

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

**NPDES PERMIT FACT SHEET
INDIVIDUAL SEWAGE**

Application No. PA0063533
 APS ID 945356
 Authorization ID 1364852

Applicant and Facility Information

Applicant Name	<u>Aqua PA Wastewater Inc.</u>	Facility Name	<u>Aqua Blakeslee Tobyhanna Township WWTP</u>
Applicant Address	<u>762 W Lancaster Avenue</u> <u>Bryn Mawr, PA 19010</u>	Facility Address	<u>Pa Rte 115 124 Keswick Drive</u> <u>Blakeslee, PA 18360</u>
Applicant Contact	<u>Todd Duerr</u>	Facility Contact	<u>Robert Soltis</u>
Applicant Phone	<u>(610) 645-1122</u>	Facility Phone	<u></u>
Client ID	<u>62614</u>	Site ID	<u>542262</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Tobyhanna Township</u>
Connection Status	<u>No Limitations</u>	County	<u>Monroe</u>
Date Application Received	<u>August 4, 2021</u>	EPA Waived?	<u>Yes</u>
Date Application Accepted	<u>August 4, 2021</u>	If No, Reason	<u></u>
Purpose of Application	<u>RENEWAL OF EXISTING NPDES PERMIT</u>		

Summary of Review

The application is for a renewal of an NPDES permit for an existing discharge of treated Sewage based on a design flow of 0.3 MGD. The receiving stream, Tobyhanna Creek (HQ-CWF), is located in State Water Plan watershed 2-A and is classified for High Quality Waters - Cold Water Fishes, aquatic life, water supply and recreation. As 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 discharge is not expected to affect public water supplies.

The effluent limits for Outfall 001 are continued from the previous permit. The CBOD5, TSS and pH effluent limitations are BPT based. The remaining limitations are water quality based. SEJ Approval was granted June 1, 1993. Chapter 94 reporting will continue.

The WMS Report query "Water Management System Inspections" was run. On 07/17/2015 an Administrative/File Review was done with No Violations noted.

The WMS "Open Violations by Client Report" was run and there are No Open Violations.

The Existing Permit expires on January 31, 2022 and the renewal was submitted on August 4, 2021.

Sludge use and disposal description and location(s): GHJSA

Approve	Deny	Signatures	Date
X		Bernard Feist (signed) Bernard Feist, P.E. / Environmental Engineer	August 25, 2021
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	8-31-21

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.	<u>001</u>	Design Flow (MGD)	<u>.3</u>
Latitude	<u>41° 5' 6.45"</u>	Longitude	<u>-75° 34' 53.89"</u>
Quad Name	<u>Blakeslee</u>	Quad Code	<u></u>
Wastewater Description: <u>Sewage Effluent</u>			
Receiving Waters	<u>Tobyhanna Creek</u>	Stream Code	<u>4357</u>
NHD Com ID	<u>26283629</u>	RMI	<u>0.9</u>
Drainage Area	<u>75.2</u>	Yield (cfs/mi ²)	<u>.12</u>
Q ₇₋₁₀ Flow (cfs)	<u>9.0</u>	Q ₇₋₁₀ Basis	<u>Gage 014444720 Bull 12</u>
Elevation (ft)	<u>1560</u>	Slope (ft/ft)	<u>.0005</u>
Watershed No.	<u>2-A</u>	Chapter 93 Class.	<u>HQ-CWF</u>
Existing Use	<u></u>	Existing Use Qualifier	<u></u>
Exceptions to Use	<u></u>	Exceptions to Criteria	<u></u>
Assessment Status	<u>Impaired</u>		
Cause(s) of Impairment	<u>Mercury</u>		
Source(s) of Impairment	<u>Source Unknown</u>		
TMDL Status	<u>Final</u>	Name	<u>Lehigh River TMDL</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>Easton</u>		
PWS Waters	<u></u>	Flow at Intake (cfs)	<u></u>
PWS RMI	<u></u>	Distance from Outfall (mi)	<u>> 25 miles</u>

Other Comments: SEJ 1996 Modelling ->



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 96%20Modelling.pd

Treatment Facility Summary				
Treatment Facility Name: Aqua Blakeslee Tobyhanna Township WWTP				
Facility was approved by WQM Part II Permit No. 4596402. Existing dwelling units were connected to the newly constructed system in 1999. The year 2000 was the first full year of operation. SEJ Approval was granted June 1, 1993.				
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary With Ammonia And Phosphorus	Sequencing Batch Reactor	Ultraviolet	0.3
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.375	829	Not Overloaded	Aerobic Digestion	Other WWTP

Development of Effluent Limitations

Outfall No. 001 Design Flow (MGD) .3
 Latitude 41° 5' 7.00" Longitude -75° 34' 54.00"
 Wastewater Description: Sewage Effluent

Technology-Based Limitations

The following technology-based limitations apply, subject to water quality analysis and BPJ where applicable:

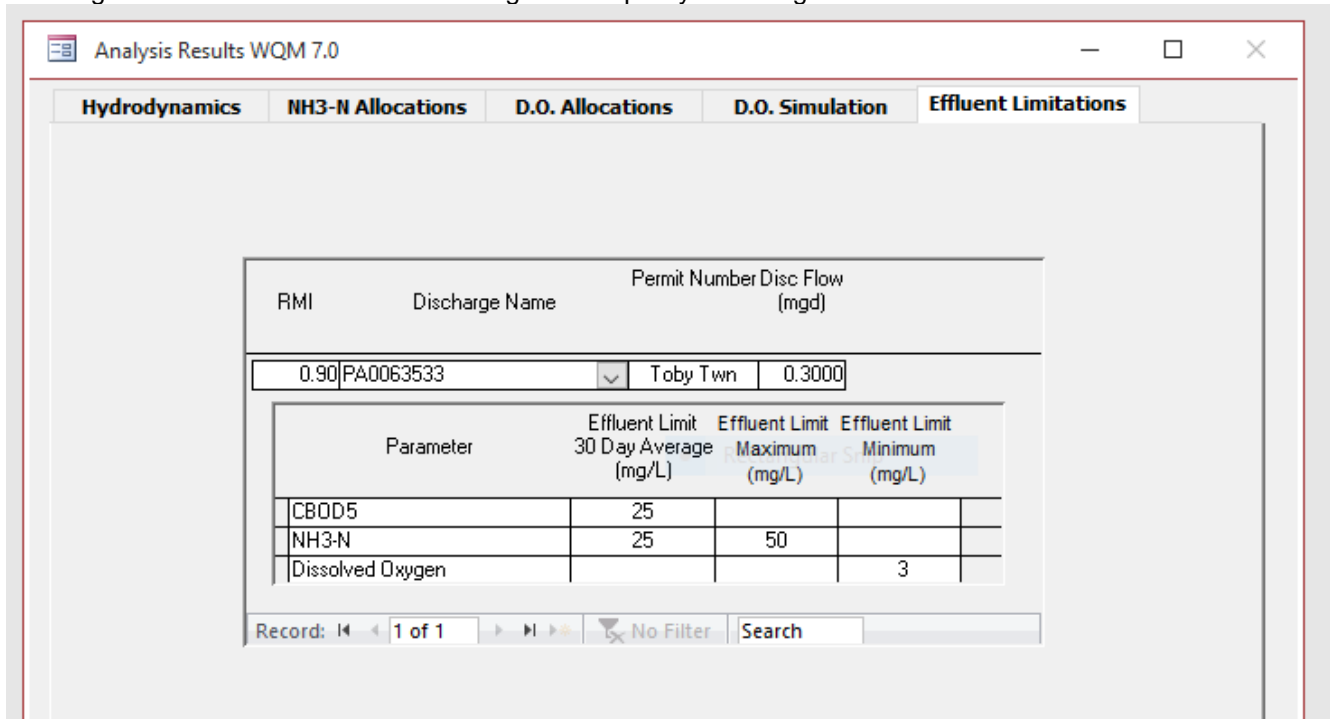
Parameter	Minimum	Average Monthly	Average Weekly	IMAX	Basis
Flow (MGD)	XXX	Report	Report Max Daily	XXX	§§ 92a.27, 92a.61
CBOD5 (mg/L)	XXX	25	40	50	§ 92a.47
TSS (mg/L)	XXX	30	45	60	§ 92a.47
TRC (mg/L)	XXX	0.5	XXX	1.6	§§ 92a.47-48
NH3-N (mg/L)	XXX	25	XXX	50	BPJ
pH (SU)	6	XXX	XXX	9	§ 92a.47, § 95.2
Total N (mg/L)	XXX	Report	XXX	XXX	§ 92a.61
Total P (mg/L)	XXX	Report	XXX	XXX	§ 92a.61
Fecal Coliform (No./100 ml) (May-Sept)	XXX	200 Geo Mean	XXX	1,000	§ 92a.47
Fecal Coliform (No./100 ml) (Oct-April)	XXX	2,000 Geo Mean	XXX	10,000	§ 92a.47
E. Coli (No./100 ml)*	XXX	XXX	XXX	Report	§ 92a.61

* 2021 update - Sewage discharges will include monitoring, at a minimum, for E. Coli, in new and reissued permits, with a monitoring frequency of 1/month for design flows >= 1 MGD, 1/quarter for design flows >= 0.05 and < 1 MGD, 1/year for design flows of 0.002 – 0.05 MGD.

Comments: Quarterly E-Coli, TN & TP reporting will be added to the Permit

Water Quality-Based Limitations

The following limitations were determined through water quality modeling:



TRC EVALUATION			
Input appropriate values in A3:A9 and D3:D9			
9	= Q stream (cfs)	0.5	= CV Daily
0.3	= 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 = 6.205	1.3.2.iii WLA cfc = 6.042
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373	5.1c LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 2.312	5.1d LTA_cfc = 3.513
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	

Recommended WQBELs & Monitoring Requirements

No. Samples/Month: 4

Pollutants	Mass Limits		Concentration Limits			
	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX	Units

Other Pollutants without Limits or Monitoring

The following pollutants do not require effluent limits or monitoring based on water quality because reasonable potential concentration was less than thresholds for monitoring, or the pollutant was not detected and a sufficiently sensitive a

Pollutants	Governing WQBEL	Units	Comments
Total Dissolved Solids (PWS)	N/A	N/A	PWS Not Applicable
Chloride (PWS)	N/A	N/A	PWS Not Applicable
Bromide	N/A	N/A	No WQS
Sulfate (PWS)	N/A	N/A	PWS Not Applicable



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In general, DEP establish limits in the draft permit where the effluent concentration exceeds 50% of the WQBEL. For non-conservative pollutants, in general, establish monitoring requirements where the effluent concentration determined is between 25% - 50% of the WQBEL. For conservative pollutants, in general, establish monitoring requirements where the effluent concentration determined is between 10% - 50% of the WQBEL. In general, DEP establish limits in the draft permit where the effluent concentration exceeds 50% of the WQBEL. For non-conservative pollutants, in general, establish monitoring requirements where the effluent concentration determined is between 25% - 50% of the WQBEL. For conservative pollutants, in general, establish monitoring requirements where the effluent concentration determined is between 10% - 50% of the WQBEL.

Comments : Toxic Modelling produced no additional limits

Best Professional Judgment (BPJ) Limitations

Comments: 2021 TRC Tech limits imposed if utilized for cleaning or backup to UV.

Anti-Backsliding

1996 Water Quality Modelling will remain in effect

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	0.1150	0.153	0.1385	0.2293	0.1435	0.1632	0.196	0.1265	0.1186	0.1124	0.1177	0.1371
Flow (MGD) Daily Maximum	0.1816	0.4451	0.2102	0.4905	0.2273	0.236	1.140	0.4459	0.5196	0.1838	0.562	0.3942
pH (S.U.) Minimum	7.1	7.1	7.0	6.9	7.24	7.35	6.72	7.39	6.91	7.51	7.32	7.11
pH (S.U.) Maximum	7.9	7.7	7.7	7.6	7.78	7.92	7.80	8.01	8.26	8.19	8.05	8.10
DO (mg/L) Minimum	7.3	8.1	7.5	9.2	10.11	9.65	9.04	8.44	7.5	7.05	6.5	6.36
TRC (mg/L) Average Monthly	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG
TRC (mg/L) Instantaneous Maximum	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG	GG
CBOD5 (lbs/day) Average Monthly	< 2.18	< 2.34	< 2.96	< 4.01	< 2.4	< 2.70	< 2.79	< 2.88	< 1.68	< 1.65	< 3.86	< 2.20
CBOD5 (lbs/day) Weekly Average	< 2.51	< 2.88	< 4.45	< 4.69	< 2.71	< 2.96	< 3.07	< 2.27	< 1.84	< 1.92	< 9.37	< 2.45
CBOD5 (mg/L) Average Monthly	< 2.0	< 2.0	< 2.3	< 2.0	< 2.0	< 2.0	< 2.0	< 2.5	< 2.0	< 2.0	< 2.0	< 2.0
CBOD5 (mg/L) Weekly Average	< 2.0	< 2.0	< 3.0	< 2.0	< 2.0	< 2.0	< 2.0	4.0	< 2.0	< 2.0	< 2.0	< 2.0
BOD5 (mg/L) Raw Sewage Influent Average Monthly	164.20	134	121	100.4	147.25	133.25	175	166	233.75	229.20	174.5	156
TSS (lbs/day) Average Monthly	< 3.3	< 3.51	< 3.88	< 6.01	< 3.60	< 4.05	< 4.19	< 3.35	2.51	< 2.29	< 5.79	< 3.30
TSS (lbs/day) Weekly Average	< 3.8	< 4.32	< 4.45	< 7.03	< 4.07	< 4.44	< 4.6	< 3.41	< 2.77	< 2.59	< 14.06	< 3.68
TSS (mg/L) Average Monthly	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 2.8	< 3.0	< 3.0
TSS (mg/L) Raw Sewage Influent Average Monthly	116.20	99.5	67.5	62.6	103.75	93.75	100.2	125.25	122.75	117.20	101.5	110.5
TSS (mg/L) Weekly Average	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0	< 3.0
Fecal Coliform (CFU/100 ml) Geometric Mean	< 1	< 1	< 1	4.86	1.57	< 1.41	< 1	< 1	< 1	< 1.0	< 1	< 1.0
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	< 1	< 1	< 1	41	3	2.0	< 1	1	< 1	1.0	< 1	< 1.0
Ammonia (lbs/day) Average Monthly	< 0.3	< 0.12	2.37	< 1.67	< 0.19	< 0.47	< 0.14	< 0.11	< 0.08	< 0.08	< 0.19	< 0.11
Ammonia (mg/L) Average Monthly	0.2	< 0.1	1.7	< 0.6	< 0.17	< 0.33	< 0.10	< 0.1	< 0.10	< 0.10	< 0.10	< 0.10
Total Phosphorus (lbs/day) Average Monthly	0.5	0.6	0.24	0.8	0.50	0.16	0.34	0.44	0.36	0.33	0.90	0.26
Total Phosphorus (mg/L) Average Monthly	0.4	0.6	0.19	0.3	0.42	0.12	0.23	0.40	0.41	0.40	0.35	0.25