

Northeast Regional Office CLEAN WATER PROGRAM

Application Type

Renewal

Non
Facility Type

Major / Minor

Minor

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0029807

APS ID 821461

Authorization ID 1293959

	Applicant and Facility Information						
Applicant Name	New Jersey Federation of YMHA & YWHA	Facility Name New Jersey Y Camps WWTF					
Applicant Address	21 Plymouth Street	Facility Address 570 Sawkill Road					
	Fairfield, NJ 07004-1615	Milford, PA 18337-1090					
Applicant Contact	Janet Fliegelman, Executive Director	Facility Contact Janet Fliegelman, Executive Director					
Applicant Phone	(973) 575-3333	Facility Phone (973) 575-3333					
Client ID	39157	Site ID 488197					
Ch 94 Load Status	Not Overloaded	Municipality Dingman Township					
Connection Status		County Pike					
Date Application Rece	october 21, 2019	EPA Waived? Yes					
Date Application Acce	pted March 4, 2020	If No, Reason -					
Purpose of Application	Renewal of NPDES permit for	discharge of treated sewage.					

Summary of Review

The applicant is requesting the renewal of an NPDES permit to discharge up to 0.10 MGD of treated sewage into Sawkill Pond (Sawkill Stream), an Exceptional Value, Migratory Fish (EV, MF) receiving stream in State Water Plan Basin 1-D (Shohola). As per the Department's current existing use list, the receiving stream/pond does not have an existing use classification that is more protective than its designated use. This stream segment is designated as a naturally reproducing trout stream as per PA Fish & Boat Commission. This discharge is not expected to affect public water supplies.

According to the NPDES permit application and the WQM permit application (submitted on April 5, 2019), the facility has a hydraulic design capacity of 0.167 MGD but is only permitted to discharge 0.10 MGD. This facility typically only discharges during the summer months of June, July, and August. The average discharge from 2017-2019 is 0.057 MGD

Limitations for pH, Total Suspended Solids (TSS), and Fecal Coliform are technology-based and carried over from the previous permit.

Limitations for CBOD₅, Dissolved Oxygen (DO), and Ammonia-Nitrogen are water quality-based and carried over from the previous permit. WQM 7.0 modeling did not recommend stricter limits.

The 0.5 mg/L monthly average and 1.6 mg/L IMAX limitations for Total Residual Chlorine (TRC) in the previously issued permit were technology-based limitations. The TRC Calculation Spreadsheet recommends stricter limitations than the previous permit. The permittee will be required to meet the new water quality-based limits for TRC starting three years after the effective date of the permit (see Part C.III.). TRC limitations from the previously issued permit are in effect for the first three years after the permit effective date.

The annual monitoring and reporting for Total Nitrogen, Total Kjeldahl Nitrogen, and Nitrate-Nitrite as N has been maintained in this permit.

Approve	Deny	Signatures	Date
Х		/s/ Allison Seyfried / Environmental Engineering Specialist	July 9, 2020
Х		/s/ Amy M. Bellanca, P.E. / Environmental Engineer Manager	7-10-20

Summary of Review

The previous permit has Total Phosphorous limitations (2.0 mg/L average monthly, 4.0 mg/L IMAX) based on a report entitled "Sawkill Pond Trophic State Index Survey" dated September 23, 2013. A new lake assessment was conducted during the year 2017, which resulted in a new "Sawkill Pond Trophic State Index Survey" dated January 30, 2020. The report concludes that the lake has probable impairment and states that the New Jersey Federation of YMHA/YWHA Camp wastewater treatment plant is likely causing this impairment due to consistent exceedances of their Total Phosphorous limitations.

A review of the facility's DMRs confirm these exceedances. The report also states there is an increase in TSI Scores for the lake during the same summer months the treatment plant discharges the elevated phosphorous concentrations. The report recommends the phosphorous limit in the NPDES permit be decreased to 1.0 mg/L average monthly and 2.0 mg/l IMAX. These new limits have been applied to this permit renewal. The permittee will be required to meet the new limits starting three years after the effective date of the permit.

For this permit renewal, all monitoring frequencies for parameters with limitations are consistent with the Department's Technical Guidance for the Development and Specification of Effluent Limitations and Other Permit Conditions in NPDES Permits (document no. 362-0400-001).

There are no representative stream gages in the vicinity of the outfall. Therefore, the default Low Flow Yield (LFY) of 0.1 cfs/mi² was chosen to model the discharge. The discharge was also modeled using the LFY value provided by USGS StreamStats. Both models did not recommend stricter limits. For modeling inputs, RMI values were obtained using the "PA Historic Streams" feature of eMapPA, drainage areas were delineated using USGS's StreamStats Interactive Map, and elevations were obtained using the elevation profile feature of StreamStats.

As per the permittee's NPDES permit renewal application, sludge is pumped and hauled by M&S Disposal, treated and dried by Pike County Environmental in Matamoras, PA, and disposed via land application by TAM Environmental in Goshen, NY.

A WQM Permit application for upgrades at this facility (including a new dechlorintation pump, replacement of the existing chlorine pump, and a new aeration system) was received by the permittee's consultant on April 5, 2019. A deficiency notification was sent to the permittee and consultant via email on May 16, 2019. The consultant has still not provided responses to the missing information.

The existing NPDES permit expired on April 30, 2020 and the application for renewal was received on time.

A Water Management System Inspection guery indicated that on July 16, 2019 a Compliance Evaluation was performed.

There are currently four open violations for this client that need to be resolved before issuance of the final permit:

- 1. 03/15/2018 Violation ID 813499 Violation Code 92A.41(A)12B NPDES Failure to submit monitoring report(s) or properly complete monitoring reports (WPC NPDES - Program Specific ID: PA0029807).
- 2. 03/15/2018 Violation ID 813500 Violation Code 92A.44 NPDES Violation of effluent limits in Part A of permit (WPC NPDES - Program Specific ID: PA0029807).
- 3. 07/10/2018 Violation ID 823907 Violation Code 92A.44 NPDES Violation of effluent limits in Part A of permit (WPC NPDES - Program Specific ID: PA0029807).
- 4. 07/16/2019 Violation ID 857859 Violation Code 92A.44 NPDES Violation of effluent limits in Part A of permit (WPC NPDES - Program Specific ID: PA0029807).











Watershed Info - NJ YMHA.pdf

WQM 7.0 - NJ YMHA Camp.pdf

TRC_CALC_NJ YMHA.pdf

Trophic State Index Survey - Sawkill Pon

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	Discharge, Receiving Waters and Water Supply Information					
Outfall No. 001		Design Flow (MGD)	0.10			
Latitude 41° 2°	0' 57.13"	Longitude	-74º 53' 30.51"			
Quad Name Edg	gemere	Quad Code	0846			
Wastewater Descrip	otion: Sewage Effluent					
Receiving Waters	Sawkill Pond (EV, MF)	Stream Code	5241 (Sawkill Stream)			
NHD Com ID	26143204	RMI	7.75			
Drainage Area	3.27 mi ²	Yield (cfs/mi²)	0.10			
Q ₇₋₁₀ Flow (cfs)	0.327	Q ₇₋₁₀ Basis	State-wide default			
Elevation (ft)	1,215	Slope (ft/ft)				
Watershed No.	1-D	Chapter 93 Class.	EV, MF			
Existing Use		Existing Use Qualifier				
Exceptions to Use		Exceptions to Criteria				
Assessment Status	_ =					
Cause(s) of Impairn	nent					
Source(s) of Impair	ment					
TMDL Status	<u>-</u>	Name				
Nearest Downstream Public Water Supply Intake		Easton Area Water System				
PWS Waters	Delaware River	Flow at Intake (cfs)				
PWS RMI 1	10.4	Distance from Outfall (mi)	≈ 70			

	Tre	atment Facility Summa	nry	
reatment Facility Nar	ne: New Jersey Y Camps V	WWTF		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Aeration	Chlorination	0.057 (2017-2019)
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposa
0.167 Permitted for 0.10	217	Not Overloaded	Sludge Holding Tank	Hauled

Compliance History

DMR Data for Outfall 001 (from June 1, 2019 to May 31, 2020)

Parameter	MAY-20	APR-20	MAR-20	FEB-20	JAN-20	DEC-19	NOV-19	OCT-19	SEP-19	AUG-19	JUL-19	JUN-19
Flow (MGD)												
Average Monthly									0.3	0.069		
Flow (MGD)												
Daily Maximum									0.37	0.106		
pH (S.U.)												
Minimum									7.49	6.16		
pH (S.U.)												
Maximum									8.25	8.04		
DO (mg/L)												
Minimum [']									9.1	7.0		
TRC (mg/L)												
Average Monthly									< 0.01	< 0.03		
TRC (mg/L)												
Instantaneous												
Maximum									< 0.01	0.2		
CBOD5 (mg/L)												
Average Monthly									4.2	6.7		
TSS (mg/L)												
Average Monthly									12.8	9.7		
Fecal Coliform												
(CFU/100 ml)												
Geometric Mean									10	< 5		
Fecal Coliform												
(CFU/100 ml)												
Instantaneous												
Maximum									10	27		
Nitrate-Nitrite (lbs/day)												
Annual Average						12						
Nitrate-Nitrite (mg/L)												
Annual Average						17.7						
Total Nitrogen												
(lbs/day)												
Annual Average						14						
Total Nitrogen (mg/L)												
Annual Average						20						
Ammonia (mg/L)												
Average Monthly									< 0.2	< 0.5		
TKN (lbs/day)												
Annual Average						1.5						

NPDES Permit Fact Sheet New Jersey Y Camps WWTF

NPDES Permit No. PA0029807

TKN (mg/L) Annual Average			2.31				
Total Phosphorus							
(mg/L)							
Average Monthly					2.1	4.0	

Compliance History

Effluent Violations for Outfall 001, from: July 1, 2019 To: May 31, 2020

Lillacit	Emacht Violations for Outlan 601, from: outy 1, 2010 for may 61, 2020							
	Parameter	Date	SBC	DMR Value	Units	Limit Value	Units	
Total Pho	osphorus	08/31/19	Avg Mo	4.0	mg/L	2.0	mg/L	
Total Ph	osphorus	09/30/19	Avg Mo	2.1	mg/L	2.0	mg/L	

	Development of Effluent Limitations					
Outfall No.	001	Design Flow (MGD)	0.1			
Latitude	41° 20' 57.00"	Longitude	-74º 53' 26.00"			
Wastewater	Description: Sewage Effluer	nt				

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
	30.0	Average Monthly	133.102(b)(1)	92a.47(a)(1)
Total Suspended Solids	60.0	Average Weekly	133.102(b)(2)	92a.47(a)(2)
pН	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)

Water Quality-Based Limitations

The following limitations were determined through water quality modeling (output files attached):

Parameter	Limit (mg/l)	SBC	Model
	0.32	Average Monthly	TDC Coloulation Spreadshoot
Total Residual Chlorine	1.0	IMAX	TRC Calculation Spreadsheet
Dissolved Oxygen	7.0	Minimum	
CBOD ₅	10.0	Average Monthly	
CBOD ₅	20.0	IMAX	
Ammonia-Nitrogen	1.0	Average Monthly	Previous Permit
May 1 - Oct 31	2.0	IMAX	
Ammonia-Nitrogen	3.0	Average Monthly	
Nov 1 - Apr 30	6.0	IMAX	
Total Phaenharus	1.0	Average Monthly	Sawkill Pond Trophic State Index Survey
Total Phosphorus	2.0	IMAX	(January 30, 2020)

Anti-Backsliding

No limitations were made less stringent.