pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Northwest Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0222798**
Facility Type	**Non-Municipal**	APS ID	**1016823**
Major / Minor	**Minor**	Authorization ID	**1315086**

Applicant and Facility Information

Applicant Name	**Westline Inn Inc.**	Facility Name	**Westline Inn**
Applicant Address	PO Box 7156	Facility Address	15 El Day Drive
	Mount Jewett, PA 16740-7156		Westline, PA 16740-2821
Applicant Contact	Jonathan Pomeroy	Facility Contact	Jonathan Pomeroy
Applicant Phone	(814) 778-5013	Facility Phone	(814) 778-5013
Client ID	80315	Site ID	447746
Ch 94 Load Status		Municipality	Lafayette Township
Connection Status		County	McKean
Date Application Received	May 8, 2020	EPA Waived?	Yes
Date Application Accepted	May 26, 2020	If No, Reason	

Purpose of Application: Renewal of an NPDES Permit for an existing discharge of treated sewage.

Summary of Review

There are no open violations currently listed in EFACTS for the permittee as of 3/17/2021.

This facility is currently registered to use the eDMR system for reporting.

No changes were proposed to the permit in the renewal application.

Permittee requested a variance to reduce daily pH, chlorine and dissolved oxygen sampling be reduced to 2/week. Request for variance will not be granted due to the stricter TRC limit and compliance schedule being applied. *A request was made to reduce the monitoring as part of the last permit renewal but was denied because a special condition was added in the previous permit cycle that allowed for monitoring frequency to be relaxed to 2/year if the first six months of flow data in the permit cycle showed flows comfortably below 2,000 GPD and the IMAX for any parameter was not exceeded during the same period of time. After data was collected and submitted, relaxation of the sampling frequency was denied due to large fluctuations in flow and treatment quality (IMAX was exceeded for TSS; average monthly limit was exceeded for TSS, NH3-N, fecal coliform, and TRC). Flow data did show that flows did not exceed 2,000 GPD but the fluctuations in flow and treatment quality shows the treatment system needs to be monitored more regularly, as well as more frequent operational and maintenance oversight. Considering recent CBOD5 violations and the proposed TRC limit, it does not seem appropriate to consider a reduced monitoring request at this time. It should also be noted that the applicant inquired about connecting his daughter's house located approximately 900-feet from the Westline Inn to the Westline Inn treatment system. Mr. Pomeroy was directed to submit a Sewage Facilities Planning Module Application Mailer" if he intends to proceed with his plan to connect his daughters home. Additional flows could be added to the system if Mr. Pomeroy gets authorization to make this connection.* *JCD 3-29-2021*

Sludge use and disposal description and location(s): Sludge disposed of by contractor (roughly 60 gallons per year).

Approve	Deny	Signatures	Date
X		Jordan A. Frey, E.I.T. Jordan A. Frey, E.I.T. / Civil Engineer Trainee	March 17, 2021
X		Justin C. Dickey Justin C. Dickey, P.E. / Environmental Engineer Manager	March 29, 2021

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 Information

Outfall No.	001	Design Flow (MGD)	.004
Latitude	41º 46' 25.88"	Longitude	-78º 46' 24.97"
Quad Name	Westline	Quad Code	41078G7
Wastewater Description:	Sewage Effluent		

Receiving Waters	Kinzua Creek (CWF)	Stream Code	56522
NHD Com ID	112375587	RMI	0.13
Drainage Area	57.9	Yield (cfs/mi^2)	0.1
Q_{7-10} Flow (cfs)	5.79	Q_{7-10} Basis	Default
Elevation (ft)	1465	Slope (ft/ft)	---
Watershed No.	16-B	Chapter 93 Class.	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)	7.0	Default
Temperature (°F)	20	Default
Hardness (mg/L)	100	Default
Other:	---	---

Nearest Downstream Public Water Supply Intake	Aqua Pennsylvania, Inc. - Emlenton		
PWS Waters	Allegheny River	Flow at Intake (cfs)	1376.0
PWS RMI	90.0	Distance from Outfall (mi)	>50

Changes Since Last Permit Issuance: None.

Other Comments: None.

Treatment Facility Summary

Treatment Facility Name: Westline Inn

WQM Permit No.	Issuance Date
4299402	6/23/1999

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Septic tank/sand filter	Tablet chlorination	0.004

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.004			None	Other WWTP

Changes Since Last Permit Issuance: None.

Other Comments: None.

Compliance History

DMR Data for Outfall 001 (from February 1, 2020 to January 31, 2021)

Parameter	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20
Flow (MGD) Average Monthly	0.00056	0.0003	0.0006	0.0004	0.0005	0.0004	0.00063	0.0005	0.00053		0.0004	0.0006
Flow (MGD) Daily Maximum	0.0018	0.0012	0.0015	0.0017	0.0016	0.0017	0.14	0.0018	0.0015		0.0017	0.0019
pH (S.U.) Minimum	7.5	7.4	7.5	7.2	7.8	7.3	7.4	7.4	7.5		7.1	7.0
pH (S.U.) Maximum	8.0	8.0	8.1	8.2	8.2	8.2	8.2	7.8	7.8		7.9	8.0
DO (mg/L) Minimum	5.0	4.5	6.0	6.0	5.0	6.0	4.0	5.0	6.0		6.6	6.24
TRC (mg/L) Average Monthly	0.75	0.75	0.50	0.75	0.75	0.75	0.75	0.75	0.75		0.25	0.9
TRC (mg/L) Instantaneous Maximum	1.5	1.5	2.0	1.0	1.25	1.0	1.25	1.0	1.0		1.25	1.75
CBOD5 (mg/L) Average Monthly	3.0	8.0	7.0	11.7	7.0	5.19	9.15	3	3.0		11.4	6.0
TSS (mg/L) Average Monthly	3.0	5.0	8.0	3.0	3.0	2.5	7.0	8	8.0		5.5	2.5
Fecal Coliform (CFU/100 ml) Geometric Mean	1.0	1.0	2	1.0	1.0	1.0	8.2	1.0	1.0		1.0	2.0
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	1.0	1.0	2	1.0	1.0	1.0	8.2	1.0	1.0		1.0	2.0
Total Nitrogen (mg/L) Annual Average		12.3										
Ammonia (mg/L) Average Monthly	1.03	0.14	1.6	2.95	0.16	1.79	1.68	0.326	0.326		5.1	0.65
Total Phosphorus (mg/L) Annual Average		6.51										

Compliance History

Effluent Violations for Outfall 001, from: March 1, 2020 To: January 31, 2021

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
CBOD5	03/31/20	Avg Mo	11.4	mg/L	10	mg/L
CBOD5	10/31/20	Avg Mo	11.7	mg/L	10	mg/L

Summary of Inspections: Most recent inspection performed 5/10/2016. STP and discharge point inspected, no problems identified.

Other Comments: None.

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** .004
Latitude 41º 46' 31.22" **Longitude** -78º 46' 22.10"
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	0.5	Average Monthly	-	92a.48(b)(2)

Comments: A new technology-based TRC limit of 0.5 mg/l has been included in this permit. A compliance schedule is included in Part C of the included NPDES Permit.

Water Quality-Based Limitations

WQM 7.0 modeling was not conducted as tertiary treatment limits are already applied and significant dilution is available in the perennial stream.

TRC spreadsheet (attached) shows that a water quality based effluent limitation for TRC is not required. However, a more stringent technology-based limit for TRC will be applied. The average monthly limitation of 0.5 mg/L for TRC is a regulatory standard under §§ 92a.47(a)(8) and 92a.48(b) *JCD 3-29-2021*

Best Professional Judgment (BPJ) Limitations

Comments: All other previously-applied limits besides TRC have been retained from the previous NPDES permit.

Anti-Backsliding

None.

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) (1)		Concentrations (mg/L)				Minimum (2) Measurement Frequency	Required Sample Type
	Average Monthly	Average Weekly	Minimum	Average Monthly	Maximum	Instant. Maximum		
Flow (MGD)	Report	Report Daily Max	XXX	XXX	XXX	XXX	Continuous	Measured
pH (S.U.)	XXX	XXX	6.0 Inst Min	XXX	XXX	9.0	1/day	Grab
DO	XXX	XXX	4.0 Inst Min	XXX	XXX	XXX	1/day	Grab
TRC (Interim)	XXX	XXX	XXX	1.4	XXX	3.2	1/day	Grab
TRC (Final)	XXX	XXX	XXX	0.5	XXX	1.6	1/day	Grab
CBOD5	XXX	XXX	XXX	10	XXX	20	1/month	Grab
TSS	XXX	XXX	XXX	10	XXX	20	1/month	Grab
Fecal Coliform (No./100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	1/month	Grab
Fecal Coliform (No./100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	1/month	Grab
Total Nitrogen	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18	1/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6	1/month	Grab
Total Phosphorus	XXX	XXX	XXX	Report Annl Avg	XXX	XXX	1/year	Grab

Compliance Sampling Location: Outfall 001, after disinfection.

TRC Spreadsheet

TRC EVALUATION

Input appropriate values in A3:A9 and D3:D9

5.79	= Q stream (cfs)	0.5	= CV Daily
0.0004	= Q discharge (MGD)	0.5	= CV Hourly
30	= no. samples	1	= AFC_Partial Mix Factor
0.3	= Chlorine Demand of Stream	1	= CFC_Partial Mix Factor
0	= Chlorine Demand of Discharge	15	= AFC_Criteria Compliance Time (min)
0.5	= BAT/BPJ Value	720	= CFC_Criteria Compliance Time (min)
0	= % Factor of Safety (FOS)		=Decay Coefficient (K)

Source	Reference	AFC Calculations	Reference	CFC Calculations
TRC	1.3.2.iii	WLA afc = 2984.844	1.3.2.iii	WLA cfc = 2909.982
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 1112.224	5.1d	LTA_cfc = 1691.727

Source		Effluent Limit Calculations	
PENTOXSD TRG	5.1f	AML MULT = 1.231	
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 0.500	BAT/BPJ
		INST MAX LIMIT (mg/l) = 1.635	

WLA afc	**(.019/e(-k*AFC_tc)) + [(AFC_Yc*Qs*.019/Qd*e(-k*AFC_tc))...** **...+ Xd + (AFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)**
LTAMULT afc	EXP((0.5*LN(cvh^2+1))-2.326*LN(cvh^2+1)^0.5)
LTA_afc	wla_afc*LTAMULT_afc
WLA_cfc	**(.011/e(-k*CFC_tc) + [(CFC_Yc*Qs*.011/Qd*e(-k*CFC_tc))...** **...+ Xd + (CFC_Yc*Qs*Xs/Qd)]*(1-FOS/100)**
LTAMULT_cfc	EXP((0.5*LN(cvd^2/no_samples+1))-2.326*LN(cvd^2/no_samples+1)^0.5)
LTA_cfc	wla_cfc*LTAMULT_cfc
AML MULT	EXP(2.326*LN((cvd^2/no_samples+1)^0.5)-0.5*LN(cvd^2/no_samples+1))
AVG MON LIMIT	MIN(BAT_BPJ,MIN(LTA_afc,LTA_cfc)*AML_MULT)
INST MAX LIMIT	**1.5*((av_mon_limit/AML_MULT)/LTAMULT_afc)**