

Application Type Renewal  
 Facility Type Municipal  
Minor  
 Major / Minor with CSOs

**NPDES PERMIT FACT SHEET  
INDIVIDUAL SEWAGE**

Application No. PA0023736  
 APS ID 547857  
 Authorization ID 1131220

**Applicant and Facility Information**

Applicant Name	<u>Tri Borough Municipal Authority</u> <u>Susquehanna County</u>	Facility Name	<u>Tri Borough Municipal Authority</u>
Applicant Address	<u>83 Erie Boulevard</u> <u>Susquehanna, PA 18847</u>	Facility Address	<u>131 Exchange Street</u> <u>Susquehanna, PA 18847</u>
Applicant Contact	<u>Jamie Koziol</u>	Facility Contact	<u>Jamie Koziol</u>
Applicant Phone	<u>(570) 853-4206</u>	Facility Phone	<u>(570) 396-1045</u>
Client ID	<u>148143</u>	Site ID	<u>250909</u>
Ch 94 Load Status	<u>Not Overloaded</u>	Municipality	<u>Susquehanna Depot Borough</u>
Connection Status	<u>No Limitations</u>	County	<u>Susquehanna</u>
Date Application Received	<u>March 23, 2016</u>	EPA Waived?	<u>No</u>
Date Application Accepted	<u>April 1, 2016</u>	If No, Reason	<u>Significant CB Discharge</u>
Purpose of Application	<u>The application is for a renewal of an NPDES permit for an existing discharge of treated Sewage.</u>		

**Summary of Review**

The applicant is requesting the renewal of their NPDES permit to discharge up to 0.50 MGD of treated sewage. The receiving stream, Susquehanna River is located in State Water Plan watershed 4E and is classified for WWF (Warm 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 Facility serves Susquehanna (comb. sewers), Oakland (comb. sewers), & Lanesboro through Outfall 001. Two Combined Sewage Overflows CSOs are located at Oakland River Street - CSO 002 and Susquehanna Exchange Street - CSO 003. Combined sewer regulator chambers are set to allow daily flows up to 1.0 mgd into the STP during wet-weather as part of a CSO minimization plan.

The dilution ratio of this discharge to river low flow is 1:234. The CBOD, TSS, pH, TRC and fecal are all tech-based limits. WQM, TMS and TRC modeling was completed for this renewal and the limits remain the same as the previous permit. The Chesapeake Bay Tributary Strategy nutrient limits for Total Nitrogen and Total Phosphorus were previously developed in accordance with the CBTS. The Total Nitrogen (TN) concentration of 6.0 mg/l and Total Phosphorus (TP) concentration of 0.8 mg/l were used to calculate the limits.

For POTWs with design flows greater than 2,000 GPD and for non-municipal sewage facilities that service municipalities the renewal will establish influent BOD5 and TSS monitoring in the permit using the same frequency and sample type as is used for effluent.

Chesapeake Bay Watershed

Section 7 of Pennsylvania's Phase 2 Chesapeake Bay Watershed Implementation Plan (Phase 2 WIP) describes

Approve	Deny	Signatures	Date
X		Bernard Feist (signed) Bernard Feist, P.E. / Environmental Engineer	March 16, 2021
X		Amy M. Bellanca (signed) Amy M. Bellanca, P.E. / Environmental Engineer Manager	3-16-21

**Summary of Review**

Pennsylvania’s strategy for reducing nutrients to the Chesapeake Bay from wastewater facilities. Appendix Q of the Chesapeake Bay TMDL segregates Pennsylvania’s point sources into four sectors – significant sewage dischargers, significant industrial waste (IW) dischargers, combined sewer overflows (CSOs) and non-significant dischargers (both sewage and IW facilities). All sectors contain a listing of individual facilities with NPDES permits that were believed to be discharging at the time the TMDL was published (2010). All sectors with the exception of the non-significant dischargers have individual wasteload allocations (WLAs) for TN and TP assigned to specific facilities. Non-significant dischargers have a bulk or aggregate allocation for TN and TP based on the facilities in that sector that were believed to be discharging at that time and their estimated nutrient loads.

The Chesapeake Bay TMDL specifies individual WLAs for 183 significant sewage treatment facilities. A sewage facility is considered significant if it has a design flow of at least 0.4 MGD. For rollout of its permitting strategy, DEP classified these facilities into three phases. This facility is a Phase 3.

Table 7-1: Significant Chesapeake Bay Sewage NPDES Permits Issued

**Chesapeake Bay – Wastewater Phase 2 WIP Wastewater Supplement Revised, November 9, 2018**

NPDES Permit No.	Phase	Facility	TN Cap Load (lbs/yr)	TP Cap Load (lbs/yr)	TN Delivery Ratio	TP Delivery Ratio
PA0023736	3	Tri-Boro Municipal Authority	9,132	1,218	0.495	0.436

The nutrient monitoring limits required by the Chesapeake Bay strategy were previously established in the last Permit and cannot be amended. If necessary, Credits must be purchased to comply.

An update is that the minimum monitoring frequency for TN species and TP in new or renewed NPDES permits for Significant Sewage dischargers is now 2/week.

An Annual DMR must be submitted by the end of the CBTS Truing Period, November 28. As attachments to the Annual DMR a facility must submit the completed Annual Chesapeake Bay Spreadsheet, available through DEP’s Supplemental Reports website, which contains an Annual Nutrient Monitoring worksheet and an Annual Nutrient Budget worksheet. This Spreadsheet will be submitted once per Compliance Year only and reflect all nutrient sample results (for the period October 1 – September 30), Credit transactions (including the Truing Period) and Offsets applied during the Compliance Year.

Combined Sewer Overflow (CSO)

The goals of the EPA’s 1994 Combined Sewer Overflow (CSO) Control Policy (Volume 59 of the Federal Register (FR) 18688 and 18689, April 19, 1994) are:

1. To ensure that if CSOs occur, they are only as a result of wet weather,
2. To bring all wet weather CSO discharge points into compliance with the technology-based and water quality-based requirements of the Clean Water Act (CWA) and
3. To minimize water quality, aquatic biota and human health impacts from CSOs from all Publicly Owned Treatment Works (POTW) Treatment Plants (as defined in Title 40 of the Code of Federal Regulations (CFR) Part 403.3(p)).”

NPDES Compliance - EPA Publication Number: 305-K-17-001 Interim Revised Version, January 2017

EPA’s CSO Policy outlines the NMCs and the minimum elements of an LTCP. Table 12-1 lists the NMCs, while Table 12-2 lists the elements of the LTCP.

## Summary of Review

**Table 12-1. Nine Minimum CSO Controls**

- Proper operation and regular maintenance programs for the sewer system and the CSOs.
- Maximum use of the collection system for storage.
- Review and modification of pretreatment requirements to ensure that CSO impacts are minimized.
- Maximization of flow to the POTW for treatment.
- Prohibition of CSOs during dry weather.
- Control of solid and floatable materials in CSOs.
- Establishment of pollution prevention programs.
- Public notification to ensure that the public receives adequate notification of CSO occurrences and CSO impacts.
- Monitoring to effectively characterize CSO impacts and the efficacy of CSO controls.

**Table 12-2. Elements of the Long-Term CSO Control Plan**

- Characterization, monitoring, and modeling of the Combined Sewer System
- Public Participation
- Consideration of Sensitive Areas
- Evaluation of Alternatives
- Cost/Performance Considerations
- Operational Plan
- Maximizing Treatment at the Existing POTW Treatment Plant
- Implementation Schedule
- Post-Construction Compliance Monitoring Program

<https://www.epa.gov/sites/production/files/2017-03/documents/npdesinspect-chapter-12.pdf>

The key elements of CSO control is to:

- Eliminate or relocate overflows that discharge to sensitive areas wherever physically possible and economically achievable, and where not possible, provide treatment necessary to meet WQS for full protection of existing and designated uses.
- Coordinate the review and appropriate revision of water quality standards and implementation procedures on CSO-impacted waters with development of long-term CSO control plans.
- Evaluate a reasonable range of alternatives for the CSO control plan that could achieve the necessary level of control/treatment and select the controls to be implemented based on cost/performance evaluations.
- Develop an implementation schedule based on the relative importance of adverse impacts on WQS and designated uses, priority projects identified in the long-term plan LTCP, and on the permittee's financial capability.
- Maximize treatment of wet weather flows at the existing POTW treatment plant.

All future PaDEP Inspections and Permits will obtain information to determine compliance in the following areas:

- CSO prevention during dry weather.
- Implementation of the nine minimum CSO controls.
- Adherence to a schedule for development, submission, and implementation of a LTCP, including any interim deliverables.
- Adherence to schedule for implementation of the CSO controls selected from the LTCP.
- Elimination or relocation of overflows from identified sensitive areas, as defined in the approved LTCP.
- Meeting narrative, performance-based, or numerical water quality-based effluent limitations.
- Monitoring program, including baseline information on frequency, duration, and impacts of CSOs.
- Once PADEP's proposed E. coli standard becomes effective, PADEP will incorporate E. coli monitoring in subsequently reissued NPDES permits and ensure that it is included in CSO post-construction compliance monitoring (PCCM) plans to verify compliance with water quality standard and designated uses.

### Summary of Review

The Department wants the Applicant to be aware of a guidance document offered by the Environmental Protection Agency. It is a planning tool for the development of LTCPs in Small Communities (jurisdictions with populations under 75,000), which might be useful in development of any revised LTCP. The links to the instructions and LTCP-EZ Template can be found at: <https://www.epa.gov/npdes/npdes-cso-guidance-documents>.

#### Long Term Control Plan

The required Long-Term Control Plan (LTCP) is a document by which the permittee evaluates the existing CSS infrastructure and the hydraulic relationship between the CSS, wet weather, overflows and treatment capacity. Cost effective alternatives for reducing or eliminating overflows are evaluated and a plan forward to eventually meet water quality standards is selected. An implementation schedule is then developed to achieve that goal. The three LTCP options are demonstrative, presumptive and total separation. The demonstrative approach shows that the current plan is adequate to meet the water quality-based requirements of the CWA based on data, while the presumptive approach will implement a minimum level of treatment that is presumed to meet the water quality-based requirements of the CWA.

#### PaDEP's Annual CSO Status Report (Chapter 94 Report)

The Annual CSO Status Report is part of the permittee's annual Chapter 94 Municipal Wasteload Management Report. In this annual report, the permittee includes

1. The summary of the frequency, duration and volume of the CSO events from the past year,
2. The operational status of the CSO outfalls,
3. Identification of any known in-stream water quality impacts,
4. A summary of all actions taken to implement NMCs and the LTCP and effectiveness of those actions,
5. A progress report and evaluation of the NMC implementation,
6. Rain gauge data for each event and
7. Documentation of annual inspections and maintenance.

The Tri Borough Municipal Authority (TBMA) has two CSO Regulators. The River Street Regulator (CSO 002) located in Oakland and The Exchange Street Regulator (CSO 003) located in Susquehanna. Both CSO's were installed in 1975. The TBMA employs two staff members that operate and maintain the collection system, the pumping stations, the two CSO's, and the WWTP. The staff is responsible for conducting weekly inspections of all diversions and outfalls, completing monthly DMR's, maximizing flows to the WWTP, performing maintenance on the diversion chambers and outfall structures and correcting any problems encountered in the collection system and WWTP. They attempt to stay <4 events/year. They had 1 event in 2019.

All flows from the CSO regulators occur as a result of wet weather conditions or snow melt in the spring. There are no automatic monitoring devices in either regulator at the present time. For their Long Term Control Plan, they plan on studying and installing an automatic device as money becomes available (hopefully from a grant). Records are maintained at the WWTP site which allow recording of the date, time and estimated duration of flow discharged from the CSO's. The records are available at the treatment plant for inspection and review. The presumptive approach is to discharge no more than an average of 4 overflow events per year.

They are also actively applying for grants to help eliminate some of the I/I problems. Presently the finances are extremely limited due to the low income in their collection area.

The NMS query "Inspections & Inspectors – Inspections – Inspection History by Permit" was run. A Compliance Evaluation was done on 09/12/2019 with No Violations Noted.

The NMS query "Violations – eFACTS – Open Violations for Client" was run. There are currently no open violations.

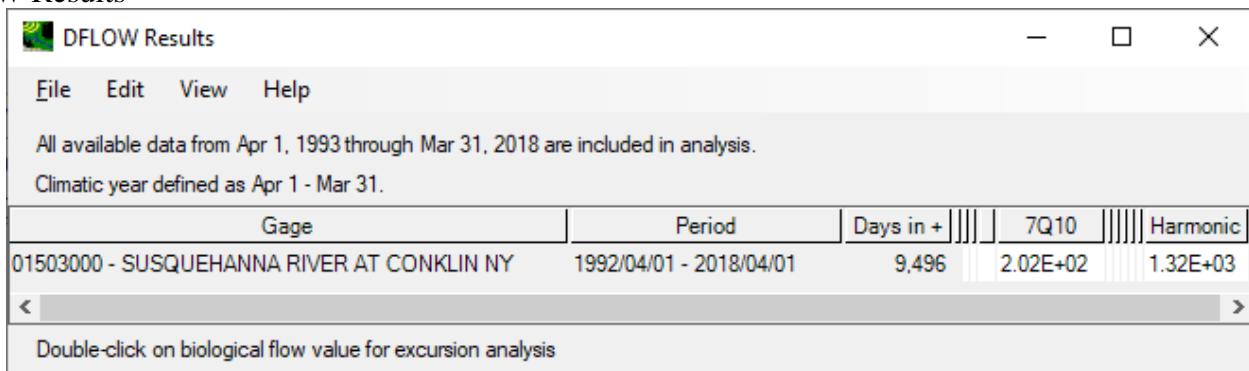
#### Public Participation

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)	0.5
Latitude	41° 56' 54.96"	Longitude	-75° 36' 20.25"
Quad Name		Quad Code	
Wastewater Description: Sewage Effluent			
Receiving Waters	Susquehanna River (WWF)	Stream Code	
NHD Com ID	43488547	RMI	343.2
Drainage Area	2000	Yield (cfs/mi <sup>2</sup> )	0.09
Q <sub>7-10</sub> Flow (cfs)	180	Q <sub>7-10</sub> Basis	DFlow USGS 01503000
Elevation (ft)	890	Slope (ft/ft)	
Watershed No.	4-E	Chapter 93 Class.	WWF
Existing Use		Existing Use Qualifier	
Exceptions to Use		Exceptions to Criteria	
Assessment Status	Impaired		
Cause(s) of Impairment	MERCURY		
Source(s) of Impairment	SOURCE UNKNOWN		
TMDL Status	Final	Name	Susquehanna River PCB
Background/Ambient Data		Data Source	
Nearest Downstream Public Water Supply Intake		Danville Muni	
PWS Waters		Flow at Intake (cfs)	
PWS RMI		Distance from Outfall (mi)	> 100 miles

Other Comments: RMI @ 343.2p WRDS: 6685 HUC 8 Code: 02050101

DFLOW Results



All available data from Apr 1, 1993 through Mar 31, 2018 are included in analysis.

Q<sub>7-10</sub> LowFlowYield (cfs/mi<sup>2</sup>)= 202/2,232 = 0.09

USGS 01503000 SUSQUEHANNA RIVER AT CONKLIN NY  
LOCATION.--Lat 42°02'07", long 75°48'11" referenced to North American Datum of 1983, Broome County, NY, Hydrologic Unit 02050101, on left bank at abutment of former highway bridge, 500 ft upstream from bridge on County Highway 20 at Conklin, 0.7 mi downstream from Little Snake Creek, and 3.5 mi downstream from Pennsylvania-New York State line.  
DRAINAGE AREA --2,232 mi<sup>2</sup>.

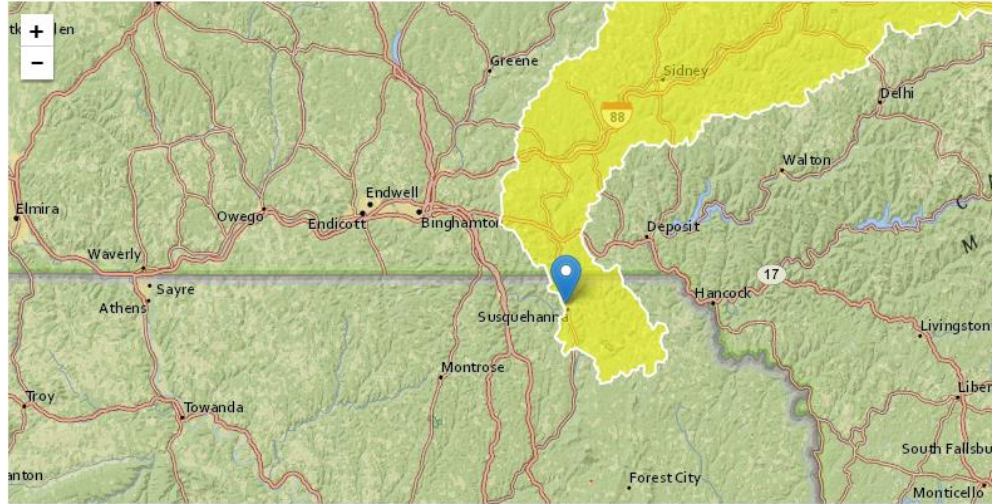
**Outfall 001 At RMI 343.2 @ 890 ft**

Clicked Point (Latitude, Longitude):

41.94834, -75.60639

Time:

2019-08-26 12:59:31



Low-Flow Statistics Parameters[100 Percent (2000 square miles) Low Flow Region 5]

Parameter Code	Parameter Name	Value	Units
DRNAREA	Drainage Area	2000	square miles

$Q_{7-10} \text{ Flow (cfs)} = 2000 * 0.09 = 180 \text{ cfs}$

Ratio of 0.5 discharge is  $180 \text{ cfs} / 0.77 \text{ cfs} = 234 : 1$

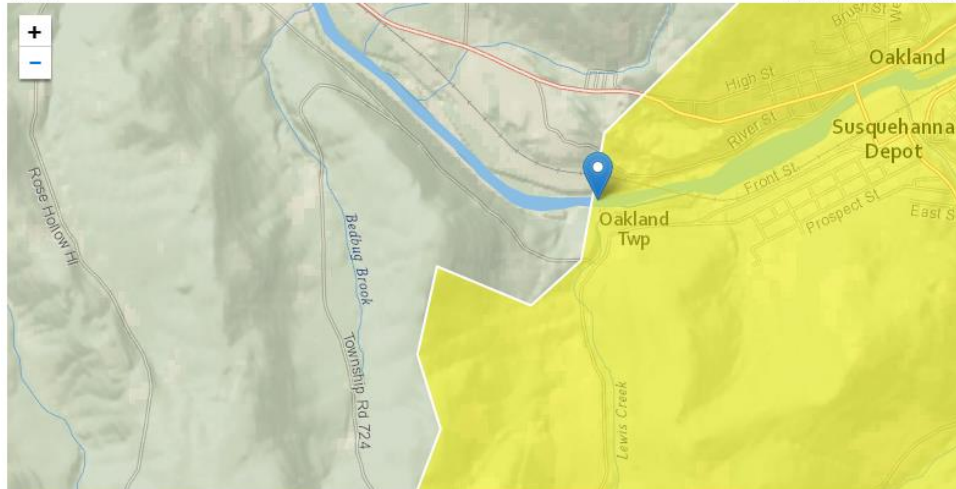
**RMI 342 at Lewis Creek trib @878 ft**

Clicked Point (Latitude, Longitude):

41.94251, -75.62540

Time:

2019-08-26 13:13:44



Low-Flow Statistics Parameters[100 Percent (2010 square miles) Low Flow Region 5]

Parameter Code	Parameter Name	Value	Units
DRNAREA	Drainage Area	2010	square miles

Treatment Facility Summary				
Treatment Facility Name: Tri-Boro Municipal Authority				
Waste Type	Degree of Treatment	Process Type	Disinfection	Avg Annual Flow (MGD)
Sewage	Secondary	Extended Aeration	Chlorine	0.5
Hydraulic Capacity (MGD)	Organic Capacity (lbs/day)	Load Status	Biosolids Treatment	Biosolids Use/Disposal
0.5	834	Not Overloaded	Aerobic Digestion	Land Application

Other Comments: Two CSOs

Outfall No.	Name of Outfall and/or Street Location	Receiving Stream Name	Location	
			Latitude	Longitude
998	Oakland River Street CSO 002	Susquehanna River (WWF)	41° 57' 02"	-75° 36' 09"
999	Susquehanna Exchange Street CSO 003	Susquehanna River (WWF)	41° 56' 53"	-75° 36' 17"

**Development of Effluent Limitations**

<b>Outfall No.</b>	<u>001</u>	<b>Design Flow (MGD)</b>	<u>.5</u>
<b>Latitude</b>	<u>41° 56' 51.00"</u>	<b>Longitude</b>	<u>-75° 36' 19.00"</u>
<b>Wastewater Description:</b> <u>Sewage Effluent</u>			

The limitations and monitoring requirements specified are proposed, 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 will be derived from the "NPDES Permit Writer's Manual" (362-0400-001) and/or BPJ. All proposed sample frequencies and types are believed to be appropriate for an industrial facility discharging to the Susquehanna River.

The Department models in-stream conditions to determine if WQBELs are appropriate. Models were created using WQM 7.0 for CBOD5, ammonia-N and dissolved oxygen and Toxics Management Spreadsheet v1.2 (TMS 1.2) for toxics.

The recommended TQBEL is then placed into the Toxics Management Spreadsheet v1.2, which recommends monitoring requirements, effluent limits, or no action based on the following logic:

- Establish where the maximum reported concentration equals or exceeds 50% of the WQBEL.
- For non-conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 25% - 50% of the WQBEL.
- For conservative pollutants, establish monitoring requirements where the maximum reported concentration is between 10% - 50% of the WQBEL.

**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 <sub>5</sub>	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*	1.0	Average Monthly	-	92a.48(b)(2)

Comments: The TRC\* Spreadsheet incorporates a DEP “facility-specific BAT” based on the NERO POTW BAT for this size of facility, the lack of any subsequent upgrading or expansion, and no known chlorine impact on the receiving stream.

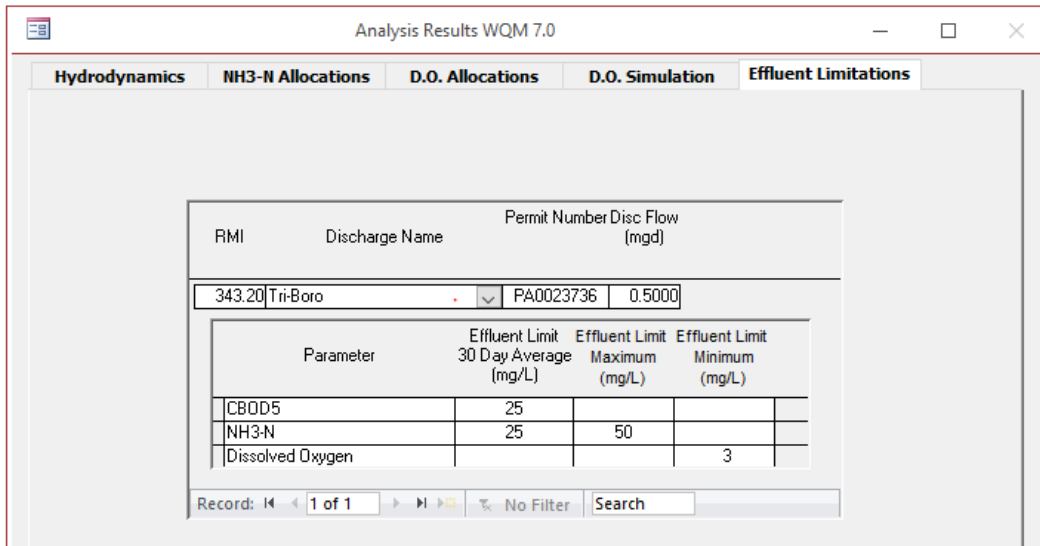
**Water Quality-Based Limitations**

A “Reasonable Potential Analysis” determined the following parameters were candidates for limitations:

<b>TRC EVALUATION</b>					
Input appropriate values in A3:A9 and D3:D9			Tri-Boro		
180	= Q stream (cfs)		0.5	= CV Daily	
0.5	= 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)	
1	= 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 = 74.253		1.3.2.iii	WLA cfc = 72.383
PENTOXSD TRG	5.1a	LTAMULT afc = 0.373		5.1c	LTAMULT cfc = 0.581
PENTOXSD TRG	5.1b	LTA_afc= 27.668		5.1d	LTA_cfc = 42.080
Source	Effluent Limit Calculations				
PENTOXSD TRG	5.1f	AML MULT = 1.231			
PENTOXSD TRG	5.1g	AVG MON LIMIT (mg/l) = 1.000		BAT/BPJ	
		INST MAX LIMIT (mg/l) = 3.270			

The TRC Spreadsheet incorporates a DEP “facility-specific BAT” based on the NERO POTW BAT for this size of facility, the lack of any subsequent upgrading or expansion, and no known chlorine impact on the receiving stream





Recommended WQBELs & Monitoring Requirements

No. Samples/Month:

Pollutants	Mass Limits		Concentration Limits			Governing WQBEL	WQBEL Basis	Comments
	AML (lbs/day)	MDL (lbs/day)	AML	MDL	IMAX			

Other Pollutants without Limits or Monitoring

The following pollutants do not require effluent limits or monitoring based on water quality because reasonable potential to exceed water quality criteria was not determined and the discharge concentration was less than thresholds for monitoring, or the pollutant was not detected and a sufficiently sensitive analytical method was used (e.g., <= Target QL).

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
Total Copper	231	µg/L	Discharge Conc ≤ 10% WQBEL
Total Lead	550	µg/L	Discharge Conc ≤ 10% WQBEL
Total Zinc	1,981	µg/L	Discharge Conc ≤ 10% WQBEL

**Attachments**



TMS PA0023736  
2021.pdf



Tri Boro Renewal  
Application.pdf



Tri Boro 2019  
Chapter 94.pdf



Tri Boro 2019 CSO  
Report.pdf



TriBoro 2013 CSO  
LongTerm Control PI

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	0.2931	0.3543	0.2523	0.2073	0.2144	0.2601	0.2297	0.2464	0.3488	0.3913	0.3511	0.4531
Flow (MGD) Daily Maximum	0.4621	2.0002	0.4146	0.5366	0.3697	0.4617	0.4016	0.3714	0.6911	0.7351	0.4607	0.7659
pH (S.U.) Minimum	6.00	6.00	6.00	6.00	6.00	6.06	6.32	6.69	6.32	6.30	6.00	6.00
pH (S.U.) Maximum	6.77	6.60	6.43	6.62	6.46	6.59	6.96	7.04	6.80	6.96	6.53	6.45
TRC (mg/L) Average Monthly	0.75	1.0	1.2	0.81	0.71	0.63	0.54	0.6	0.73	0.51	0.57	0.62
TRC (mg/L) Instantaneous Maximum	1.7	1.4	1.9	1.2	1.2	0.85	1.0	1.0	1.25	1.0	1.0	1.0
CBOD5 (lbs/day) Average Monthly	9.0	19.7	6.24	7.9	6.8	4.7	6.6	20.9	6.28	16	19.6	26.8
CBOD5 (lbs/day) Weekly Average	25.3	18.1	11	4.6	5.4	5.2	9.6	39.2	8.07	64.4	31.2	57.6
CBOD5 (mg/L) Average Monthly	4.1	7.4	3.3	5.1	4.2	2.4	3.8	11.3	2.4	4.9	6.7	7.1
CBOD5 (mg/L) Weekly Average	9.59	10	6.33	5.76	3.9	3.0	6.59	19.9	3.0	10.5	9.13	10.6
TSS (lbs/day) Average Monthly	16.9	67	30.1	36.4	38.8	12.6	13.8	43.6	23.2	32	26.7	41
TSS (lbs/day) Weekly Average	37.9	69.3	39.3	36.9	31.1	28.8	18	78	33.5	85.8	39.6	82.6
TSS (mg/L) Average Monthly	7.7	25.2	15.92	23.4	24.15	6.48	8.0	23.6	8.88	9.8	9.1	10.85
TSS (mg/L) Weekly Average	20	40.8	24.8	26	22.4	10.4	11.6	39.6	14.8	14	11.6	15.2
Fecal Coliform (CFU/100 ml) Geometric Mean	75	16.7	45.2	174	121	68.5	92.6	10.6	8.5	2.8	17	4
Fecal Coliform (CFU/100 ml) Instantaneous Maximum	866.4	74.3	410.6	857.2	976.8	522.6	334.8	648.8	75.4	14.4	461.1	10.4
Nitrate-Nitrite (mg/L) Average Monthly	6.07	11.94	16.33	19.88	14.10	9.20	3.25	0.21	0.53	2.30	8.83	9.48
Nitrate-Nitrite (lbs) Total Monthly	459	763	993	938	771	743	169	14	44	261	811	971
Total Nitrogen (mg/L) Average Monthly	12.20	17.73	19.04	21.24	16.15	10.61	8.16	16.44	10.64	8.58	12.93	12.29
Total Nitrogen (lbs) Effluent Net   Total Monthly	932	1177	1183	1010	876	853	446	1081	816	1127	1203	1246
Total Nitrogen (lbs) Effluent Net   Total Annual					9132							
Total Nitrogen (lbs) Total Annual					12529							
Ammonia (mg/L) Average Monthly	5.07	1.05	0.12	0.1	1.10	0.11	4.23	17.68	9.48	4.88	1.34	1.87
Ammonia (lbs) Total Monthly	398	90	8	5	52	9	242	1144	720	6.94	125	172
Ammonia (lbs) Total Annual					3285							
TKN (mg/L) Average Monthly	6.12	5.79	2.71	1.36	2.05	1.40	4.91	16.23	10.11	6.29	4.10	2.81
TKN (lbs) Total Monthly	472	414	190	72	105	111	277	1067	771	866	392	275

**NPDES Permit Fact Sheet  
Tri Borough Municipal Authority**

**NPDES Permit No. PA0023736**

Total Phosphorus (mg/L) Average Monthly	2.06	1.92	2.51	2.81	2.80	2.42	2.11	2.03	1.93	1.54	1.97	1.70
Total Phosphorus (lbs) Effluent Net   Total Monthly	151	124	153	133	155	199	114	133	149	203	179	167
Total Phosphorus (lbs) Total Monthly	151	124	153	133	155	199	114	133	149	203	179	167
Total Phosphorus (lbs) Effluent Net   Total Annual					1218							
Total Phosphorus (lbs) Total Annual					1997							