O. (mg/L) 8.24 8.24 8.24 8.24 8.24 8.24 8.24 8.24	
	0.387 0.430		0.27 0.26	8.24 8.24	

## WQM 7.0 D.O.Simulation

# WQM 7.0 Effluent Limits

		<u>1 Code</u> 188		Stream Name MEADOW RU	-		
RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
0.620	Boathouse STP	PA0096521	0.010	CBOD5	25		
				NH3-N	25	50	
				Dissolved Oxygen			4

Attachment 3 Winter WQM7 Modeling

#### Input Data WQM 7.0

	SWP Basir			Stre	am Name		RMI	I	Elevatio (ft)	on [	Drainage Area (sq mi)	Slope (ft/ft)	PW Withdr (mg	awal	Apply FC
	19E	384	488 MEAD	OW RUN			0.62	20	203	0.00	40.90	0.00000		0.00	$\checkmark$
					S	tream Da	ta								
Design Cond.	LFY	Trib Flow	Stream Flow	Rch Trav Time	Rch Velocity	WD Ratio	Rch Width	Rc Dep		<u>T</u> Temp	<u>ributary</u> ⊳ pH	Tem	<u>Stream</u> p	рН	
conu.	(cfsm)	(cfs)	(cfs)	(days)	(fps)		(ft)	(ft	)	(°C)		(°C	)		
Q7-10	0.050	1.07	0.00	0.000	0.000	10.0	0.00		0.00	5.	.00 7.0	00	0.00	0.00	
Q1-10 Q30-10		0.00 0.00		0.000 0.000	0.000 0.000										

	Dis	scharge D	ata					
Name	Permit Number	Existing Disc Flow (mgd)	Permitted Disc Flow (mgd)	Design Disc Flow (mgd)	Reser Facto	ve Te or	)isc emp °C)	Disc pH
Boathouse STP	PA0096521	0.0100	0.0000	0.000	0.0	000	15.00	7.0
	Pa	rameter D	ata					
Par	ameter Name	Dis Co			eam onc	Fate Coef		
1 4		(mg	/L) (mg	/L) (m	g/L) (	1/days)		
CBOD5		2	5.00	2.00	0.00	1.50		
Dissolved Ox	ygen		4.00 12	2.51	0.00	0.00		
NH3-N		2	5.00 (	0.00	0.00	0.70		

# WQM 7.0 Hydrodynamic Outputs

	SWP Basin		Strea	m Code				Stream	Name			
		19E	3	8488				MEADOW	V RUN			
RMI	Stream Flow	PWS With	Net Stream Flow	Disc Analysis Flow	Reach Slope	Depth	Width	W/D Ratio	Velocity	Reach Trav Time	Analysis Temp	Analysis pH
	(cfs)	(cfs)	(cfs)	(cfs)	(ft/ft)	(ft)	(ft)		(fps)	(days)	(°C)	
Q7-1	0 Flow											
0.620	1.07	0.00	1.07	.0155	0.00124	.579	21.64	37.36	0.09	0.430	5.14	7.00
Q1-1	0 Flow											
0.620	0.68	0.00	0.68	.0155	0.00124	NA	NA	NA	0.07	0.550	5.22	7.00
Q30-	10 Flow	1										
0.620	1.46	0.00	1.46	.0155	0.00124	NA	NA	NA	0.10	0.363	5.11	7.00

### WQM 7.0 Modeling Specifications

Parameters	Both	Use Inputted Q1-10 and Q30-10 Flows	$\checkmark$
WLA Method	EMPR	Use Inputted W/D Ratio	
Q1-10/Q7-10 Ratio	0.64	Use Inputted Reach Travel Times	
Q30-10/Q7-10 Ratio	1.36	Temperature Adjust Kr	✓
D.O. Saturation	90.00%	Use Balanced Technology	$\checkmark$
D.O. Goal	6		

### WQM 7.0 Wasteload Allocations

SWP Basin	Stream Code	Stream Name
19E	38488	MEADOW RUN

#### NH3-N Acute Allocations Baseline Baseline Multiple Multiple Critical Percent WĽA RMI Discharge Name Criterion WLA Criterion Reach Reduction (mg/L) (mg/L) (mg/L) (mg/L) 0.620 Boathouse STP 0 0 24.1 24.1 50 50 NH3-N Chronic Allocations Baseline Baseline Multiple Multiple Critical Percent RMI WLA Discharge Name Criterion WLA Criterion Reach Reduction (mg/L) (mg/L) (mg/L) (mg/L) 0.620 Boathouse STP 4.36 25 4.36 25 0 0

#### **Dissolved Oxygen Allocations**

		CBC	DD5	NH	3-N	Dissolved	d Oxygen	Critical	Percent
RMI	Discharge Name	Baseline (mg/L)	Multiple (mg/L)	Baseline (mg/L)	Multiple (mg/L)	Baseline	Multiple (mg/L)		Reduction
0.62 B	oathouse STP	25	25	25	25	4	4	0	0

<u>SWP Basin</u> St 19E	ream Code 38488			Stream Name MEADOW RUN	
RMI	Total Discharge	e Flow (mgd	) Ana	lysis Temperature (°C)	Analysis pH
0.620	0.01	0		5.143	7.000
Reach Width (ft)	Reach De	pth (ft)		Reach WDRatio	Reach Velocity (fps)
21.637	0.57	9		37.356	0.087
Reach CBOD5 (mg/L)	Reach Kc	(1/days)	R	each NH3-N (mg/L)	Reach Kn (1/days)
2.33	0.20	-		0.36	0.223
Reach DO (mg/L)	Reach Kr (			Kr Equation	Reach DO Goal (mg/L)
12.389	0.71	9		Tsivoglou	6
Reach Travel Time (days) 0.430	TravTime (days)	Subreach CBOD5 (mg/L)	NH3-N (mg/L)	D.O. (mg/L)	
	0.043	2.32	0.35	11.41	
	0.086	2.31	0.35	11.41	
	0.129	2.30	0.35	11.41	
	0.172	2.29	0.34	11.41	
	0.215	2.28	0.34	11.41	
	0.258	2.27	0.34	11.41	
	0.301	2.26	0.33	11.41	
	0.344	2.25	0.33	11.41	
	0.387	2.24	0.33	11.41	
	0.430	2.23	0.32	11.41	

# WQM 7.0 D.O.Simulation

# WQM 7.0 Effluent Limits

		<u>n Code</u> 488		Stream Name MEADOW RU	-		
RMI	Name	Permit Number	Disc Flow (mgd)	Parameter	Effl. Limit 30-day Ave. (mg/L)	Effl. Limit Maximum (mg/L)	Effl. Limit Minimum (mg/L)
0.620	Boathouse STP	PA0096521	0.010	CBOD5	25		
				NH3-N	25	50	
				Dissolved Oxygen			4

# Attachment 4 DEP Testing Frequency for DCNR State Park Sewage Treatment Plants

#### DCNR State Park Sewage Treatment Plants

DCNR Region	Park	Design Flow (MGD)	NPDES Permit Number	Permit Expiration Date	Op Cert Class	Municipal Contributors	Weekend Sampling Currently?	pH, DO and TR Requirement fo Renewed Perm
	Black Moshannon	0.05/0.2	PA0032441	10/31/2014	D-1	Rush Twp.*	No (not a permit requirement; samples pulled when staffing permits)	
	Bald Eagle	0.45/0.562	PA0032492	8/31/2016	C-1	Howard Bo. & Liberty Twp.	Yes	1/day year roun
	Denton Hill	0.013	PA0032514	12/31/2015	D-1	None	Yes	1/day (May - Sej 3/week (Oct - Ap
	Hills Creek	0.02/0.07	PA0044547	6/30/2014	D-1	Charleston Twp.	Yes	1/day year roun
1	Kettle Creek - Lower Campground	0.0022	PA0228869	10/31/2015	D-1	None	No	1/day (May - Sep
	Mount Pisgah	0.02/0.06	PA0044652	1/31/2012	D-1	None	Permit requires 5 samples per week. Samples pulled on days STOP is working.	3/week (Oct - Ap 1/day (May - Sep 3/week (Oct - Ap
	Parker Dam	0.09	PA0044245	12/31/2014	D-1	None	No	1/day (May - Sep 3/week (Oct - Ac
	Reeds Gap	0.037	PA0032506	4/30/2016	D-1	None	Required by permit - done on weekends while seasonal staff on board.	1/day (May - Sep 3/week (Oct - Ap
	Clear Creek (sub sand filter)	0.00535	PA0240001	12/06/12- renewal submitted	D-2	None	No	1/day (May - Sep 3/week (Oct - Ap
	Cook Forest	0.079	PA0032468	7/31/2016	D-1	None	No	1/day (May - Sep 3/week (Oct - Ap
	Keystone	0.075	PA0032271	7/31/2014		None	No	1/day (May - Sep
	Laurel Hill	0.019	PA0032247	3/31/2014	C-1,3	None	No (not a permit requirement)	3/week (Oct - Ap 1/day (May - Sep
	Moraine	0.225/0.45	PA0032531	12/16/2006	C-1	Prospect Bo.	No	3/week (Oct - Ap 1/day year round
	Ohiopyle - Boater's Change House	0.008	PA0098521	11/30/2014	D-1	None	No	1/day (May - Seg 3/week (Oct - Ap
2	Ohiopyle - Campground	0.04	PA0032425	11/30/2014	D-1	None	No	1/day (May - Sep 3/week (Oct - Ap
	Ohiopyle - Presley Ridge	0.0045	PA0046116	8/31/2015	D-1	None	No	1/day (May - Sep 3/week (Oct - Ap
	Oil Creek (sub sand filter)	0.002	PA0045039	6/30/2015	Not Required	None	No	1/week year rour
1	Presque Isle	0.0175	PA0032549	7/22/2013	D-1	None	No	1/day (May - Sep 3/week (Oct - Ap
-	Raccoon Creek	0.1	PA0031964	7/31/2014	D-1	None	No	1/day (May - Sep 3/week (Oct - Ap
	Ryerson Station	0.007	PA0217841	11/30/2013	D-1	None	No	1/day (May - Sep 3/week (Oct - Ap
	Yellow Creek	0.313	PA0032263	11/31/16	C-1	None	No	1/day (May - Sep
	Canoe Creek	0.12	PA0044261	2/28/2017	C-1	Frankstown Twp.	No (not a permit requirement)	3/week (Oct - Ap
	Cowans Gap	0.03	PA0032964	12/31/2012	D-1,2	None	No	1/day (May - Sep) 3/week (Oct - Apr
	Gifford Pinchot	0.216	PA0032000	2011 (in draft)	C-1	Wellsville Bo.*	Yes (DEP permits us to read sensors for weekend sampling)	1/day year round
з	Greenwood Furnace	0.015	PA0031992	10/31/2013	D-1	None	No	1/day (May - Sep) 3/week (Oct - Apr
	Little Buffalo	0.076	PA0031950	4/30/2013	D-1	None	No	1/day (May - Sep)
	Prince Gallitzin	0.12	PA0032085	9/30/2014	C-1	None	No	3/week (Oct - Apr 1/day (May - Sep)
	Shawnee	0.1	PA0032093	10/3/2016	D-1	Schelisburg Bo.	Required by permit - done Memorial Day through Labor Day weekends.	3/week (Oct - Apr 1/day year round
	Beltzville	0.035	PA0032107	3/31/2017	D-1	None	No	1/day (May - Sep) 3/week (Oct - Apr
	Frances Slocum	0.08	PA0032433	10/31/2015	D-1	None	No	1/day (May - Sep)
Į.	Hickory Run	0.066	PA0032999	11/30/2015	D-1,2	None	No	3/week (Oct - Apr 1/day (May - Sep)
Ī	Lackawanna	0.108	PA0032140	4/30/12 (in draft)	C-1	None	No (not a permit requirement)	3/week (Oct - Apr 1/day (May - Sep)
4	Locust Lake	0.047	PA0032131	1/31/2013	D-1	None	No	3/week (Oct - Apr 1/day (May - Sep)
1	Nockamixon	0.02	PA0042641	8/31/2014	D-1	Vo-Tech	No	3/week (Oct - Apr 1/day year round
8	Promised Land	0.2	PA0032123	\$V30/2013	G-1	None	No	1/day (May - Sep)
F	Rickets Glen	0.105	PA0032115	6/30/2015	D-1	None	No	3/week (Oct - Apr) 1/day (May - Sep)
1								3/week (Oct - Apr)

\* Industrial contribution to plant from outside source(s).