

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

NPDES PERMIT FACT SHEET INDIVIDUAL SEWAGE

Application No. PA0060453
APS ID 568305
Authorization ID 1407719

Applicant and Facility Information

Applicant Name	<u>Camp Lavi</u>	Facility Name	<u>Camp Lavi</u>
Applicant Address	<u>2656 Upper Woods Road</u> <u>Lakewood, PA 18439-3977</u>	Facility Address	<u>2556 Upper Wood Road</u> <u>Lakewood, PA 18439</u>
Applicant Contact	<u>Michael Pelikow</u>	Facility Contact	<u>Dale Williams</u>
Applicant Phone	<u>(516) 474-0347</u>	Facility Phone	<u>(570) 798-2009</u>
Client ID	<u>39458</u>	Site ID	<u>246679</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Buckingham Township</u>
Connection Status		County	<u>Wayne</u>
Date Application Received	<u>August 26, 2022</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted		If No, Reason	
Purpose of Application	<u>RENEWAL OF EXISTING NPDES PERMIT.</u>		

Summary of Review

The applicant is requesting the renewal of NPDES Permit No. PA0060453 to discharge up to 0.024 MGD of treated sewage into an unnamed tributary to Equinunk Creek, a High-Quality, Cold-Water Fishes (HQ-CWF) designated water. Per the Department's current existing use list, the receiving stream does not have an existing use classification that is more protective than the designated use.

The Total Residual Chlorine (TRC) average monthly effluent limitation has been revised to be consistent with the regulatory standard of 0.5 mg/Monthly average and 1.6 mg/L IMAX found under §§92a.47(a)(8) and 92a.48(b). The treatment facility incorporates dechlorination and has consistently produced low TRC concentrations. Meeting the new limitations should not be a problem.

Annual monitoring for Total Nitrogen and Total Phosphorus are also part of previous permit and will continue in the current term.

Annual sampling for Total Kjeldahl Nitrogen and Nitrite-Nitrate as N in order to calculate TN.

Annual E-Coli monitoring and reporting is added as per 2024 Updated SOP for NPDES sewage permits.

Comment:

~~Permittee made comments~~ The design flow is incorrect and a flow of .about design flow of 0.024 MGD was incorrect, and he advise to use a flow of 0.027 MGD should be used.

Response to comment:

Previous permit review search indicated that a flow of **0.024MGD** is the one existed originally ~~in Microfish Records~~, therefore is the correct design flow to use. Any increase of design flow above 0.024MGD will require a permittee to request ~~an approval from Planning (Act 537)Act 537 Planning approval and will need to satisfy the anti-degradation requirements.~~

WMS Query by client report was performed September 16,2024 and no violations exist.

A site inspection was performed August 15,2019 and no violations were noted.

Approve	Deny	Signatures	Date
X		Hakim Yesli (signed) Hakim Yesli / Environmental Engineering Specialist	September 16, 2024
X		<u>Amy M. Bellanca (signed)</u> Amy M. Bellanca, P.E. / <u>Program Acting Engineer</u> Manager	<u>9-30-24</u>

Summary of Review

	A	B	C	D	E	F	G
1	TRC EVALUATION						
2	Input appropriate values in A3:A9 and D3:D9						
3	0.2	= Q stream (cfs)		0.5	= CV Daily		
4	0.024	= Q discharge (MGD)		0.5	= CV Hourly		
5	30	= no. samples		1	= AFC_Partial Mix Factor		
6	0.3	= Chlorine Demand of Stream		1	= CFC_Partial Mix Factor		
7	0	= Chlorine Demand of Discharge		15	= AFC_Criteria Compliance Time (min)		
8	0.5	= BAT/BPJ Value		720	= CFC_Criteria Compliance Time (min)		
9	0	= % Factor of Safety (FOS)			= Decay Coefficient (K)		
10	Source	Reference	AFC Calculations	Reference	CFC Calculations		
11	TRC	1.3.2.iii	WLA afc = 1.737	1.3.2.iii	WLA cfc = 1.686		
12	PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581		
13	PENTOXSD TRG	5.1b	LTA_afc = 0.647	5.1d	LTA_cfc = 0.980		
14							
15	Source		Effluent Limit Calculations				
16	PENTOXSD TRG	5.1f	AML MULT = 1.231				
17	PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500		BAT/BPJ		
18			INST MAX LIMIT (mg/l) = 1.635				
19							
20							
21							
22	WLA afc	(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))...					
23		...+ Xd + (AFC_Yc*Qs*Xd/Qd)]*(1-FOS/100)					
24	LTAMULT afc	EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)					
25	LTA_afc	wla_afc*LTAMULT_afc					
26							
27	WLA_cfc	(.011/e(-k*CFC_tc) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))...					
28		...+ Xd + (CFC_Yc*Qs*Xd/Qd)]*(1-FOS/100)					
29	LTAMULT_cfc	EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)					
30	LTA_cfc	wla_cfc*LTAMULT_cfc					
31							
32	AML MULT	EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1))					
33	AVG MON LIMIT	MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT)					
34	INST MAX LIMIT	1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc)					
35							
36							
37							
38							
39							
40							
41	(0.011/EXP(-K*CFC_tc/1440))+(((CFC_Yc*Qs*0.011)/(1.547*Qd)....						
42*EXP(-K*CFC_tc/1440))+Xd+(CFC_Yc*Qs*Xd/1.547*Qd)]*(1-FOS/100)						
43							

Summary of Review
<p><u>Public Participation</u></p> <p>DEP will publish notice of the receipt of the NPDES permit application and a tentative decision to issue the individual NPDES permit in the <i>Pennsylvania Bulletin</i> in accordance with 25 Pa. Code § 92a.82. Upon publication in the <i>Pennsylvania Bulletin</i>, 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 <i>Pennsylvania Bulletin</i> at least 30 days prior to the hearing and in at least one newspaper of general circulation within the geographical area of the discharge.</p>

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	.024
Latitude	41° 48' 11.30"	Longitude	-75° 18' 15.58"
Quad Name		Quad Code	
Wastewater Description:		Sewage Effluent	
Receiving Waters	Unnamed Tributary to Equinunk Creek (HQ-CWF)	Stream Code	6467
NHD Com ID	25865206	RMI	
Drainage Area	15.2 mi sq	Yield (cfs/mi²)	
Q ₇₋₁₀ Flow (cfs)	0.2	Q ₇₋₁₀ Basis	
Elevation (ft)		Slope (ft/ft)	
Watershed No.	1-A	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		Name	
Background/Ambient Data		Data Source	
pH (SU)			
Temperature (°F)			
Hardness (mg/L)			
Other:			
Nearest Downstream Public Water Supply Intake			
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	

Changes Since Last Permit Issuance: None

Development of Effluent Limitations

Outfall No. 001
Latitude 41° 48' 14.42"
Wastewater Description: Sewage Effluent

Design Flow (MGD) .05
Longitude -75° 18' 6.30"

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	0.5	Average Monthly	-	92a.48(b)(2)

Comments:

Water Quality-Based Limitations: None

no major modifications in facility and no stream modifications.



Approve	Deny	Signatures	Date
X		Hakim Yesli (signed) Hakim Yesli / Environmental Engineering Specialist	September 16, 2024
<u>X</u>		<u>Amy M. Bellanca (signed)</u> Amy M. Bellanca, P.E. / <u>Program Acting Engineer</u> Manager	<u>9-30-24</u>