pennsylvania
DEPARTMENT OF ENVIRONMENTAL PROTECTION

Southwest Regional Office
CLEAN WATER PROGRAM

NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE

Application Type	**Renewal**	Application No.	**PA0097691**
Facility Type	**Non-Municipal**	APS ID	**1033693**
Major / Minor	**Minor**	Authorization ID	**1345555**

Applicant and Facility Information

Applicant Name	**Leclair Danielle**	Facility Name	**Washington Koa Campground**
Applicant Address	7 Koa Road	Facility Address	7 Koa Rd
	Washington, PA 15301-3123		Washington, PA 15301
Applicant Contact	Danielle Leclair	Facility Contact	Danielle Leclair
Applicant Phone	(724) 225-7590	Facility Phone	(724) 225-7590
Client ID	241608	Site ID	256231
Ch 94 Load Status	Not Overloaded	Municipality	South Strabane Township
Connection Status	None	County	Washington
Date Application Received	February 23, 2021	EPA Waived?	Yes
Date Application Accepted	Not Applicable	If No, Reason	

Purpose of Application: Renew NPDES permit

Summary of Review

A permit renewal application was received for PA0097691. The facility consists of a comminutor with bar screen, aeration tank with extended aeration, clarifier, dosing tank to 2 sand beds, chlorine disinfection with tablet chlorinator, a discharge outfall. The annual average design flow rate is 10,000 gallons per day (gpd) but reported flows for the past three years are about 3,000 gpd with a highest monthly average flow of 4,000 gpd.

The same limitations, monitoring frequencies and sampling types are the same in this renewed permit as in the existing permit. The only exception is that E. coli monitoring 1/year has been added.

Act 14 Notifications:
South Strabane Township Received May 7, 2021
Washington County received February 21, 2021

Sludge use and disposal description and location(s): Hauled off-site

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.

Approve	Deny	Signatures	Date
X		Harmonie Hawley, PhD, PE / Environmental Engineering Specialist /s/	08/09/2021
X		Pravin C. Patel, P.E. / Environmental Engineer Manager /s/	08/10/2021

Discharge, Receiving Waters and Water Supply Information			
Outfall No.	001	Design Flow (MGD)	0.01
Latitude	40º 9' 38.00"	Longitude	-80º 11' 41.00"
Quad Name	Washington East	Quad Code	1704
Wastewater Description:	Treated Domestic Sewage		
Receiving Waters	Unnamed Tributary of Chartiers Creek (HQ-WWF)	Stream Code	36989
NHD Com ID	99694626	RMI	3.72
Drainage Area	1.04	Yield (cfs/mi^2)	0.01
Q_{7-10} Flow (cfs)	0.01	Q_{7-10} Basis	PA StreamStats
Elevation (ft)	1090	Slope (ft/ft)	N/A
Watershed No.	20-F	Chapter 93 Class.	HQ-WWF
Assessment Status	Impaired		
Cause(s) of Impairment	Metals, Siltation, Total Suspended Solids (TSS)		
Source(s) of Impairment	Acid Mine Drainage, Urban Runoff/Storm Sewers		
TMDL Status	Final, Final	Name	Chartiers Creek, Chartiers Creek Watershed
Background/Ambient Data		Data Source	
pH (SU)	7	TRG WQM (391-2000-007 default data)	
Temperature (°F)	68 (20 °C)	TRG WQM (391-2000-007 default data)	
Nearest Downstream Public Water Supply Intake		Western PA Water Company located on Little Charters Creek	

Changes Since Last Permit Issuance: The last permit renewal used an Adjusted Q7-10 from the Chartiers Creek; this renewal uses the PA StreamStats data which showed lower flows and drainage area; however, this did not affect the permit limitations.

Other Comments: None

Treatment Facility Summary

Treatment Facility Name: Washington Koa Campgrounds STP

Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Tertiary	Extended Aeration	No Disinfection	0.01

Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.01	N/A	Not Overloaded	N/A	N/A

Changes Since Last Permit Issuance: None

Other Comments: None

Compliance History

DMR Data for Outfall 001 (from July 1, 2020 to June 30, 2021)

Parameter	JUN-21	MAY-21	APR-21	MAR-21	FEB-21	JAN-21	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20
Flow (MGD) Average Monthly	0.001	0.001	0.002	0.001	0.001	0.001	0.002	0.002	0.003	0.002	0.002	0.001
pH (S.U.) Minimum	6.8	6.7	6.7	6.7	6.7	6.7	6.7	6.6	6.7	6.7	6.7	6.7
pH (S.U.) Maximum	6.9	6.9	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8	6.8
DO (mg/L) Minimum	6.9	6.7	6.7	6.8	6.7	6.7	6.7	6.7	6.7	6.7	6.7	6.7
TRC (mg/L) Average Monthly	0.19	0.18	0.18	0.18	0.18	0.17	0.17	0.19	0.17	0.19	0.19	0.20
TRC (mg/L) Instantaneous Maximum	0.20	0.21	0.20	0.24	0.22	0.20	0.20	0.20	0.20	0.21	0.24	0.22
CBOD5 (mg/L) Average Monthly	< 2.0	2.4	3.6	< 5.0	3.7	< 2.0	< 2.0	7.3	2.2	< 2.0	< 2.0	2.1
CBOD5 (mg/L) Instantaneous Maximum	< 2.0	2.8	5.2	< 5.0	4.0	< 2.0	< 2.0	12.7	2.4	< 2.0	< 2.0	2.2
TSS (mg/L) Average Monthly	5.5	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
TSS (mg/L) Instantaneous Maximum	6.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0	< 6.0
Fecal Coliform (CFU/100 ml) Geometric Mean	358	39.5	< 1	27.7	15.0	3.1	7.1	321.9	43.8	15.8	2.8	< 1.0
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	656	196	< 1	192	114.0	10	52	730	192	36	8	< 1.0
Total Nitrogen (mg/L) Daily Maximum							16.3					
Ammonia (mg/L) Average Monthly	2.7	0.2	2.6	0.4	7.0	0.4	0.2	0.5	0.4	0.3	0.4	0.6

Ammonia (mg/L) Instantaneous Maximum	2.8	0.2	5.2	0.5	7.4	0.4	0.2	0.4	0.4	0.3	0.5	0.7
Total Phosphorus (mg/L) Average Monthly	4.6	1.4	3.2	5.0	5.6	6.9	2.5	4.0	3.0	3.6	4.4	4.6
Total Phosphorus (mg/L) Instantaneous Maximum	5.5	1.7	3.5	6.2	5.9	9.0	2.6	4.8	3.0	3.9	4.5	5.1

Compliance History

Effluent Violations for Outfall 001, from: August 1, 2020 To: June 30, 2021

Parameter	Date	SBC	DMR Value	Units	Limit Value	Units
Fecal Coliform	06/30/21	Geo Mean	358	CFU/100 ml	200	CFU/100 ml
Total Phosphorus	01/31/21	Avg Mo	6.9	mg/L	6.0	mg/L

Summary of Inspections: Inspection conducted 08/31/2017 with violations noted (this inspection was within the past 5 years)

Other Comments: Open violations report run 08/04/2021 and no open violations were found

Development of Effluent Limitations

Outfall No. 001 **Design Flow (MGD)** 0.01
Latitude 40º 9' 38.00" **Longitude** -80º 11' 41.00"
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 (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: E coli monitoring was added to the permit based on 92a.61. The pH and fecal coliform will be retained in this renewal and is the same as the above table.

Water Quality-Based Limitations

A “Reasonable Potential Analysis” was not conducted as this is a minor facility with no industrial contributions.

This is a High Quality water and in past renewals limitations (CBOD5, Dissolved Oxygen, and Ammonia-Nitrogen) were based on this stream designation. The Chapter 93 DO for WWF is also 5 mg/l which is the same as the existing permit. In addition, the WQM model was run and the results were the same limitations as the current permit. The modeling results are not included in this Fact Sheet as the basis is the High Quality designation and the model was to double-check the values. Thus, the existing limitations are retained in this permit renewal. The seasonal multiplier for ammonia-nitrogen is retained in the permit renewal.

The following excerpt is from the Fact Sheet composed in 2016: “A monthly average total phosphorus effluent limitation of 6 mg/l was added to the October 5, 2005 NPDES permit and will be re-imposed. This limit is based on an August 6, 2004 email sent by Mary Kuo to Evelyn Macknight of the U.S. Environmental Protection Agency which identified assigned WLAs for phosphorus for specified point sources in the watershed tributary to Canonsburg Lake. The TMDL for Canonsburg Lake has not been revised since developed in July 2004 therefore no revisions for this parameter are necessary.” The TP limitation will be retained in this permit renewal.

The model conducted in 2016 for TRC appears to be valid, thus the limitations are retained in this permit renewal.

Nutrient monitoring is based on 92a.61 and it is standard practice to include monitoring of TN and TP at a minimum. TN monitoring will be continued in this permit. The TP limitation will be continued in this permit renewal as previously discussed.

In addition, there are two TMDLs in the Chartiers Creek. The TMDL for PCB and Chlordane Chartiers Creek was approved on 4/9/2001 but contains no wasteload allocation (WLA) or monitoring for this facility. The TMDL for the Chartiers Creek Watershed approved April 2003 is due to impairments for metals (aluminum, iron and manganese) and pH which are attributed to acid mine drainage and resource extraction. No WLA is set for this facility. As no WLAs are set for this facility, and it does not appear likely to be a source of these parameters, no monitoring or limitations are in the permit.

The same monitoring frequencies are retained in this permit. The monitoring frequency for E coli (1/year) is based on standard practice (SOP BCW-PMT-033 Version 1.9).

Best Professional Judgment (BPJ) Limitations

Comments: None.

Anti-Backsliding

TP will continue to have a limit in the permit.

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)	0.01	XXX	XXX	XXX	XXX	XXX	2/month	Measured
pH (S.U.)	XXX	XXX	6.0	XXX	XXX	9.0	Daily when Discharging	Grab
DO	XXX	XXX	5.0	XXX	XXX	XXX	Daily when Discharging	Grab
TRC	XXX	XXX	XXX	0.4	XXX	1.2	Daily when Discharging	Grab
CBOD5	XXX	XXX	XXX	10	XXX	20	2/month	Grab
TSS	XXX	XXX	XXX	25	XXX	50	2/month	Grab
Fecal Coliform (CFU/100 ml) Oct 1 - Apr 30	XXX	XXX	XXX	2000 Geo Mean	XXX	10000	2/month	Grab
Fecal Coliform (CFU/100 ml) May 1 - Sep 30	XXX	XXX	XXX	200 Geo Mean	XXX	1000	2/month	Grab
E. Coli (No./100 ml)	XXX	XXX	XXX	XXX	XXX	Report	1/year	Grab
Total Nitrogen	XXX	XXX	XXX	XXX	Report Daily Max	XXX	1/year	Grab
Ammonia Nov 1 - Apr 30	XXX	XXX	XXX	9.0	XXX	18.0	2/month	Grab
Ammonia May 1 - Oct 31	XXX	XXX	XXX	3.0	XXX	6.0	2/month	Grab
Total Phosphorus	XXX	XXX	XXX	6.0	XXX	12.0	2/month	Grab

Compliance Sampling Location: Outfall 001
Other Comments: None