

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

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0060593
 APS ID 845187
 Authorization ID 1329183

Applicant and Facility Information

Applicant Name	<u>Aqua Pennsylvania Wastewater, Inc.</u>	Facility Name	<u>Laurel Lakes WWTF</u>
Applicant Address	<u>762 W. Lancaster Avenue</u> <u>Bryn Mawr, PA 19010</u>	Facility Address	<u>End of Laurel Drive</u> <u>Mountain Top, PA 18707</u>
Applicant Contact	<u>Todd Duerr</u>	Facility Contact	<u>Robert Soltis</u>
Applicant Phone	<u>(570) 443-7099</u>	Facility Phone	<u>(570) 443-7099</u>
Client ID	<u>62614</u>	Site ID	<u>245281</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Rice Township</u>
Connection Status	<u>-</u>	County	<u>Luzerne</u>
Date Application Received	<u>October 2, 2020</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>November 20, 2020</u>	If No, Reason	<u></u>
Purpose of Application	<u>Renewal of an existing NPDES permit to discharge up to 87,500 gpd of treated sewage.</u>		

Summary of Review

The applicant is requesting renewal of NPDES Permit No. PA0060593 to authorize a discharge of 87,500 gpd of treated sewage from a minor sewage treatment plant into Nuangola Outlet (CWF, MF) in State Water Plan Watershed 05-B. Nuangola Outlet does not have an existing use classification. The 2018 Pennsylvania Integrated Water Quality Monitoring and Assessment Report lists Nuangola Outlet as 'Supporting' for Aquatic Life.' The discharge is not expected to affect public water supplies.

In 2019, the annual average flow was 46,400 gpd. The highest monthly average flow in 2019 occurred in April, when the facility discharged 67,400 gpd. The application describes the treatment train: "Wastewater enters the preliminary treatment process, which consists of a comminutor and bypass screen. From there, the wastewater flows into a splitter box, which equally distributes the flow to Aeration Tank No. 1 or No.2 for treatment. From the aeration tank, the wastewater enters a final clarifier. After clarification, the final treatment is chlorine disinfection with contact time provided via contact tanks."

The existing measurement frequencies are in accordance with Table 6-3 of DEP's Technical Guidance for the Development and Specification of Effluent Limitations; they remain unchanged.

The Department's Total Residual Chlorine (TRC) spreadsheet was used to determine the appropriate TRC limits. The average monthly limit will decrease from 0.5 mg/L to 0.12 mg/L. The instantaneous-maximum limit will decrease from 1.6 mg/L to 0.40 mg/L. The new limits go into effect 4 years after the permit effective date.

Water quality modeling was performed in WQM 7.0 to determine the appropriate limits for Ammonia-Nitrogen. The modeling results supported reducing the limits for Ammonia-Nitrogen (May-October) from 12.6 mg/L average monthly and 25.2 mg/L IMAX to 3.3 mg/L and 6.6 mg/L, respectively. The new limits go into effect 4 years after the permit effective date. In addition, a 'Monitor and Report' requirement for Ammonia-Nitrogen (November-April) has been added to the permit. Four years after the permit effective date, the 'Monitor and Report' requirement will transition to a 9.9 mg/L average monthly limit.

Approve	Deny	Signatures	Date
X		Joseph Cherinko (signed) Joseph Cherinko, P.E. / Environmental Engineering Specialist	February 12, 2021
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	2-24-21

Summary of Review

Modeling results supported retaining the existing technology-based limits for CBOD5 (25 mg/L avg. mo, 50 mg/L IMAX).

In accordance with § 92a.47, IMAX limits for Fecal Coliform have been added to the permit: 1,000 and 10,000 CFU/100mL during May-September and October-April, respectively.

The Department received a WQM permit application for the facility on December 21, 2020. The application is for upgrades to components of the wastewater treatment plant, including the influent pump station, comminutor, flow splitter box, chemical feed systems, disinfection system and other associated appurtenances. The addition of an extended aeration treatment train is also proposed. The application is still being processed and the WQM permit has not been issued as of February 12, 2021.

The WMS query 'Inspections' was performed. A 'Compliance Evaluation was performed on August 19, 2020, where 1 violation was noted: "NPDES – Illegal discharge to waters of the Commonwealth from a sanitary sewer overflow (SSO)." The violation was marked 'resolved' on August 20, 2020.

The WMS query 'Open Violations by Client Report' was performed; the applicant has 4 open violations:

Permit	Facility	Program	Violation ID	Region	Date
0993408	Peddlers View WWTP	WPC State WPC	890201	SERO	7/31/2020
PA0061719	Pincrest WWTF	WPC NPDES	904736	NERO	1/15/2021
PA0228061	New West Side STP	WPC NPDES	905627	NCRO	1/22/2021
PA0228061	New West Side STP	WPC NPDES	905628	NCRO	1/22/2021

The facility name has been modified from Aqua PA St Johns Estates in the prior permit to Laurel Lakes WWTF to match the preferred facility name in the renewal application.

Language pertaining to solids management has been added to Part C of the permit.

The existing NPDES permit expires on March 31, 2021. The renewal application was due by October 2, 2020. The application was received via OnBase on October 1, 2020.

Sludge use and disposal description and location(s): The facility produced approximately 127,000 gallons of sewage sludge in 2019. The sludge was hauled to the Greater Hazleton Joint Sewer Authority.

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.	<u>001</u>	Design Flow (MGD)	<u>.0875</u>
Latitude	<u>41° 9' 14.30"</u>	Longitude	<u>-75° 57' 38.10"</u>
Quad Name	<u>Freeland</u>	Quad Code	<u>1038</u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Nuangola Outlet (CWF, MF)</u>	Stream Code	<u>28375</u>
NHD Com ID	<u>65635779</u>	RMI	<u>~ 0.75</u>
Drainage Area	<u>2.21 mi²</u>	Yield (cfs/mi ²)	<u>0.047</u>
Q ₇₋₁₀ Flow (cfs)	<u>0.104</u>	Q ₇₋₁₀ Basis	<u>USGS StreamStats</u>
Elevation (ft)	<u>1,139</u>	Slope (ft/ft)	<u>-</u>
Watershed No.	<u>5-B</u>	Chapter 93 Class.	<u>CWF, MF</u>
Existing Use	<u>-</u>	Existing Use Qualifier	<u>-</u>
Exceptions to Use	<u>-</u>	Exceptions to Criteria	<u>-</u>
Assessment Status	<u>Attaining Use(s)</u>		
Cause(s) of Impairment	<u>-</u>		
Source(s) of Impairment	<u>-</u>		
TMDL Status	<u>-</u>	Name	<u>-</u>
Background/Ambient Data		Data Source	
pH (SU)	<u>-</u>		<u>-</u>
Temperature (°F)	<u>-</u>		<u>-</u>
Hardness (mg/L)	<u>-</u>		<u>-</u>
Other:	<u>-</u>		<u>-</u>
Nearest Downstream Public Water Supply Intake	<u>Danville Municipal Water Authority</u>		
PWS Waters	<u>Susquehanna River</u>	Flow at Intake (cfs)	<u>UNK</u>
PWS RMI	<u>UNK</u>	Distance from Outfall (mi)	<u>50+</u>

Changes Since Last Permit Issuance: -

Other Comments: -

Treatment Facility Summary				
Treatment Facility Name: Laurel Lakes WWTF				
WQM Permit No.		Issuance Date		
4076422		3/7/1984		
4076421		3/7/1984		
4076420		3/7/1984		
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Aeration	Sodium Hypochlorite	0.0464 (2019) 0.0669 (2018) 0.0510 (2017)
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.0875	175	Not Overloaded	Aerated Sludge Holding Tank	Hauled Off Site

Changes Since Last Permit Issuance: -

Other Comments: In August 2014, a minor amendment was issued for a name change from Little Washington Wastewater Company to Aqua Pennsylvania Wastewater, Inc. It was exclusively a name change; there was no change in the owner/operator for the facilities.

Compliance History

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

Parameter	DEC-20	NOV-20	OCT-20	SEP-20	AUG-20	JUL-20	JUN-20	MAY-20	APR-20	MAR-20	FEB-20	JAN-20
Flow (MGD) Average Monthly	0.0475	0.0267	0.0236	0.0214	0.025	0.0262	0.0265	0.048	0.0535	0.0365	0.0467	0.0469
Flow (MGD) Daily Maximum	0.3344	0.0538	0.0866	0.0388	0.0566	0.0777	0.1154	0.1543	0.2319	0.0721	0.1124	0.131
pH (S.U.) Minimum	6.48	7.2	7.54	7.40	7.01	6.83	6.90	FF	7.0	6.94	7.11	6.56
pH (S.U.) Maximum	7.53	7.8	7.75	7.85	7.64	7.50	7.89	FF	7.42	7.94	8.41	8.41
DO (mg/L) Minimum	6.9	6.5	6.56	6.38	6.18	6.32	6.14	FF	6.20	8.16	9.88	7.29
TRC (mg/L) Average Monthly	0.5	0.5	0.43	0.42	0.5	0.50	0.38	FF	0.36	0.45	0.49	0.50
TRC (mg/L) Instantaneous Maximum	1.11	1.3	0.63	0.65	1.08	0.85	0.85	FF	0.58	0.92	0.91	0.88
CBOD5 (mg/L) Average Monthly	< 2	< 2	< 2.0	< 2.0	< 2.0	< 2	< 2	< 2.0	< 2.0	< 2.0	< 2.0	< 3.0
TSS (mg/L) Average Monthly	< 3	4.5	3.50	< 3.0	< 3.0	< 3	< 3.50	< 3.0	3.5	< 3.0	4.5	8.5
Fecal Coliform (CFU/100 ml) Geometric Mean	< 1	< 1	17.94	< 1.0	1.73	< 1.73	< 6.08	< 1	2.65	< 1.0	< 1.0	7.14
Ammonia (mg/L) Average Monthly			< 0.13	< 0.1	0.13	< 0.12	< 6.27	1.39				
Total Phosphorus (mg/L) Average Monthly	0.2	0.36	0.68	0.76	0.74	0.7	0.74	0.38	0.29	0.25	0.23	0.35