State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**4952**	NAICS Code:	**221320**	SPDES Number:	**NY0026514**
Discharge Class (CL):		**05**		DEC Number:	**8-1824-00125/00004**
Toxic Class (TX):		**T**		Effective Date (EDP):	**EDP**
Major-Sub Drainage Basin:		**01 - 02**		Expiration Date (ExDP):	**ExDP**
Water Index Number:	**ONT-158-12**	Item No.:	**837 - 21**	Modification Dates (EDPM):	
Compact Area:		**IJC**			

This SPDES permit is issued in compliance with Title 8 of Article 17 of the Environmental Conservation Law of New York State and in compliance with the Clean Water Act, as amended, (33 U.S.C. ' 1251 et.seq.)

PERMITTEE NAME AND ADDRESS					
Name:	**City of Batavia**	Attention:	**Brett Frank, Director of Public Works**		
Street:	**1 Batavia City Centre**				
City:	**Batavia**	State:	**NY**	Zip Code:	**14020**
Email:	**mficarella@batavianewyork.com**	Phone:	**(585) 345-6324**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL														
Name:	**City of Batavia Water Pollution Control Plant**													
Address / Location:	**5 Treadeasy Avenue**									County:	**Genesee**			
City:	**Batavia**					State:	**NY**			Zip Code:	**14020**			
Facility Location:		Latitude:	**42**	°	**59**	'	**27**	" N	& Longitude:	**78**	°	**12**	'	**22**	" W
Primary Outfall No.:	**001**	Latitude:	**42**	°	**59**	'	**55**	" N	& Longitude:	**78**	°	**11**	'	**25**	" W
Outfall Description:	**Treated Sanitary and Industrial**	Receiving Water:	**Tonawanda Creek**					Class:	C	Standard:	C			

in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1 and 750-2. The co-permittees subject to one or more conditions of this permit are listed on page 2.

This permit and the authorization to discharge shall expire on midnight of the expiration date shown above and the permittee shall not discharge after the expiration date unless this permit has been renewed or extended pursuant to law. To be authorized to discharge beyond the expiration date, the permittee shall apply for permit renewal not less than 180 days prior to the expiration date shown above.

DISTRIBUTION:
BWP Permit Coordinator (permit.coordinator@dec.ny.gov)
BWP Permit Writer
RWE
RPA
EPA Region II (Region2_NPDES@epa.gov)
NYSEFC (sara.tully@efc.ny.gov)

Permit Administrator:	Ashley Kasperowicz
Address:	6274 E Avon-Lima Rd, Avon, NY 14414
Signature	Date

Contents

DEFINITIONS

TERM	DEFINITION
7-Day Geo Mean	The highest allowable geometric mean of daily discharges over a calendar week.
7-Day Average	The average of all daily discharges for each 7-days in the monitoring period. The sample measurement is the highest of the 7-day averages calculated for the monitoring period.
12-Month Rolling Average (12 MRA)	The current monthly value of a parameter, plus the sum of the monthly values over the previous 11 months for that parameter, divided by the number of months for which samples were collected in the 12-month period.
30-Day Geometric Mean	The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Action Level	Action level means a monitoring requirement characterized by a numerical value that, when exceeded, triggers additional permittee actions and DEC review to determine if numerical effluent limitations should be imposed.
Compliance Level / Minimum Level	A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136, or otherwise accepted by the DEC.
Daily Discharge	The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
Daily Maximum	The highest allowable Daily Discharge.
Daily Minimum	The lowest allowable Daily Discharge.
Effective Date of Permit (EDP or EDPM)	The date this permit is in effect.
Effluent Limitations	Effluent limitation means any restriction on quantities, quality, rates and concentrations of chemical, physical, biological, and other constituents of effluents that are discharged into waters of the state.
Expiration Date of Permit (ExDP)	The date this permit is no longer in effect.
Instantaneous Maximum	The maximum level that may not be exceeded at any instant in time.
Instantaneous Minimum	The minimum level that must be maintained at all instants in time.
Monthly Average	The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Outfall	The terminus of a sewer system, or the point of emergence of any waterborne sewage, industrial waste or other wastes or the effluent therefrom, into the waters of the State.
Range	The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.
Receiving Water	The classified waters of the state to which the listed outfall discharges.
Sample Frequency / Sample Type / Units	See NYSDEC's "DMR Manual for Completing the Discharge Monitoring Report for the SPDES" for information on sample frequency, type and units.

PERMIT LIMITS, LEVELS AND MONITORING[1]

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All Year (unless otherwise specified)	Tonawanda Creek	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow (June 1st – Oct. 31st)	Monthly Average	7.0	MGD			Continuous	Recorder		X	
Flow (Nov. 1st – May 31st)	Monthly Average	12	MGD			Continuous	Recorder		X	
Flow	Daily Maximum	Monitor	MGD			Continuous	Recorder		X	
Influent Flow	Yearly Average	5.5	MGD			Continuous	Recorder	X		2
$CBOD_5$ (June 1st – Oct. 31st)	Monthly Average	25	mg/L	1500	lbs/d	2/Week	24-hr. Comp.	X	X	3
$CBOD_5$ (June 1st – Oct. 31st)	7-Day Average	40	mg/L	2300	lbs/d	2/Week	24-hr. Comp.	X	X	
$CBOD_5$ (Nov. 1st – May 31st)	Monthly Average	25	mg/L	2500	lbs/d	2/Week	24-hr. Comp.	X	X	3
$CBOD_5$ (Nov. 1st – May 31st)	7-Day Average	40	mg/L	4000	lbs/d	2/Week	24-hr. Comp.	X	X	
UOD (June 1st – Oct. 31st)	Daily Maximum	20	mg/L	1170	lbs/d	2/Week	Calculated		X	4,5
UOD (Nov. 1st – May 31st)	Daily Maximum	23	mg/L			2/Week	Calculated		X	4,5
Total Suspended Solids (TSS) (June 1st – Oct. 31st)	Monthly Average	30	mg/L	1800	lbs/d	2/Week	24-hr. Comp.	X	X	3
Total Suspended Solids (TSS) (June 1st – Oct. 31st)	7-Day Average	45	mg/L	2600	lbs/d	2/Week	24-hr. Comp.	X	X	
Total Suspended Solids (TSS) (Nov. 1st – May 31st)	Monthly Average	30	mg/L	3000	lbs/d	2/Week	24-hr. Comp.	X	X	3
Total Suspended Solids (TSS) (Nov. 1st – May 31st)	7-Day Average	45	mg/L	4500	lbs/d	2/Week	24-hr. Comp.	X	X	
Settleable Solids	Daily Maximum	0.3	mL/L			3/Day	Grab	X	X	
Ammonia (as N) (June 1st – Oct. 31st)	Monthly Average	1.2	mg/L			2/Week	24-hr. Comp.	X	X	5
Ammonia (as N) (Nov. 1st – May 31st)	Monthly Average	2.1	mg/L			2/Week	24-hr. Comp.	X	X	5
Total Kjeldahl Nitrogen (TKN) (as N)	Daily Maximum	Monitor	mg/L			2/Week	24-hr. Comp.		X	
Total Phosphorus (as P)	Monthly Average	1.0	mg/L			2/Week	24-hr. Comp.		X	
pH	Daily Minimum	6.0	SU			3/Day	Grab	X	X	
	Daily Maximum	9.0								
Temperature	Daily Maximum	Monitor	ºC			3/Day	Grab	X	X	
Dissolved Oxygen	Daily Minimum	7.0	mg/L			2/Week	Grab		X	
Coliform, Fecal (May 1st – Oct. 31st)	30-Day Geometric Mean	200	No./100 mL			2/Week	Grab		X	5

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Coliform, Fecal (May 1st – Oct. 31st)	7-Day Geometric Mean	400	No./100 mL			2/Week	Grab		X	5
Total Mercury	Daily Maximum	25	ng/L			1/Month	Grab		X	
Total Lead	Daily Maximum	8.0	µg/L			1/Month	24-hr. Comp.		X	6
Total Chromium	Daily Maximum	450	µg/L			1/Month	24-hr. Comp.		X	6
Hexavalent Chromium	Daily Maximum	20	µg/L			1/Month	Grab		X	
Total Cyanide	Daily Maximum	7.0	µg/L			1/Month	24-hr. Comp.		X	6
Free Cyanide	Daily Maximum	Monitor	µg/L			1/Month	24-hr. Comp.		X	6
Phenolic Compounds	Monthly Average	8.0	µg/L			1/Month	24-hr. Comp.		X	6,7
Biennial Pollutant Scan						1/Two Years	-		X	8
ACTION LEVEL PARAMETERS	Type	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Total Copper	Daily Maximum	25	µg/L			1/Quarter	Grab		X	9,10
Total Nickel	Daily Maximum	100	µg/L			1/Quarter	24-hr. Comp.		X	9,10
Total Zinc	Daily Maximum	100	µg/L			1/Quarter	24-hr. Comp.		X	9,10

EFFLUENT DISINFECTION Required Seasonal from May 1st - October 31st		Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Chlorine, Total Residual	Daily Maximum	0.030	mg/L			3/Day	Grab		X	5,11, 12

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			0.30	TUa	Quarterly	See footnote		X	13
WET - Acute Vertebrate	See footnote			0.30	TUa	Quarterly	See footnote		X	13
WET - Chronic Invertebrate	See footnote			1.6	TUc	Quarterly	See footnote		X	13
WET - Chronic Vertebrate	See footnote			1.6	TUc	Quarterly	See footnote		X	13

FOOTNOTES:

1. Reopener Clause: The permit may be reopened in the future to update effluent limitations based on the results of the stream study conducted by a 3rd party organization.

2. An annual “rolling average” shall be calculated at the end of each month and reported on that month’s Discharge Monitoring Report (DMR).

3. Effluent shall not exceed 15% and 15% of influent concentration values for $CBOD_5$ & TSS respectively.

4. Ultimate Oxygen Demand (UOD) shall be computed as follows: UOD = (1.46 × $CBOD_5$) + (4.57 × TKN).

5. This is a final effluent limitation. See Schedule of Compliance for any applicable interim effluent limitations.

6. At least 8 individual manual grab samples must be collected over the course of 24 hours analyzed separately, and the concentrations averaged. Alternatively, grab samples may be collected in the field and composited in the laboratory and analyzed as a single sample if the results are equivalent to the arithmetic averaging of individual grab samples. Where effluent flows do not vary more than 10 percent over the course of composite sample collection, composite samples may be composed of equal size grab samples taken at equal time intervals. Where effluent flows do vary more than 10 percent over the course of sample collection, composite samples must be flow-proportioned.

7. Phenolic Compounds shall be determined by colorimetric or spectrophotometric analysis using the most sufficiently sensitive method approved under 40 CFR Part 136 for total recoverable phenols.

8. Biennial Pollutant Scan: The permittee shall perform effluent sampling every two (2) years for all applicable pollutants identified in the NY-2A Application, Tables A - D. Sampling data shall be collected according to the guidance in the NY-2A application and maintained by the permittee. Monitoring results shall not be submitted on the DMR. Data shall be submitted with the next submission of the NY-2A form.

9. Quarterly samples shall be collected in calendar quarters (Q1 – January 1st to March 31st; Q2 – April 1st to June 30th; Q3 – July 1st to September 30th; Q4 – October 1st to December 31st).

10. Action Levels: If the action level is exceeded, the additional monitoring requirement is triggered, and the permittee shall undertake a short-term, high-intensity, monitoring program for Total Copper, Total Nickel, or Total Zinc. Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive days and analyzed. Results shall be expressed in both mass and concentration. If levels higher than the action levels are confirmed, the permittee shall evaluate the treatment system operation and identify and employ actions to reduce concentrations present in the discharge. The permit may also be reopened by the DEC for consideration of revised action levels or effluent limits. Action level monitoring results and the effectiveness of the actions taken shall be summarized and submitted with the monthly operating report [or DMR] data.

11. This is a Compliance Level. The calculated WQBEL is 0.008 mg/L.

12. Sampling and reporting for total residual chlorine are only necessary if chlorine is used for disinfection, elsewhere in the treatment process, or the facility otherwise has reasonable potential to discharge chlorine. Otherwise, the permittee shall report NODI-9 on the DMR.

13. **Whole Effluent Toxicity (WET) Testing:**
Testing Requirements – Chronic WET testing is required, but report both the acute and chronic results. Testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the DEC. The test species shall be Ceriodaphnia dubia (water flea - invertebrate) and Pimephales promelas (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is **1.5:1** for acute, and **1.6:1** for chronic.

Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in **2** and **7**.

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: TUa = (100)/(48-hr LC50) [note that Acute data is generated by both Acute and Chronic testing] and TUc = (100)/(7-day NOEC) or (100)/(7-day IC25) when Chronic testing has been performed or TUc = (TUa) x (10) when only Acute testing has been performed and is used to predict Chronic test results, where the 48-hr LC50, 7-day NOEC and/or IC25 are all expressed in % effluent. This must be done, including the Chronic prediction from the Acute data, for both species unless otherwise directed. For Chronic results, report the most sensitive endpoint (i.e. survival, growth and/or reproduction) corresponding to the lowest 7-day NOEC or IC25 and resulting highest TUc. For Acute results, report a TUa of 0.3 if there is no statistically significant mortality in 100% effluent as compared to the control. Report a TUa of 1.0 if there is statistically significant mortality in 100% effluent as compared to the control, but insufficient mortality to

generate a 48-hr LC50. Also, in the absence of a 48-hr LC50, use 1.0 TUa for the Chronic prediction from the Acute data, and report a TUc of 10.0.

The complete test report including all bench sheets, statistical analyses, reference toxicity data, daily average flow at the time of sampling and other appropriate supporting documentation, shall be submitted within 60 days following the end of each test period with your WET DMR and to the WET@dec.ny.gov email address. A summary page of the test results for the invertebrate and vertebrate species indicating TUa, 48-hr LC50 for Acute tests and/or TUc, NOEC, IC25, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

WET Testing Action Level Exceedances - If an action level is exceeded then the DEC may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Identification/Reduction Evaluation (TI/RE) in accordance with DEC guidance. Enforceable WET limits may also apply. The permittee shall be notified in writing by their Regional DEC office of additional requirements. The written notification shall include the reason(s) why such testing, TI/RE and/or limits are required.

STORMWATER POLLUTION PREVENTION REQUIREMENTS

NO EXPOSURE CERTIFICATION

The permittee submitted a Conditional Exclusion for No Exposure Form on August 31, 2022, certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and stormwater runoff except as allowed under 40 CFR 122.26(g)(2). The permittee must maintain a condition of no exposure for the exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to stormwater, the permittee must notify the Regional Water Engineer. The permittee must recertify a condition of no exposure every five years by completing the "No Exposure Certification Form" found on the DEC website.

MERCURY MINIMIZATION PROGRAM (MMP) - Type I

1. General – To reduce mercury effluent levels with the goal of achieving the water quality standard of 0.7 ng/L, the permittee must develop, implement, and maintain a written MMP plan, which includes the elements set forth below.
2. Relevant Documents – incorporate by reference documents already prepared, if any, for the wastewater treatment facility.
3. Drawings or Maps – for the facility and collection system identifying key locations and other areas identified in the MMP Plan.
4. Monitoring Plan – All mercury outfall monitoring must be conducted using the methods specified in Table 8 of DOW 1.3.10. Monitoring at influent and other locations tributary to compliance points may be performed using either USEPA Method 1631 or another sufficiently sensitive method, as approved under 40 CFR Part 136. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate. Monitoring must be coordinated so that the results can be effectively compared between locations and conducted with the following frequencies:
    a. Influent/Effluent – sampled in accordance with the SPDES permit limitations table for Outfall 001; and
    b. Key Locations – sampled semi-annually, chosen to identify potential mercury sources. Sampling of discharges from dental facilities that are in compliance with 6 NYCRR 374.4 is not required. For permittees with an EEQ at or below 12 ng/L, influent monitoring will be required in lieu of monitoring at key locations within the collection system. If the facility reports discharges above 12 ng/L for 2 of 4 consecutive effluent samples, DEC may undertake a Department-initiated permit modification to remove the allowance of reduced requirements.
5. Hauled Wastes Procedures – establish procedures for the acceptance of hauled waste to ensure it is not a potential mercury source. The permittee must notify the DEC prior to acceptance of loads which may exceed 500 ng/L[1].
6. Control Strategy –
    a. Pretreatment/Sewer Use Law (SUL) – develop, include, and enforce pretreatment and SUL conditions which will support efforts to achieve the water quality standard of 0.7 ng/L in the effluent.
    b. Inventory – develop and maintain an inventory of known and potential mercury sources, including a subset list of dental facilities.
    c. Dental Facilities Requirements – once every five years, conduct and document either:
        i. Inspections at each dental facility to verify compliance with the wastewater treatment operation, maintenance, and notification elements of 6 NYCRR 374.4; OR,
        ii. An outreach program[2], which informs new and existing users of their responsibilities, and collection of the "Amalgam Waste Compliance Report for Dental Dischargers"[3] form. Ensure the "Amalgam Waste Compliance Report for Dental Dischargers" is submitted by new users. The permittee should conduct site inspections to support the outreach program.
    d. Other Potential Mercury Sources – once every five years, conduct and document either:
        i. Inspections at each identified location with potential mercury source(s), other than dental facilities; OR,
        ii. An outreach program which informs users of their responsibilities as identified locations with potential mercury source(s). The permittee should conduct site inspections to support the outreach program.

[1] A level of 0.2 mg/L (200,000 ng/L) or more is considered hazardous per 40 CFR 261.11. The 500 ng/L amount is used here to alert the permittee that there is an unusual concentration of mercury and that it will need to be managed appropriately.
[2] For example, the outreach program could include education about sources of mercury and what to do if a mercury source is found.
[3] The form, "Amalgam Waste Compliance Report for Dental Dischargers," can be found here: https://www.dec.ny.gov/docs/water_pdf/dentalform.pdf.

MERCURY MINIMIZATION PROGRAM (MMP) – Type I (Continued)

e. Equipment and Materials – evaluate equipment and materials (e.g., thermometers, thermostats) used by the permittee for potential mercury contribution to the discharge. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.

f. Bulk Chemical Evaluation – for chemicals used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain:
   i. A manufacturer's certificate of analysis;
   ii. A chemical analysis performed by a certified laboratory; OR,
   iii. A notarized affidavit that describes the substance's mercury concentration and the detection limit achieved.

   Where practicable, the permittee must only use bulk chemicals in the wastewater treatment process which contain <10 parts per billion (ppb) of mercury.

7. Status Report **–** the permittee must develop **an annual** report, in accordance with the Schedule of Additional Submittals, summarizing:
   a. All MMP monitoring results for Outfall 001 since the previous report;
   b. A list of known mercury sources and potential mercury sources for Outfall 001;
   c. All actions undertaken by the permittee, pursuant to the control strategy, since the previous report;
   d. Actions planned by the permittee, pursuant to the control strategy, for the upcoming reporting period; and,
   e. Progress toward achieving a dissolved mercury concentration of 0.7 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation or installation/modification of a treatment system).

   The first status report is due in accordance with the Schedule of Additional Submittals. The permittee must maintain a file on-site with all MMP documentation.

8. MMP Modification – the permittee must submit a permittee-initiated modification request to DEC whenever:
   a. The permittee meets the criteria for another MMP type;
   b. Changes at the facility, or within the collection system, increase the potential for mercury discharges; OR,
   c. Effluent discharges exceed the current permit limitation(s).

   The permittee may use information in the status reports, as applicable in accordance with item 7, as a basis for the permittee-initiated modification.

DEFINITIONS:

Key location – a location within the collection/wastewater system (e.g., including but not limited to a specific manhole/access point, tributary sewer/wastewater connection, or user discharge point) identified by the permittee as a potential mercury source. The permittee may adjust key locations based upon sampling and/or best professional judgement.

Potential mercury source – a source identified by the permittee that may reasonably be expected to have total mercury contained in the discharge. Some potential mercury sources include switches, fluorescent lightbulbs, cleaners, degreasers, thermometers, batteries, hauled wastes, universities, hospitals, laboratories, landfills, Brownfield sites, or raw material storage.

DISCHARGE NOTIFICATION REQUIREMENTS

(a) The permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit, unless the Permittee has obtained a waiver in accordance with the Discharge Notification Act (DNA). Such signs shall be installed before initiation of any new discharge location.

(b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.

(c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.

(d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

The signs shall have **minimum** dimensions of eighteen inches by twenty-four inches (18" x 24") and shall have white letters on a green background and contain the following information:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

Permittee Phone: ( ) - ### - ####

OR:

NYSDEC Division of Water Regional Office Address:

NYSDEC Division of Water Regional Phone: ( ) - ### - ####

(e) The permittee shall provide for public review at the business office repository of the permittee or at the off-premises location of its choice, provided the custodian of the off-premise location grants written permission, (such off-premise location shall be the village, town, city or county clerk's office, local library or other location accessible by the public) all the Discharge Monitoring Reports (DMR) prepared by the permittee to demonstrate compliance with the SPDES permit conditions. A copy of each DMR shall be placed on file at such location at the same time it is sent to the department, or within 60 days of preparation for DMRs not required to be submitted to the Department. In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained (either electronically or as a hard copy) on record for a period of five years.

(f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

CAPACITY, MANAGEMENT, OPERATION AND MAINTENANCE PLAN

1. **General Standards:** The permittee shall develop, maintain and implement a Capacity, Management, Operation and Maintenance (CMOM) program. The program should be effective at reducing wet weather flows and eliminating separate sanitary sewer overflows (SSOs), if applicable, that receive less than secondary treatment as required by the Clean Water Act to ensure the protection of public health, receiving water(s), and the environment during wet weather period from a separate sanitary sewer system serving public owned treatment works (POTW). The primary performance measures for the CMOM program are:

   -Reductions in the number of backups and SSOs, if applicable
   -Reduction in peak wet weather flows in the system
   -Minimization of pump station failures and overflows due to equipment malfunction

2. **Compliance Due Date**: In accordance with the Schedule of Submittals, the permittee shall submit an approvable CMOM Program, including an implementation schedule, to the Regional Water Engineer for review and approval. The permittee shall begin implementation of the approved CMOM program within 3 months of DEC approval. The permittee shall review, update and modify the CMOM plan annually and submit an annual report describing all actions taken in the preceding year. The submitted CMOM Program, once approved, shall supersede the requirements listed in this section for purposes of compliance with this Permit.

3. **Components of CMOM program:** The following components, at a minimum, shall be addressed in the development of the CMOM program. Note that while these components shall be addressed by the permittee, the permittee may address these and any additional items using organizational and implementation methods applicable to and tailored to their specific system:

   Goals
   Organization
   Legal Authority
   Measures and activities
   Design and Inspection Standards
   Overflow Emergency Response Plan
   System Evaluation and Capacity Assurance Plan
   Monitoring and evaluation the effectiveness of the CMOM program

   The permittee may include measures undertaken and completed as part of other ongoing programs, as well as Asset Management planning and principles, to satisfy any applicable CMOM program requirements. The permittee may also indicate “not applicable” for any portions of the CMOM Program that do not apply to its facility or collection system based upon its knowledge of the system. Guidance for developing and evaluating CMOM programs can be found at: https://www.epa.gov/npdes/sanitary-sewer-overflow-sso-additional-resources.

4. **Compliance with CMOM Requirements:** As stated in (2) above, compliance with the submitted and approved CMOM Program shall constitute compliance with the CMOM requirements in this permit. Any future CMOM requirements promulgated by either the Department or USEPA will not go into effect for this facility, and the facility shall not be required to comply with these additional requirements, until such time as the facility's permit and approved CMOM Program are modified to include the future CMOM requirements. As part of that modification, a schedule of compliance will be included to allow adequate time for the permittee to update its approved CMOM Program to address the future CMOM requirements.

INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS

A. DEFINITIONS: Generally, terms used in this Section shall be defined as in the General Pretreatment Regulations (40 CFR Part 403). Specifically, the following definitions apply to terms used in this Section:

1. Categorical Industrial User (CIU): an industrial user of the POTW that is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N;

2. Local Limits: General Prohibitions, specific prohibitions and specific limits as set forth in 40 CFR 403.5.

3. The Publicly Owned Treatment Works (POTW): as defined by 40 CFR 403.3(q) and that discharges in accordance with this permit.

4. Program Submission(s): requests for approval or modification of the POTW Pretreatment Program submitted in accordance with 40 CFR 403.11 or 403.18 and approved by USEPA on **September 17, 1985**.

5. Significant Industrial User (SIU):
   a) CIUs;
   b) Except as provided in 40 CFR 403.3(v)(3), any other industrial user that discharges an average of 25,000 gallons per day or more of process wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater) to the POTW;
   c) Except as provided in 40 CFR 403.3(v)(3), any other industrial user that contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant;
   d) Any other industrial user that the permittee designates as having a reasonable potential for adversely affecting the POTW's operation or for violating a pretreatment standard or requirement.

6. Substances of Concern: Substances identified by the New York State Department of Environmental Conservation Industrial Chemical Survey as substances of concern.

B. IMPLEMENTATION: The permittee shall implement a POTW Pretreatment Program in accordance 40 CFR Part 403, 40 CFR Part 122, and as set forth in the permittee's approved Program Submission(s). Modifications to this program shall be made in accordance with 40 CFR 403.18. Specific program requirements are as follows:

1. Industrial Survey: To maintain an updated inventory of industrial dischargers to the POTW the permittee shall:
   a) Identify, locate and list all industrial users who might be subject to the industrial pretreatment program from the pretreatment program submission and any other necessary, appropriate and available sources. This identification and location list will be updated, at a minimum, every five years. As part of this update the permittee shall collect a current and complete New York State Industrial Chemical Survey form (or equivalent) from each SIU.
   b) Identify the character and volume of pollutants contributed to the POTW by each industrial user identified in B.1.a above that is classified as a SIU.
   c) Identify, locate and list, from the pretreatment program submission and any other necessary, appropriate and available sources, all SIUs of the POTW.
   d) Provide a written technical evaluation of the need to revise local limits following permit issuance or reissuance.

2. Control Mechanisms: To provide adequate notice to and control of industrial users of the POTW the permittee shall:
   a) Inform by certified letter, hand delivery courier, overnight mail, or other means which will provide written acknowledgment of delivery, all industrial users identified in B.1.a. above of applicable pretreatment standards and requirements including the requirement to comply with the local sewer use law, regulation or ordinance and any applicable requirements under section 204(b) and 405 of the Federal Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

b) Control through permit or similar means the contribution to the POTW by each SIU to ensure compliance with applicable pretreatment standards and requirements. Permits shall contain limitations, sampling frequency and type, reporting and self-monitoring requirements as described below, requirements that limitations and conditions be complied with by established deadlines, an expiration date not later than five years from the date of permit issuance, a statement of applicable civil and criminal penalties and the requirement to comply with Local Limits and any other requirements in accordance with 40 CFR 403.8(f)(1).

3. Monitoring and Inspection: To provide adequate, ongoing characterization of non-domestic users of the POTW, the permittee shall:
   a) Receive and analyze self-monitoring reports and other notices. The permittee shall require all SIUs to submit self-monitoring reports at least every six months unless the permittee collects all such information required for the report, including flow data.
   b) The permittee shall adequately inspect each SIU at a minimum frequency of once per year.
   c) The permittee shall collect and analyze samples from each SIU for all priority pollutants that can reasonably be expected to be detectable at levels greater than the levels found in domestic sewage at a minimum frequency of once per year.
   d) Require, through permits, each SIU to collect at least one 24 hour, flow proportioned composite (where feasible) effluent sample every six months and analyze each of those samples for all priority pollutants that can reasonably be expected to be detectable in that discharge at levels greater than the levels found in domestic sewage. The permittee may perform the aforementioned monitoring in lieu of the SIU except that the permittee must also perform the compliance monitoring described in 3.c.

4. Enforcement: To assure adequate, equitable enforcement of the industrial pretreatment program the permittee shall:
   a) Investigate instances of noncompliance with pretreatment standards and requirements, as indicated in self-monitoring reports and notices or indicated by analysis, inspection and surveillance activities. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions. Enforcement activities shall be conducted in accordance with the permittee's Enforcement Response Plan developed and approved in accordance with 40 CFR Part 403.
   b) Enforce compliance with all national pretreatment standards and requirements in 40 CFR Parts 406 - 471.
   c) Provide public notification of significant non-compliance as required by 40 CFR 403.8(f)(2)(viii).
   d) Pursuant to 40 CFR 403.5(e), when either the DEC or the USEPA determines any source contributes pollutants to the POTW in violation of Pretreatment Standards or Requirements the DEC or the USEPA shall notify the permittee. Failure by the permittee to commence an appropriate investigation and subsequent enforcement action within 30 days of this notification may result in appropriate enforcement action against the source and permittee.

5. Recordkeeping: The permittee shall maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by SIUs. Records shall be maintained in accordance with 6 NYCRR 750-2.5(c).

6. Staffing: The permittee shall maintain minimum staffing positions committed to implementation of the Industrial Pretreatment Program in accordance with the approved pretreatment program.

C. SLUDGE DISPOSAL PLAN. The permittee shall notify DEC, and USEPA as long as USEPA remains the approval authority, 60 days prior to any major proposed change in the sludge disposal plan. DEC may require additional pretreatment measures or controls to prevent or abate an interference incident relating to sludge use or disposal.

INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

D. REPORTING: The permittee shall provide to the offices listed on the Monitoring, Reporting and Recording page of this permit and to the Chief-Water Compliance Branch, USEPA Region II, 290 Broadway, New York, NY 10007, a periodic report that briefly describes the permittee's program activities over the previous year. This report shall be submitted in accordance with the Schedule of Submittals to the above noted offices within 60 days of the end of the reporting period. The periodic report shall include:

1. Industrial Survey: Updated industrial survey information in accordance with 40 CFR 403.12(i)(1) (including any NYS Industrial Chemical Survey forms updated during the reporting period).

2. Implementation Status: Status of Program Implementation, to include:
   a) Any interference, upset or permit violations experienced at the POTW directly attributable to industrial users.
   b) Listing of SIUs issued permits.
   c) Listing of SIUs inspected or monitored during the previous reporting period and summary of results.
   d) Listing of SIUs notified of promulgated pretreatment standards or applicable local standards who are on compliance schedules. The listing should include for each facility the final date of compliance.
   e) Summary of POTW monitoring results not already submitted on Discharge Monitoring Reports and toxic loadings from SIU's organized by parameter.
   f) A summary of additions or deletions to the list of SIUs, with a brief explanation for each deletion.

3. Enforcement Status: Status of enforcement activities to include:
   a) Listing of SIUs in significant non-compliance (as defined by 40 CFR 403.8(f)(2)(viii) with federal or local pretreatment standards at end of the reporting period.
   b) Summary of enforcement activities taken against non-complying SIUs. The permittee shall provide a copy of the public notice of significant violators as specified in 40 CFR 403.8(f)(2)(viii).

E. ADDITIONAL PRETREATMENT CONDITIONS:
1. Notification of Material Change:
   a) Facility shall provide adequate notice to the EPA prior to the introduction of any new pollutants from an indirect discharger that is subject to categorical standards and prior to any substantial change in the volume or character of pollutants by existing sources (40 CFR 122.42 (b) (1&2)). Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the facility and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the facility (40 CFR 122.42 (b)(3)).

   b) Facility shall provide adequate notice to the DEC prior to the addition or modification of any SIUs or CIUs which may materially change the nature of the discharge from the POTW or increase the discharge of one or more substances authorized in this permit or discharge a substance not currently authorized in this permit (6 NYCRR Part 750-2.9(a)(1)). Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the facility and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the facility (6 NYCRR 750-2.9 (a)(1)(ii)). The noticed act is prohibited until the DEC determines whether a permit modification is necessary pursuant to 750-2.9(a)(2).

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date[4]
001	INTERIM PROGRESS REPORT[5] The permittee shall provide a status update for the FECAL COLIFORM STUDY and the ALTERNATIVE COMPLIANCE POINT FOR FECAL COLIFORM	EDP + 9 Months
001	FECAL COLIFORM STUDY The permittee shall submit an approvable[6] engineering report with sample results for fecal coliform at different testing locations within the treatment train. The report shall include information that demonstrates the removal of fecal coliform through the treatment plant and characterizes the effectiveness of the lagoon system.	EDP + 12 Months
001	ALTERNATIVE COMPLIANCE POINT Following the FECAL COLIFORM STUDY, the permittee shall propose an alternative compliance testing location for the final effluent limitations for all pollutants, including fecal coliform. This compliance location shall be a point that is upstream of the wetland ponds and associated wildlife impacts while also ensuring the alternative compliance location is representative of the lagoon system's treatment capabilities.	EDP + 18 months
001	OPERATION, MAINTENANCE, AND OPTIMIZATION STUDY The permittee shall submit a report that investigates the operation and maintenance (O&M) activities that are required to restore the treatment system to the design standards. This study shall determine if the current units are able to meet the new permit requirements and will describe the optimization projects that will be used to comply with the final concentration limits, interim loadings, and monitoring for concentration for Ultimate Oxygen Demand (UOD) and the final effluent limitations for Ammonia, as N, Fecal Coliform, and Total Residual Chlorine.	EDP + 6 Months
001	OPERATION, MAINTENANCE, AND OPTIMIZATION IMPLEMENTATION The permittee shall begin implementing operation, maintenance, and optimization projects that will be used to comply with the final effluent limitations.	EDP + 12 Months
001	INTERIM PROGRESS REPORT The permittee shall provide a status update for the OPERATION, MAINTENANCE, AND OPTIMIZATION IMPLEMENTATION.	EDP + 21 months EDP + 30 Months EDP + 39 Months EDP + 48 Months
001	COMPLETE OPERATION, MAINTENANCE, AND OPTIMIZATION WORK The permittee shall comply with the final effluent limitations described in this permit for UOD, Ammonia, as N, Fecal Coliform, and Total Residual Chlorine.	EDP + 54 Months
	STREAM GAGE INSTALLATION The permittee shall sign a 30-year Joint Funding Agreement with the USGS New York Water Science Center for the annual operation and maintenance (O&M) of	EDP + 18 Months

[4] 6 NYCRR 750-1.14 (a)
[5] 6 NYCRR 750-1.14 (a)
[6] 6 NYCRR 750 1.2 (a)(8)

Outfall(s)	Compliance Action	Compliance Date[4]
	the stream gage at coordinates 42° 59' 51" N, 78° 11' 20" W or for a new stream gage within Tonawanda Creek. The permittee shall also begin monitoring the ambient flow of Tonawanda Creek at the designated stream gage to indicate that excessive discharges of UOD are not occurring.	
	LOAD-BASED EFFLUENT LIMITATIONS STUDY The permittee shall study the feasibility of implementing effluent limitations for UOD that are tied to variable stream flows. The study will hold UOD concentrations and loadings constant with the final effluent limitations of 20 mg/L and 1170 lbs/day (summer) and 23 mg/L (winter), while adjusting the facility and stream flows. The study will identify implementation options such as whether the effluent gates can be automatically adjusted via SCADA based on varying stream flows from a USGS operated stream gate, whether a new stream gage would be necessary, or if there are other feasible alternatives. The permittee shall submit an Engineering Report that follows the EFC Engineering Report Outline and identifies a preferred alternative.	EDP + 12 Months
	IMPLEMENT PREFERRED ALTERNATIVE The permittee shall begin implementing preferred alternative.	EDP + 18 Months
Unless noted otherwise, the above actions are one-time requirements.		
See next page for Interim Effluent Limits.		

SCHEDULE OF COMPLIANCE – Interim Effluent Limits

OUTFALL	EXPIRING
001	See Note 1

PARAMETER	INTERIM EFFLUENT LIMIT					MONITORING REQUIREMENTS				Notes
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
UOD (Jun. 1st – Oct. 31st)	Daily Max	Monitor	mg/L	1170	lbs/d	2/Week	Calculated		X	1
UOD (Nov. 1st – May 31st)	Daily Max	Monitor	mg/L			2/Week	Calculated		X	1
Ammonia (Jun. 1st – Oct. 31st)	Monthly Avg	2.4	mg/L			2/Week	24-hr. Comp.	X	X	1
Ammonia (Nov. 1st – May 31st)	Monthly Avg	9.5	mg/L			1/Week	24-hr. Comp.	X	X	1
Fecal Coliform	N/A	N/A	N/A	N/A	N/A	N/A	N/A			2
Total Residual Chlorine	N/A	N/A	N/A	N/A	N/A	N/A	N/A			2

Notes:
1. Interim limits expire EDP + 54 months.
2. No Interim Effluent Limits. Final effluent limitations are not in effect until the completion of the operation, maintenance, and optimization work at EDP + 54 months.

b) The permittee shall submit a Report of Non-Compliance Event form with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All notifications shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:
   1. A short description of the non-compliance;
   2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
   3. Any details which tend to explain or mitigate an instance of non-compliance; and
   4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

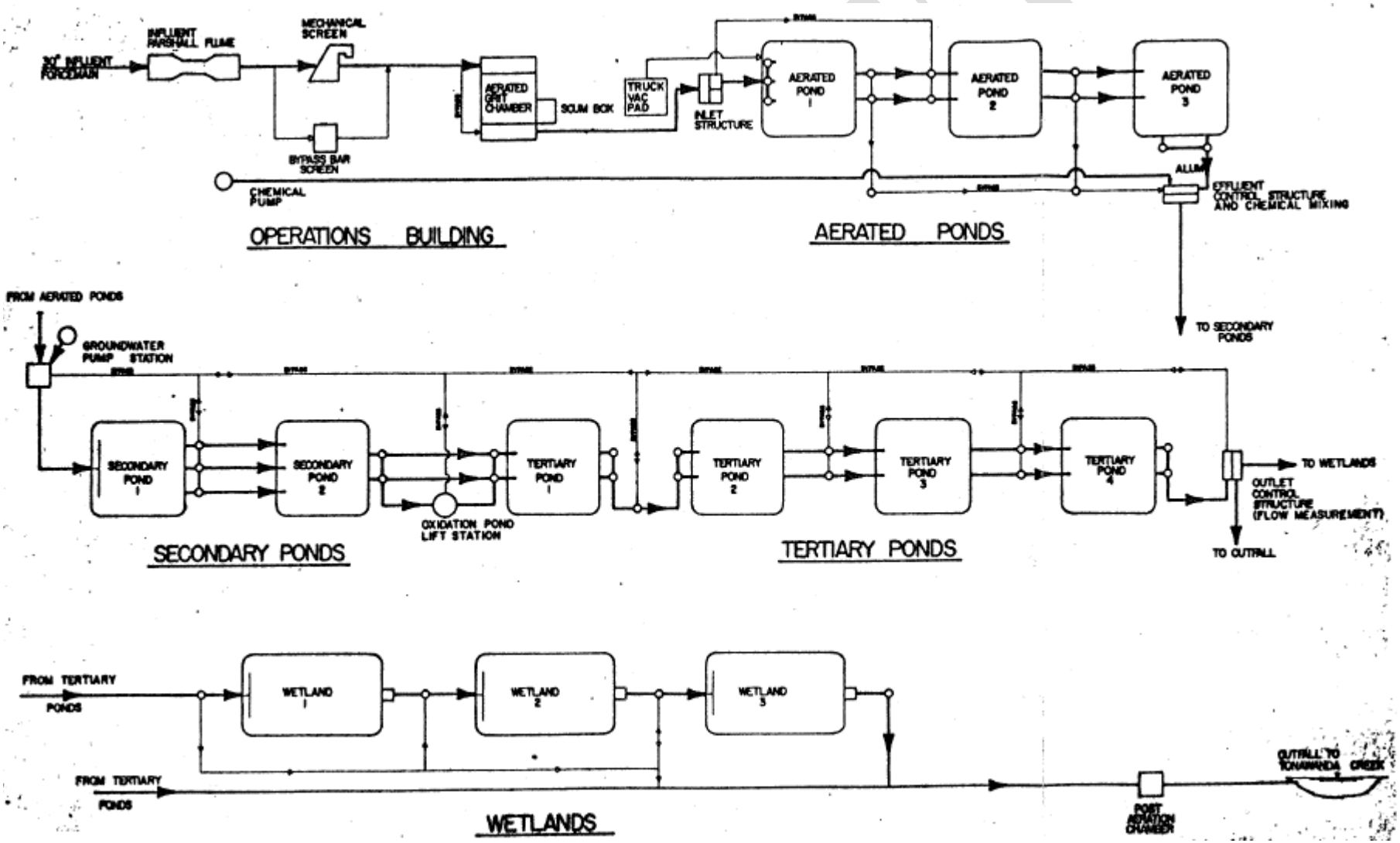
c) The permittee shall submit copies of any document required by the above schedule of compliance to the DEC Regional Water Engineer and to the Bureau of Water Permits.

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the locations(s) specified below:

Influent: After the mechanical bar screen

Effluent: At the post aeration chamber



GENERAL REQUIREMENTS

A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through I as follows:

B. General Conditions

1.	Duty to comply	6 NYCRR 750-2.1(e) & 2.4
2.	Duty to reapply	6 NYCRR 750-1.16(a)
3.	Need to halt or reduce activity not a defense	6 NYCRR 750-2.1(g)
4.	Duty to mitigate	6 NYCRR 750-2.7(f)
5.	Permit actions	6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h)
6.	Property rights	6 NYCRR 750-2.2(b)
7.	Duty to provide information	6 NYCRR 750-2.1(i)
8.	Inspection and entry	6 NYCRR 750-2.1(a) & 2.3

C. Operation and Maintenance

1.	Proper Operation & Maintenance	6 NYCRR 750-2.8
2.	Bypass	6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7
3.	Upset	6 NYCRR 750-1.2(a)(98) & 2.8(c)

D. Monitoring and Records

1.	Monitoring and records	6 NYCRR 750-2.5(a)(2), 2.5(a)(6), 2.5(c)(1), 2.5(c)(2), & 2.5(d)
2.	Signatory requirements	6 NYCRR 750-1.8 & 2.5(b)

E. Reporting Requirements

1.	Reporting requirements	6 NYCRR 750-2.5, 2.7 & 1.17
2.	Anticipated noncompliance	6 NYCRR 750-2.7(a)
3.	Transfers	6 NYCRR 750-1.17
4.	Monitoring reports	6 NYCRR 750-2.5(e)
5.	Compliance schedules	6 NYCRR 750-1.14(d)
6.	24-hour reporting	6 NYCRR 750-2.7(c) & (d)
7.	Other noncompliance	6 NYCRR 750-2.7(e)
8.	Other information	6 NYCRR 750-2.1(f)
9.	Additional conditions applicable to a POTW	6 NYCRR 750-2.9

F. Planned Changes

1. In accordance with 6 NYCRR 750-2.7, the permittee shall give notice to the DEC at least 45 days prior to planned physical alterations or additions to the permitted facility when:

   a. The alteration or addition to the permitted facility may meet any of the criteria for determining whether facility is a new source in 40 CFR §122.29(b); or
   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject either to effluent limitations in the permit, or to notification requirements under 40 CFR §122.42(a)(1); or
   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

In addition to the DEC, the permittee shall submit a copy of this notice to the United States Environmental Protection Agency at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

GENERAL REQUIREMENTS (continued)

2. Notification Requirement for POTWs
   All POTWs shall provide adequate notice to the Department and the USEPA of the following:

   a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; or
   b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
   c. For the purposes of this paragraph, adequate notice shall include information on:
      i. the quality and quantity of effluent introduced into the POTW, and
      ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

   POTWs shall submit a copy of this notice to the United States Environmental Protection Agency, at the following address:
   U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866

G. Sludge Management
   The permittee shall comply with all applicable requirements of 6 NYCRR Part 360 series.

H. SPDES Permit Program Fee
   The permittee shall pay to the Department an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the DEC, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.

I. Water Treatment Chemicals (WTCs)
   New or increased use and discharge of a WTC requires prior DEC review and authorization. At a minimum, the permittee must notify the DEC in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The DEC will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed under the current permit. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the DEC. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.
   1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized in writing by the DEC.
   2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used.
   3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The *WTC Notification Form and WTC Annual Report Form* are available from the DEC's website at: http://www.dec.ny.gov/permits/93245.html

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

A. The monitoring information required by this permit shall be retained for a period of at least five years from the date of the sampling for subsequent inspection by the DEC or its designated agent.

B. Discharge Monitoring Reports (DMRs): Completed DMR forms shall be submitted for each **one (1)** month reporting period in accordance with the DMR Manual available on DEC's website.

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by DEC. Instructions on the use of NetDMR can be found at: How To Complete And Submit Discharge Monitoring Reports (DMRs) - NYSDEC. **Hardcopy paper DMRs will only be accepted if a waiver from the electronic submittal requirements has been granted by DEC to the facility.**

Attach the monthly "Wastewater Facility Operation Report" (form 92-15-7) and any required DMR attachments electronically to the DMR or with the hardcopy submittal.

The first monitoring period begins on the effective date of this permit, and, unless otherwise required, the reports are due no later than the 28th day of the month following the end of each monitoring period.

C. Additional information required to be submitted by this permit shall be summarized and reported to the Regional Water Engineer and Bureau of Water Permits at the following addresses:

Department of Environmental Conservation
Division of Water, Bureau of Water Permits
625 Broadway, Albany, New York 12233-3505 Phone: (518) 402-8111

Department of Environmental Conservation
Regional Water Engineer, Region 8
6274 E. Avon-Lima Road, Avon, New York, 14414-9519 Phone: (585) 226-5450

D. Bypass and Sewage Pollutant Right to Know Reporting: In accordance with the Sewage Pollutant Right to Know Act (ECL § 17-0826-a), Publicly Owned Treatment Works (POTWs) are required to notify DEC and Department of Health within two hours of discovery of an untreated or partially treated sewage discharge and to notify the public and adjoining municipalities within four hours of discovery. Information regarding reporting and other requirements of this program may be found on the DEC's website. In addition, POTWs are required to provide a five-day incident report and supplemental information to the DEC in accordance with Part 750-2.7(d) by utilizing the Division of Water Report of Noncompliance Event form unless waived by DEC on a case-by-case basis.

E. Schedule of Additional Submittals:

The permittee shall submit the following information to the Regional Water Engineer and to the Bureau of Water Permits, unless otherwise instructed:

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	**Required Action**	**Due Date**
001	EMERGING CONTAMINANT SHORT-TERM MONITORING The permittee shall collect grab samples of both the influent and effluent from the facility's treatment system(s) associated with the identified outfall for Per-and Polyfluoroalkyl Substances (PFAS) utilizing EPA analytical method 1633 and 1,4-Dioxane (1,4-D) utilizing EPA Method 8270D SIM or 8270E SIM. The samples must represent normal discharge conditions and treatment operations and shall be obtained on a quarterly basis for at least four (4) consecutive quarters. The results shall be reported through the "Emerging Contaminants Survey for POTWs" found at: Emerging Contaminants In NY's Waters - NYSDEC. Please utilize the link above to access the chain of custody template, monitoring template for laboratories, and monitoring template instructions for laboratories. For each month, please fill out the chain of custody template to reflect the required analytical sampling for each outfall using the correct sample naming convention (example provided in the form). The chain of custody, monitoring template, and monitoring template instructions should then be provided to the laboratory. The laboratory should complete the monitoring template, utilizing EQuIS EDD format, for each month of sampling. The completed chain of custody, monitoring template, and PDF laboratory reports should be submitted with the Emerging Contaminants Survey. The permittee shall initiate track down of potential sources by completing the "Emerging Contaminants Investigation Checklist for POTWs" available at the above link. The DEC may periodically request updates or additional monitoring to check progress on track down investigations. Elements of the checklist may be used as permit conditions in future permit modifications.	EDP + 18 months Within 90 days of DEC written notification
001	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	With December DMR (January 28th)
001	ANNUAL FLOW CERTIFICATION The permittee shall submit an Annual Flow Certification form each year in accordance with 750-2.9(C)(4). The form shall be attached to the February DMR or submitted through nForm.	With February DMR (March 28th)
001	BIENNIAL POLLUTANT SCAN The permittee shall implement an ongoing monitoring program and perform effluent sampling every two years as specified in footnote of the permit limits table.	Retain and submit with next NY-2A Application
001	SHORT-TERM HIGH-INTENSITY MONITORING PROGRAM The permittee shall collect 10 samples representative of normal discharge conditions and treatment operations over a 5-week period for Total Dissolved Solids parameters. The permittee shall use approved EPA analytical method with the lowest possible detection limit as promulgated under 40 CFR Part 136 for the determination of the concentrations of parameters listed. The permittee shall submit a summary of the results.	EDP + 6 months
001	WHOLE EFFLUENT TOXICITY (WET) TESTING WET testing shall be performed as required in the footnote of the permit limits table. The toxicity test report including all information requested of this permit shall be attached to your WET DMRs and sent to the WET@dec.ny.gov email address.	Within 60 days following the end of each monitoring period

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	**Required Action**	**Due Date**
001	STORMWATER NO EXPOSURE CERTIFICATION Permittee must recertify every five years a condition of no exposure to stormwater in order to continue to qualify for the no exposure exclusion. The No Exposure Certification Form can be found on the DEC website.	08/31/2027, and every 5 years thereafter
001	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite a mercury minimization plan and subsequent annual mercury minimization status reports in accordance with the requirements of this permit.	***Maintained Onsite*** EDP + 12 months, annually thereafter
001	CAPACITY, MANAGEMENT, OPERATION & MAINTENANCE PROGRAM PLAN (CMOM) The permittee shall develop and submit a CMOM plan. The plan shall follow the guidelines contained in this permit.	EDP + 4 months
001	CMOM ANNUAL REPORT The permittee shall submit an annual report describing all actions taken in the preceding year.	EDP + 36 months, annually thereafter
001	INDUSTRIAL PRETREATMENT PROGRAM Submit a report that briefly describes the permittee's program activities over the reporting period (October 1 to September 30). The report shall follow the guidelines contained in this permit and be electronically submitted to the USEPA Region II office as well as to the Regional Water Engineer and the Bureau of Water Permits.	Annually by November 30th

Unless noted otherwise, the above actions are one-time requirements.

F. Monitoring and analysis shall be conducted using sufficiently sensitive test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

G. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.

H. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

I. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.

J. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

SPDES Permit Fact Sheet
City of Batavia
City of Batavia Water Pollution Control Plant
NY0026514

Contents

Summary of Permit Changes

The Department drafted a State Pollutant Discharge Elimination System (SPDES) EBPS permit renewal and department-initiated permit modification for the City of Batavia Water Pollution Control Plant. The changes to the permit are summarized below:

- Updated the cover page format and information, including the permittee address and contact information, the facility address, and the outfall coordinates
- Added new influent monthly average and effluent daily maximum flow monitoring requirements
- Updated the influent and effluent flow sample type
- Added new summer and winter daily maximum Ultimate Oxygen Demand (UOD) concentration limitations
- Reduced the summer and winter monthly average Ammonia, as N limitations
- Changed the Dissolved Oxygen (DO) limitation from summer only to year round
- Added a new daily maximum Total Mercury limitation
- Added new concentration monitoring requirements for Free Cyanide
- Added new seasonal concentration limits for Fecal Coliform
- Added seasonal disinfection of the wastewater treatment plant effluent for:
    - Total Residual Chlorine: Daily maximum of 0.030 mg/L
- Revised all limits to reflect two (2) significant figures
- Updated the sampling frequency for the following parameters:
    - $CBOD_5$ (between November 1st and May 31st)
    - Total Suspended Solids (Monthly and 7-day average, between November 1st and May 31st)
    - Settleable Solids (All year)
    - Ammonia, as N (between November 1st and May 31st)
    - Total Phosphorus, as P (between November 1st and May 31st)
    - pH (All year)
    - Temperature (All year)
- Added new WET testing requirements
- Added new requirements for a Biennial Pollutant Scan
- Added a new Stormwater Pollution Prevention Requirements section
- Added requirements for a new Mercury Minimization Program, Type I
- Added a new Discharge Notification Requirements section
- Added new requirements for a Capacity, Management, Operation and Maintenance (CMOM) program
- Updated the Schedule of Compliance to remove all completed compliance actions and to add new compliance requirements for:
    - Development of a Fecal Coliform Study
    - Proposal for an Alternative Compliance Point
    - Completion of Operational, Maintenance, and Optimization work to comply with the final effluent limitations for UOD, Ammonia, as N, and Fecal Coliform
    - Installation of a new stream gage
    - The completion of a Load-Based Effluent Limitations Study

- Added a new Monitoring Locations section
- Added a new General Requirements section
- Updated the Recording, Reporting and Additional Monitoring Requirements section with information on NetDMR
- Added the following requirements in a new Schedule of Submittals:
    - Submission of Emerging Contaminant Short-Term monitoring
    - Submission of a Water Treatment Chemical (WTC) annual report form
    - Submission of an Annual Flow Certification form
    - Submission of a Biennial Pollutant Scan with the next NY-2A application
    - Submission of short-term high intensity monitoring sample results for Total Dissolved Solids (influent and effluent)
    - Submission of WET testing during calendar years ending in 2 and 7
    - Submission of a Stormwater No Exposure Certification every five years
    - Completion of a Mercury Minimization Program Annual Status Report (maintained onsite)
    - Completion of a Capacity, Management, Operation & Maintenance (CMOM) program plan
    - Submission of an annual CMOM report
    - Submission of an annual Pretreatment Program Activities report.

This fact sheet summarizes the information used to determine the effluent limitations (limits) and other conditions contained in the permit. General background information including the regulatory basis for the effluent limitations and other conditions are in the Appendix linked throughout this fact sheet.

Administrative History

1/1/2005 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 12/31/2009. The 2005 permit has formed the basis of this permit.

The 2005 permit was administratively renewed in 2010 and again in 2015. The last permit administrative renewal was effective until 12/31/2019.

12/31/2019 The permittee submitted a timely and sufficient application for renewal. Therefore, the 2005 permit remained in effect pursuant to SAPA[1].

5/31/2022 The Department issued a Request for Information (RFI) to modify and renew the SPDES permit and to implement new disinfection treatment requirements.

9/1/2022 The City of Batavia submitted a NY-2A permit application, identifying missing sample items, including mercury, oil & grease, total dissolved solids, and hardness. The City of Batavia also submitted modification requests to remove the sampling requirements for Hexavalent Chromium, replace the Total Suspended Solids percent removal with an assumed influent of 200 mg/L, and a variance for fecal coliform and future disinfection treatment.

[1] State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(*l*)

12/5/2022 The City of Batavia submitted the missing sampling items, resulting in a sufficient NY-2A permit application.

The Notice of Complete Application, published in the Environmental Notice Bulletin and newspapers, contains information on the public notice process.

Facility Information

This facility is a publicly owned treatment works that receives flow from domestic and industrial users, including waste from categorical industrial users, with effluent consisting of treated sanitary and industrial wastewater. The collection system consists of separate sewers. The facility accepts flow from significant industrial users (SIUs).

The facility treats wastewater via a lagoon treatment system. This type of treatment system relies on a long residence time to effectively remove pollutants. The lagoon treatment system is not covered, so is exposed to inflow from rain and snow, and is lined with a limestone rip-rap. In addition to lagoons, the facility also includes constructed wetlands. Each year, the facility attracts hundreds of visitors who come to observe migratory birds and other wildlife. In the draft fact sheet, “lagoon” and “pond” are used interchangeably.

When a SPDES permit was first developed in 1983, the Department considered the capabilities of the proposed treatment system and the water quality needs of the Tonawanda Creek. Consequently, that first SPDES permit included a UOD concentration limit of 20 mg/L. In the 1989 SPDES permit, based on the approved final facility design and ability to limit discharges to the creek during critical low flows, the Department removed the concentration limit and instead incorporated a UOD limit of 1170 lbs/day, which was derived from a UOD concentration of 20 mg/L. See also the entry for UOD in the Pollutant Summary Table. The facility started operating in 1990.

The facility includes three design flow limitations:

- Influent flows are limited to 5.5 MGD, which reflects the influent design flow of the treatment facility.
- Summer flows are limited to 7.0 MGD. During this period, there is an increase in the volume of treated water that is stored.
- Winter flows are limited to 12 MGD. During this period, there is an increase in the volume of treated water that is released.

The current lagoon treatment system consists of:

- Preliminary Treatment: Mechanical fine screen, aerated grit chamber
- Primary Treatment: Aerated ponds (A1, A2, and A3)
- Secondary Treatment: Secondary/settling ponds (S1 and S2)
- Tertiary Treatment: Tertiary/oxidation ponds (T1-T4), wetlands

As part of the design that was approved by the Department, the facility was to dredge each of the nine (9) lagoons every 20 years. To maintain the effectiveness of the treatment system, sludge should be dredged from the lagoons, dried, and then hauled to a landfill for disposal. Since 1990 only two lagoons have been dredged. The nine (9) lagoons are not dredged at the same time. Settling pond S1 was dredged in 2016 and is the most recent pond to have solids removed. No

additional ponds have been dredged within the past twenty (20) years. Plans to dredge aeration pond A2 have been in progress since 2021.

The primary outfall (Outfall 001) is located at the bank of the Tonawanda Creek and consists of a 36 in. pipe that is partially submerged at normal flow conditions. The facility adjusts its flow operations during the summer and winter months. In the summer, the facility reduces the volume of flow discharged as the lagoon system was designed to store flow in the summer and minimize aquatic impacts during lower flow months. In the winter, the facility increases the volume of flow discharged due to increased inflow to the lagoons, higher flow in the receiving waterbody, and to help comply with the summer UOD effluent limitation. This adjusted flow regime has been considered in the development of permit limitations as noted in the Pollutant Summary Table.

The facility is planning the following upgrades/improvements:

- Replacement of aeration equipment in pond A2
- Replacement of one (1) air supply blower
- Removal and disposal of sludge from pond A2
- Installation of an effluent lift station
- Installation of a final filtration system and associated building
- Installation of chemical storage and chemical pumps
- Installation of new emergency generator and general electrical upgrades

The facility accepts wastewater from the following municipalities:

Municipality	POSS # or SPDES #	Collection System
City of Batavia	NY 002 6514	Separate
Town of Batavia	NYS800001	Separate

The facility accepts wastewater from the following significant industrial users (SIUs):

Significant Industrial User (SIU)	SIC Code	Categorical Reference (if applicable to 40 CFR)
Chapin Manufacturing, Inc.	3499	40 CFR Part 433
U.S. Chrome Corp., Inc.	3471	40 CFR Part 433
O-AT-KA Milk Products, Inc,	2026	40 CFR Part 405
Seneca Power Plant	4931	40 CFR Part 423
De Novo Laundry Acquisition, Inc.	7213	-
Tompkins Metal Finishing	3471	40 CFR Part 433
Georgia Pacific, LLC	2653	40 CFR Part 430
Batavia Water Treatment Plant	9511	-
Summit Lubricants, Inc.	2992	-
Hodgins Engraving, Inc.	2796	-
Buffalo Federal Detention Center	9223, 9711	-
Genesee Community College	8221	-
HP Hood, LLC	2026	40 CFR Part 405
Upstate Cultured Products, LLC	2026	40 CFR Part 405

Site Overview

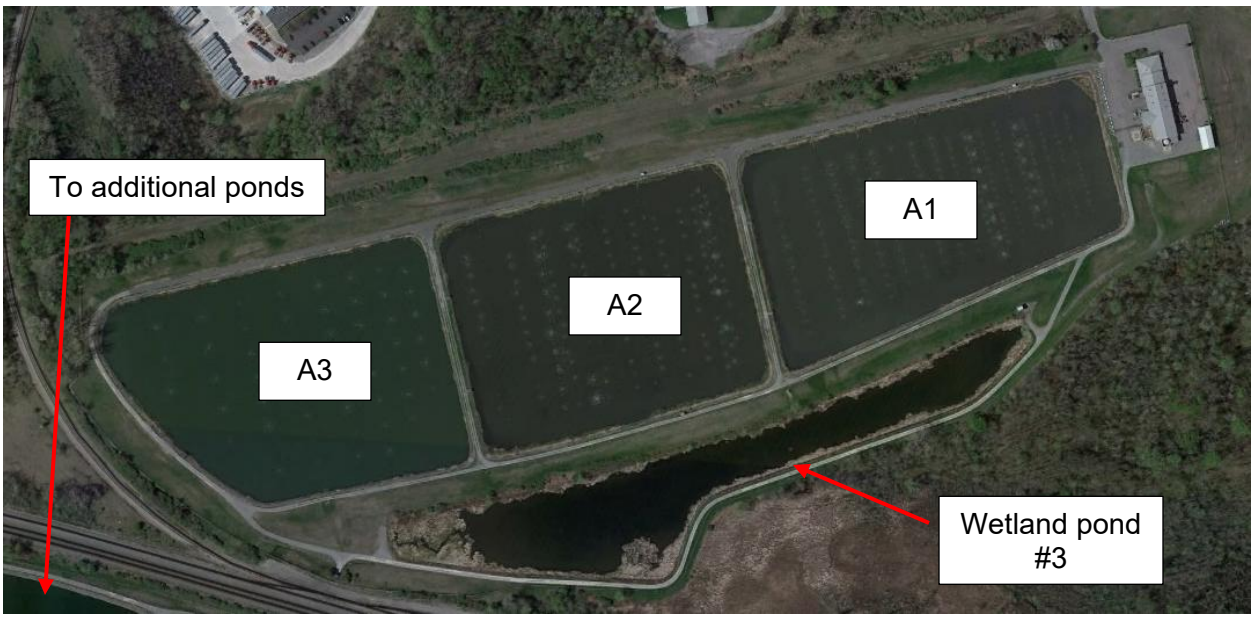


Figure 1: Main facility building, aerated ponds, and wetland pond.

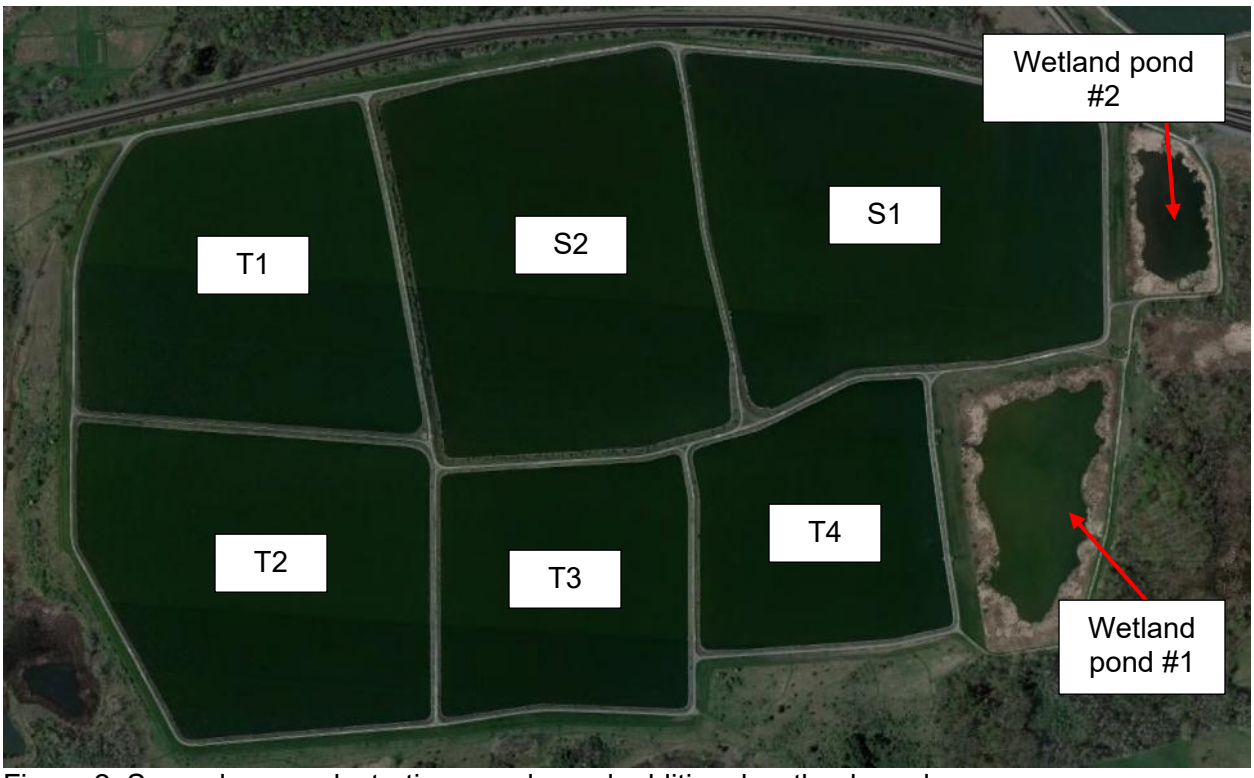


Figure 2: Secondary ponds, tertiary ponds, and additional wetland ponds.

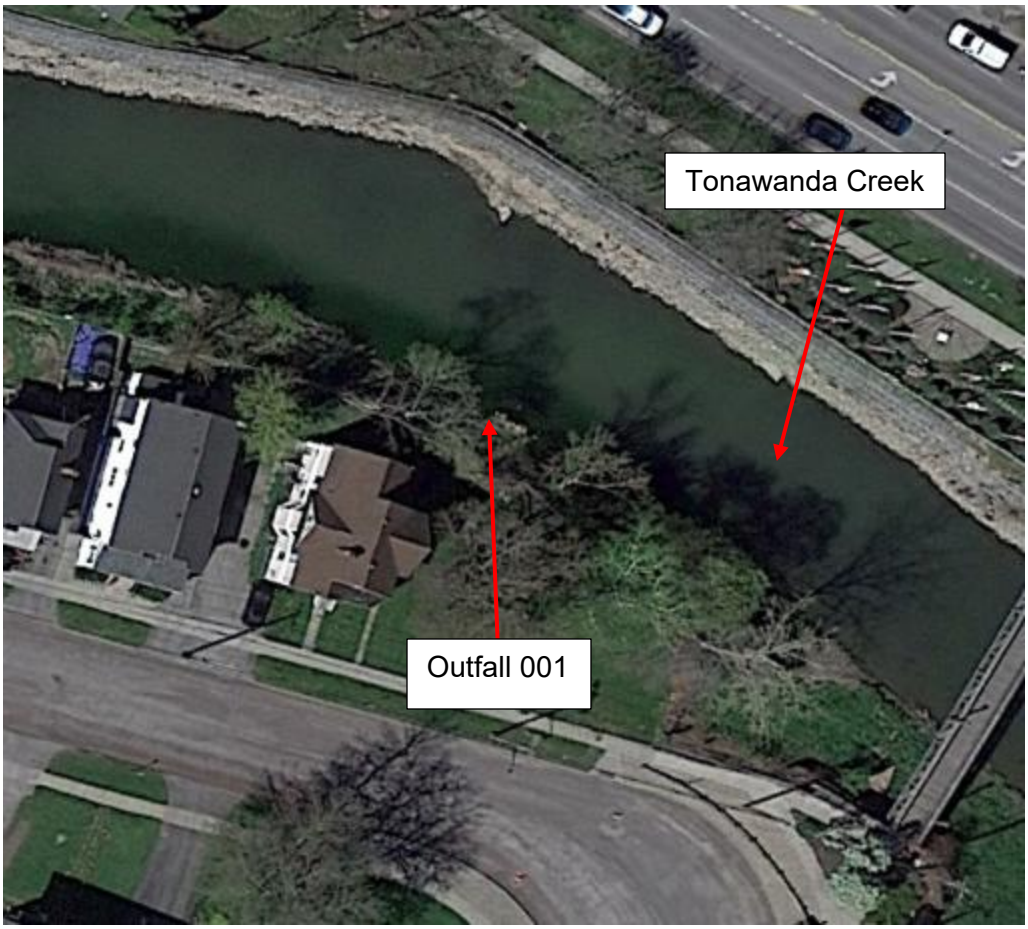


Figure 3: Outfall 001 location.

Enforcement History

The facility was issued an NOV on November 20, 2018 due to effluent limitation exceedances of Total Cyanide during the months of April, June, July, and October 2018. In an effort to determine the cause of the exceedances, inspections at two SIUs, Tompkins Metal Finishing and U.S. Chrome, were scheduled to investigate whether their discharges were the source of the Cyanide exceedances. The chief operator of the facility also began additional sampling of the influent and effluent of lagoon A3. A total of three (3) additional samples were taken on July 31, August 2, and October 11. These samples were sent to different labs: two different Pace Analytical and Alpha Analytical labs, and a Pace Analytical, Alpha Analytical, and Life Science Lab. It was ultimately determined that lab error was the source of the exceedances as two of the three labs returned results that were within compliance levels. As this issue was resolved, it did not result in formal enforcement.

On September 22, 2021, the facility was issued an NOV due to indications that the facility was at risk of significant non-compliance for UOD and Total Phenolics. The air delivery system to the lagoons needed to be replaced, which caused DO levels in the lagoons to be below optimal levels. With the low DO values, numerous odor complaints were sent to NYS DEC and USEPA. An upgraded air system was placed into service on August 26, 2021. DO levels and UOD effluent exceedances continued until October 20, 2021 due to the slow nature of lagoon recovery, but ultimately returned to normal levels. As the issue was resolved, it did not result in formal enforcement.

Compliance and enforcement information can be found on the EPA's Enforcement and Compliance History Online (ECHO) website.

Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality and effluent limitations. The existing effluent quality information was taken from the 12/5/22 NY-2A application as well as the Discharge Monitoring Reports submitted by the permittee between the period 5/1/18 to 5/31/23. Appendix Link

Interstate Water Pollution Control Agencies

Outfall 001 is located within the Great Lakes watershed and International Joint Commission (IJC) compact area and is subject to specific requirements in TOGS 1.3.3. (pages 4 and 10) and 40 CFR 132. Appendix Link

Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	4952	Treated Sanitary Sewage, Industrial Wastewater	Tonawanda Creek, Class C

Impaired Waterbody Information

The Tonawanda Creek segment (PWL No. 0102-0002) that the WWTP discharges to was first listed on the 2004 New York State Section 303(d) List of Impaired/TMDL Waters as impaired due to Phosphorus from urban and storm runoff and stream erosion. The segment continues to be listed as of the 2020/2022 NYS Section 303(d) List. A TMDL has not been developed to address the impairment and, therefore, there are no applicable wasteload allocations (WLAs) for this facility.

As described under Interstate Water Pollution Control Agencies, Outfall 001 discharges within the Great Lakes drainage basin. Therefore, guidance in TOGS 1.3.3. related to Phosphorus is applicable.

Stream Study of the Tonawanda Creek

The development of the Dissolved Oxygen sag curve required the use of many stream related parameters including the stream width, stream depth, stream velocity, oxygen decay rate (K_d), and reaeration rate (K_r). During discussions with the permittee, the City of Batavia collected stream data of the Tonawanda Creek as part of a stream study on October 5, 2024. The City requested that this data be utilized within a revised version of the Dissolved Oxygen sag curve. A Quality Assurance Project Plan (QAPP) was not developed before the start of the study, and several areas were noted to have gaps in the information collected such as the time of day for dissolved oxygen sampling. The City submitted a QAPP on February 24, 2025 for a proposed study of the Tonawanda Creek between May 1, 2025 and October 1, 2025. The Department provided feedback on the submitted QAPP on April 16, 2025. A revised version was not submitted.

The Department has contracted with a 3rd party organization to complete a stream study of Tonawanda Creek. This organization will coordinate with the Department and the City as work progresses. The results from the stream study will be used to revise the Dissolved Oxygen sag curve and determine appropriate effluent limitations. A reopener clause has been added to the permit pending the outcome of the study.

See the Outfall and Receiving Water Summary Table and Appendix for additional information.

Critical Receiving Water Data & Mixing Zone

Reach Description: Tonawanda Creek (ONT- 158 - 12) is part of the Great Lakes watershed and is classified as C at the point of discharge (6 NYCRR 837.4 - Table I - Item 21). There is a confluence with an unnamed tributary (ONT - 158 - 12 - 31) approximately 4.0 miles downstream of the discharge. This unnamed tributary also has a water classification as C (6 NYCRR 837.4 - Table I - Item 91). A second confluence with Bowen Brook (ONT - 158 - 12 - 28) occurs approximately 3.36 miles after the first confluence and is similarly classified as C at the point of confluence (6 NYCRR 837.4 - Table I - Item 84). The classification of Tonawanda Creek changes to B approximately 0.73 miles after the confluence of Bowen Brook (6 NYCRR 837.4 - Table I - Item 20).

Each reach was considered as part of the Dissolved Oxygen sag curve analysis. This is described in the Pollutant Summary Table under the Winter UOD analysis. The following images show the confluences of the reaches described above.

Figure 4: Confluence of Tonawanda Creek and unnamed Tributary near Bushville, NY.

Figure 5: Confluence of Tonawanda Creek and Bowen Brook near East Pembroke.

Figure 6: Tonawanda Creek classification change at dam in East Pembroke.

In accordance with the regulatory requirements of 6 NYCRR 701.1 and 6 NYCRR 702.16(b) as well as being consistent with TOGS 1.3.1, the Department conducted a site-specific low-flow analysis at the point of discharge. The low flow conditions for the Tonawanda Creek were obtained from a drainage basin ratio analysis with USGS gage station 04217000, Tonawanda Creek at Batavia located approximately 0.12 miles upstream of Outfall 001. Seasonal flows were developed to account for the flow differences between the summer and winter periods. The summer 1Q10, 7Q10 and 30Q10 flows at the gage were found from the USGS Hydrologic Toolbox software and an analysis of data between the years of 1991 and 2023, only using data within the period of June 1st and October 31st. The winter 1Q10, 7Q10 and 30Q10 flows at the gage were similarly found from the USGS Hydrologic Toolbox software and an analysis of data between the years of 1991 and 2023, only using data within the period of November 1st and May 31st.

Summer Low Flow:

Gage Name: Tonawanda Creek at Batavia
Gage ID: 04217000
Drainage Area at Gage (mi^2): 170
Drainage Area at Facility (mi^2): 170
7Q10 Flow at Gage (CFS): 6.38 Source: USGS SW Toolbox
Calculated 7Q10 Flow at Facility (CFS): 6.38
Calculated 1Q10 (CFS): 5.08

Calculated 30Q10 (CFS): 10.06

Winter Low Flow:

Gage Name: Tonawanda Creek at Batavia
Gage ID: 04217000
Drainage Area at Gage (mi^2): 170
Drainage Area at Facility (mi^2): 170
7Q10 Flow at Gage (CFS): 12.65 Source: USGS SW Toolbox
Calculated 7Q10 Flow at Facility (CFS): 12.65
Calculated 1Q10 (CFS): 10.20
Calculated 30Q10 (CFS): 26.05

The 1Q10, 7Q10, and 30Q10 flows were used to calculate the acute, chronic, and human, aesthetic, wildlife (HEW) dilution ratios, respectively. The Facility Flow that was used to calculate the Summer and Winter dilutions were 7.0 MGD and 12 MGD, respectively.

Dilution Ratio = (Facility Flow + Low Flow) / Facility Flow

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001 (Summer)	1.5:1	1.6:1	1.9:1	TOGS 1.3.1
001 (Winter)	1.5:1	1.7:1	2.4:1	TOGS 1.3.1

As noted under Facility Information, the facility operates two different flow regimes in summer and winter months. The result is that there is less flow discharged in the summer and more flow discharged in the winter. This affects the seasonal dilution calculations.

Critical receiving water data are listed in the Pollutant Summary Table at the end of this fact sheet. Appendix Link

Permit Requirements

The technology based effluent limitations (TBELs), water quality-based effluent limitations (WQBELs), Existing Effluent Quality and a discussion of the selected effluent limitation for each pollutant present in the discharge are provided in the Pollutant Summary Table.

Whole Effluent Toxicity (WET) Testing

An evaluation of the discharge indicates the potential for toxicity based on the following criteria: Appendix Link

- There is the possibility of complex synergistic or additive effects of chemicals, typically when the number of metals or organic compounds discharged by the permittee equals or exceeds five. (#4)
- Treatment plants which equal or exceed a discharge of 1MGD. (#7)

The requirement for WET testing is new. No previous WET data was available to perform a reasonable potential analysis. Consistent with TOGS 1.3.2 and given the dilution available and location within the Great Lakes basin, the permit requires chronic WET testing. WET testing action levels of 0.3 TUa and 1.6 TUc have been included in the permit for each species. The acute

dilution ratio is less than 3.3 and the acute action level has been set equal to the default value of 0.3 TUa[2]. The chronic action levels represent the chronic dilution ratio. Samples will be collected quarterly during years ending in 2 and 7.

Anti-backsliding

The limitations contained in the permit are at least as stringent as the previous permit limits and there are no instances of backsliding. Appendix Link

Antidegradation

The permit contains effluent limitations which ensure that the best usages of the receiving waters will be maintained. The Notice of Complete Application published in the Environmental Notice Bulletin contains information on the State Environmental Quality Review (SEQR)[3] determination. Appendix Link

Discharge Notification Act Requirements

In accordance with the Discharge Notification Act (ECL 17-0815-a), the permittee is required to post a sign at each point of wastewater discharge to surface waters, unless a waiver is obtained. This requirement has been continued from the previous permit.

Additionally, the permit contains a requirement to make the DMR sampling data available to the public upon request in accordance with 6 NYCRR 750-1.12(b)(2). This requirement has been updated from the previous permit.

Stormwater Pollution Prevention Requirements

The facility is a publicly owned treatment works ≥ 1 MGD that requires SPDES permit coverage under 40 CFR 122.26 (b)(14)(ix).

> On August 31, 2022, the permittee submitted a Conditional Exclusion for No Exposure Form, certifying that all industrial activities and materials are completely sheltered from exposure. This condition must be maintained for the exclusion to remain applicable. The Schedule of Additional Submittals also includes a due date for re-certification every five years as required by 40 CFR 122.26(g)(iii). This requirement is new.

Capacity, Management, Operation and Maintenance (CMOM) Program

The permittee is required to develop and implement a CMOM program to reduce wet weather flows. This requirement is necessary because the permittee has high inflow and infiltration (I/I) related discharges from the wastewater treatment plant that continues to exceed the allocated flow. This requirement is new.

Mercury

The DOW 1.3.10 Mercury – Multiple Discharge Variance (MDV), dated December 31, 2025, provides the framework for DEC to require mercury monitoring and mercury minimization programs (MMPs), through SPDES permitting. All of the following permit conditions are consistent with the MDV. Appendix Link

The facility is located within the Great Lakes Basin watershed and is an USEPA Major, Class 05. The permit includes requirements for the implementation of MMP Type I.

The new daily max limit of 25 ng/L represents the general level currently achievable (GLCA). Based on 1 data point with a max of 1.0 ng/L, the facility is expected to meet the limit (with monthly

[2] EPA's Technical Support Document Section 5.7.4
[3] As prescribed by 6 NYCRR Part 617

sampling frequency). Once ten or more data points are collected from monthly sampling, DEC will establish an additional 12-month rolling average effluent limit during the next permit review.

The MMP consists of the following:

- Additional monitoring of key locations, as defined in the MMP;
- Control strategy for implementation of the MMP; and,
- Annual status report (maintained onsite)

Biennial Pollutant Scan

The permit includes a requirement to perform biennial sampling (once every two years) of the WWTP effluent for the parameters in the NY-2A Application, Tables A – D. This sampling will provide the required three effluent samples from applicable parameters for submittal with the next NY-2A Application[4]. This requirement ensures the data is representative of effluent conditions over the permit term and will be available for the next application submittal and permit review. This requirement is new.

Industrial Pretreatment Program

The permittee is required to continue implementation of a USEPA-approved pretreatment program in accordance with 40 CFR Part 403 and consistent with TOGS 1.3.3. The program specifies continued implementation of an industrial user compliance program, submission of user information, modification of local sewer use law (if necessary), and periodic reporting.

Schedule of Compliance

A Schedule of Compliance has been included[5] for the following items (Appendix Link):

- Development of a Fecal Coliform Study and proposal of an Alternate Compliance Point
    - The effluent limitation for Fecal Coliform at Outfall 001 is a new requirement and the permittee cannot immediately comply with the final effluent limitations
- Completion of an Operation, Maintenance, and Optimization Study and implementation and completion of the operation, maintenance, and optimization projects to comply with the final effluent limitations for UOD, Ammonia, as N, Fecal Coliform, and Total Residual Chlorine
    - Major O&M projects will be necessary to undertake, and will take a significant amount of time to properly plan, fund, and implement
- Completion of a Load-Based Effluent Limitations Study
    - New effluent limitations for UOD at Outfall 001 have been proposed, and the permittee cannot immediately comply with the updated limitations.

Emerging Contaminant Monitoring

Pursuant to 6 NYCRR 750-1.13(b)(2)(ii), the permit includes a short-term monitoring program listed in the Schedule of Additional Submittals to evaluate the influent and effluent discharge levels of Per-and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane. This monitoring program is consistent with guidance released in EPA guidance memos dated April 28, 2022, and December 5, 2022.

The DEC will review the monitoring results and pursuant to 6 NYCRR 750-2.1(i), may notify the permittee of the need for further monitoring to identify potential sources as specified in the Emerging Contaminants Investigation Checklist for POTWs to determine whether cause exists to modify the permit to incorporate a pollutant minimization program, pursuant to 6 NYCRR 750-1.14(f). Appendix Link

[4] Pursuant to 40 CFR 122.21(j)(4)(vi).
[5] Pursuant to 6 NYCRR 750-1.14

Schedule of Additional Submittals

Emerging Contaminant Short-term Monitoring

Pursuant to 6 NYCRR 750-1.13(b), the permit includes a short-term monitoring program. On a quarterly basis for at least four consecutive quarters, the permittee shall collect, under normal discharge conditions, grab samples of both the influent and effluent for PFAS and 1,4-dioxane analysis using EPA Method 1633/1633A and EPA Method 8270D SIM or 8270E SIM, respectively. Results must be reported through the "Emerging Contaminants Survey for POTWs" and on the provided monitoring template, which can be found at this link: Emerging Contaminants In NY's Waters - NYSDEC. Please see Emerging Contaminant Monitoring above for more information.

WTC Annual Report

In accordance with 6 NYCRR 750-2.1(i), the permit requires submission of an annual report each year that the permittee uses and discharges WTCs. The permittee must summarize all WTC use for the prior calendar year, January 1 through December 31, and attach it either to the December DMR or annual monitoring report required by the permit. More information is located on the DEC's website under SPDES Permitting of Water Treatment Chemicals.

Annual Flow Certification

In accordance with 6 NYCRR 750-2.9(C)(4), the chief fiscal officer of the municipality shall submit an Annual Flow Certification form, located on DEC's website at Wastewater forms, as an attachment to its February DMR or through nForm. The municipal chief fiscal officer may also submit an explanation for a deviation, where compliance certification cannot be provided.

Biennial Pollutant Scan

In accordance with 40 CFR 122.21(j)(4)(vi), SPDES permit applicants must provide data from a minimum of three samples taken within four and one-half years prior to the date of the permit application. To ensure sufficient effluent samples will be available for the next application submittal and permit review, the permittee shall implement an ongoing monitoring program and perform three effluent sampling every two years. Please see Biennial Pollutant Scan above.

Short-Term, High Intensity Monitoring Program

In accordance with 6 NYCRR 750-1.13(a), the permittee shall be subject to monitoring requirements to determine compliance with water quality standards. Consistent with TOGS 1.2.1, where limited data is available to confirm the presence or absence of a parameter in an outfall, a short-term, high intensity monitoring program may be used. Please see the Pollutant Summary Table below for more information.

Whole Effluent Toxicity (WET) Testing

Consistent with TOGS 1.3.2, the permittee is required to perform WET testing. A report of all testing activity and results is to be sent to the Department and should contain the specific data outlined in TOGS 1.3.2, Appendix I.

Stormwater No Exposure Certification

In accordance with 40 CFR 122.26(g)(iii) and 6 NYCRR 750-1.25(c), the permittee must submit the form, singed in accordance with 6 NYCRR 750-1.18, every five years certifying that the facility is eligible for the no exposure certification. Please see Stormwater Pollution Prevention Requirements above.

Mercury Minimization Plan (MMP) and Status Report

Please see above discussion of MMP and the required annual Status Report, in accordance with 6 NYCRR 750-1.14(f).

CMOM Program Plan and Annual Report

In accordance with 6 NYCRR 750-1.14(f) and 6 NYCRR 750-2.8(a)(3), the permittee is required to develop and implement a CMOM program plan. Additionally, the permittee must submit an annual report that describes all actions taken during the previous year. Please see Capacity, Management, Operation and Maintenance (CMOM) Program above.

Industrial Pretreatment Program

In accordance with 40 CFR 403.12(i) and 6 NCYRR 750-1.11(b), the permittee must submit an annual report describing the permittee's program activities over the previous reporting period. Please see Industrial Pretreatment Program above.

OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/l)	1Q10 (CFS)	7Q10 (CFS)	30Q10 (CFS)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001 (Summer)	42° 59' 55" N	78° 11' 25" W	Tonawanda Creek	C	ONT-158-12 PWL: 0102-0002	01 / 02	212[6]	5.08	6.38	10.06	7.0	1.5:1	1.6:1	1.9:1
001 (Winter)	42° 59' 55" N	78° 11' 25" W	Tonawanda Creek	C	ONT-158-12 PWL: 0102-0002	01 / 02	212[7]	10.20	12.65	26.05	12	1.5:1	1.7:1	2.4:1

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage, Process Wastewater														
		Type of Treatment: Mechanical fine screen, aerated grit chamber, aerated ponds (3), secondary/settling ponds (2), tertiary/oxidation ponds (4), wetlands (3)														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
General Notes: The Department obtained existing discharge data from May 1, 2018 to May 31, 2023 provided by the permittee through Discharge Monitoring Reports and the NY-2A application. The Department reviewed all applicable water quality standards for development of the WQBELs. The water quality standard and resulting WQBEL, shown below, represent the most stringent of any applicable water quality standards. The bolded text represents the permitting decision.															
Flow Rate June 1st – Oct. 31st	MGD	Monthly Avg	7.0	3.2 Actual Average	25 / 0	**7.0**	TOGS 1.3.3	Narrative					6 NYCRR 703.2	-	TBEL
Consistent with TOGS 1.3.3, the permit includes a monthly average flow limitation equal to the average summer daily design capacity of the treatment plant. There is no numeric WQS or numeric interpretation of the narrative WQS.															
Flow Rate Nov. 1st – May 31st	MGD	Monthly Avg	12	5.6 Actual Average	35 / 0	**12**	TOGS 1.3.3	Narrative					6 NYCRR 703.2	-	TBEL
Consistent with TOGS 1.3.3, a monthly average flow limitation equal to the average winter daily design capacity of the treatment plant is specified. There is no numeric WQS or numeric interpretation of the narrative WQS.															
Influent Flow Rate	MGD	Yearly Avg	5.5	3.9 Actual Average	60 / 0	**5.5**	6 NYCRR 750-1.10(c)	Narrative					6 NYCRR 703.2	-	TBEL

[6] Ambient hardness data obtained from RIBS Site ID: 01_TONA-65.8.
[7] Ambient hardness data obtained from RIBS Site ID: 01_TONA-65.8.
[8] Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage, Process Wastewater														
		Type of Treatment: Mechanical fine screen, aerated grit chamber, aerated ponds (3), secondary/settling ponds (2), tertiary/oxidation ponds (4), wetlands (3)														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis			
	This is an influent limitation that is consistent with the average daily flow received by the facility. In accordance with 6 NYCRR 750-1.10(c), the TBEL reflects the current limit in the permit and is being continued from the previous permit. There is no numeric WQS or numeric interpretation of the narrative WQS.															
pH	SU	Minimum	6.0	6.7 Actual Min	60 / 0	**6.0**	TOGS 1.3.3	8.04[9]	-	6.5 – 8.5	Range	-	6 NYCRR 703.3	-	TBEL	
		Maximum	9.0	9.7 Actual Max	60 / 0	**9.0**										
	Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards and will reasonably protect classified water use and assure compliance with applicable water quality standards.															
Temperature	°C	Daily Max	Monitor	15 Actual Average	60 / 0	**Monitor**	6 NYCRR 750-1.13 Monitor	-	Narrative				6 NYCRR 704.2	-	TBEL	
	In accordance with 6 NYCRR 750-1.13(a), monitoring is required and may be reasonably required by the department to determine compliance with effluent limitations and water quality standards that are or may be affected by the discharge. This requirement is continued from the previous permit. There is no numeric WQS or numeric interpretation of the narrative WQS.															
Dissolved Oxygen (DO) June 1st – Oct. 31st	mg/L	Daily Min	7.0	6.0 Actual Min	25 / 0	**7.0**	6 NYCRR 750-1.10(c)	-	-	4.0 mg/L	Narrative	**-**	6 NYCRR 703.3	-	TBEL	
	The facility is currently designed to meet an effluent UOD limitation of 20 mg/L and is not performing consistently with its design. A stream study that will be conducted on the Tonawanda Creek is currently in development for gathering additional stream information as there is not enough information to fully support the calculated WQBEL. As a result, the proposed effluent limitations will be held at the TBEL in accordance with 6 NYCRR 750-1.10(c). While the stream study is being conducted, the facility will also be required to implement O&M procedures to improve the treatment process. A reopener clause has been added to the permit to allow for changing effluent limitations based on the results of the stream study.															
Dissolved Oxygen (DO) Nov. 1st – May 31st	mg/L	Daily Min	-	-	-	-	-	-	4.01 Critical Point	4.0 mg/L	Narrative	**7.0**	6 NYCRR 703.3	-	WQBEL	
	In accordance with 6 NYCRR 703.3 and consistent with TOGS 1.3.1D, the downstream winter DO concentration was modeled using Streeter-Phelps equations assuming a discharge at a $CBOD_5$ maximum limit of 5.0 mg/L, an effluent NOD = 15.5 mg/L based on a proposed Ammonia limit of 2.1 mg/L, and a DO value of 7.0 mg/L. The model included the additional flows from the confluence with the unnamed stream near Bushville, NY approximately four (4) miles downstream and the confluence of Bowen Creek near East Pembroke, NY. The model showed that WQBELs for DO, UOD, and Ammonia are necessary for water quality protection and will reasonably protect classified water use and assure compliance with applicable water quality standards.															
Ultimate Oxygen Demand (UOD) June 1st – Oct. 31st	mg/L	Daily Max	-	82 Calculated from max mass loading	25 / 0	**20**	Design	-	See Summer Dissolved Oxygen			-	6 NYCRR 703.3	-	TBEL	
	lbs/d	Daily Max	1170	4759 Actual Max	25 / 0	**1170**	6 NYCRR 750-1.10(c)	-				-				

[9] Ambient pH obtained from RIBS Site ID: 01-TONA-65.8.

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage, Process Wastewater														
		Type of Treatment: Mechanical fine screen, aerated grit chamber, aerated ponds (3), secondary/settling ponds (2), tertiary/oxidation ponds (4), wetlands (3)														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis			
	The facility is currently designed to meet an effluent UOD limitation of 20 mg/L and is not performing consistently with its design. A stream study that will be conducted on the Tonawanda Creek is currently in development for gathering additional stream information as there is not enough information to fully support the calculated WQBEL. As a result, the proposed effluent limitations will be held at the current design concentration and loadings equal to the TBELs in accordance with 6 NYCRR 750-1.10(c). While the stream study is being conducted, the facility will also be required to implement O&M procedures to improve the treatment process. A reopener clause has been added to the permit to allow for changing effluent limitations based on the results of the stream study.															
Ultimate Oxygen Demand (UOD) Nov. 1st – May 31st	mg/L	Daily Max	-	-	-	-	-	-	See Winter Dissolved Oxygen			**23**	6 NYCRR 703.3	-	WQBEL	
	lbs/d	Daily Max	-	-	-	-	-	-				-				
	In accordance with 6 NYCRR 703.3 and consistent with TOGS 1.3.1D, the downstream winter DO concentration was modeled using Streeter-Phelps equations assuming a discharge at a $CBOD_5$ maximum limit of 5.0 mg/L, an effluent NOD = 15.5 mg/L based on a proposed Ammonia limit of 2.1 mg/L, and a DO value of 2.0 mg/L. The model included the additional flows from the confluence with the unnamed stream near Bushville, NY approximately four (4) miles downstream and the confluence of Bowen Creek near East Pembroke, NY. The model shows new winter UOD limits are necessary to maintain DO water quality standards. Therefore, an effluent limitation equal to the WQBEL has been added to the proposed permit and will reasonably protect classified water use and assure compliance with applicable water quality standards. Implementation of this limit is deferred until the completion of the Tonawanda Creek stream study. A reopener clause has been added to the permit to allow for changing effluent limitations based on the results of the stream study.															
5-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) June 1st – Oct. 31st	mg/L	Monthly Avg	25	18 Actual Max	25 / 0	**25**	TOGS 1.3.3	-	See Summer Dissolved Oxygen			-	6 NYCRR 703.3	-	TBEL	
		7 Day Avg	40	18 Actual Max	25 / 0	**40**	TOGS 1.3.3					-				
	lbs/d	Monthly Avg	1460	566 Actual Max	25 / 0	**1500**	6 NYCRR 750-1.10(c)					-				
		7 Day Avg	2335	1174 Actual Max	25 / 0	**2300**	6 NYCRR 750-1.10(c)					-				
	% Rem	Minimum	85	96 Actual Average	25 / 0	**85**	TOGS 1.3.3					-				
	Consistent with TOGS 1.3.3 for POTWs, the TBELs reflect secondary treatment standards and will reasonably protect classified water use and assure compliance with applicable water quality standards.															
5-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) Nov. 1st – May 31st	mg/L	Monthly Avg	25	19 Actual Max	35 / 0	**25**	TOGS 1.3.3	-	See Winter Dissolved Oxygen			-	6 NYCRR 703.3	-	TBEL	
		7 Day Avg	40	25 Actual Max	35 / 0	**40**	TOGS 1.3.3					-				
	lbs/d	Monthly Avg	2502	1179 Actual Max	35 / 0	**2500**	6 NYCRR 750-1.10(c)					-				
		7 Day Avg	4003	1574 Actual Max	35 / 0	**4000**	6 NYCRR 750-1.10(c)					-				
	% Rem	Minimum	85	94 Actual Average	35 / 0	**85**	TOGS 1.3.3					-				

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage, Process Wastewater													
		Type of Treatment: Mechanical fine screen, aerated grit chamber, aerated ponds (3), secondary/settling ponds (2), tertiary/oxidation ponds (4), wetlands (3)													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
	Consistent with TOGS 1.3.3 for POTWs, the TBELs reflect secondary treatment standards. The downstream winter DO concentration was modeled using Streeter-Phelps equations (see winter UOD narrative for details on the modeling assumptions). The winter model shows that limitations for DO, UOD, and Ammonia are necessary to maintain DO water quality standards. Therefore, limitations equal to the TBELs will be continued in the proposed permit consistent with 6 NYCRR 750-1.10(c) and will reasonably protect classified water use and assure compliance with applicable water quality standards.														
Total Suspended Solids (TSS) June 1st – Oct. 31st	mg/L	Monthly Avg	30	42 Actual Max	25 / 0	**30**	TOGS 1.3.3	-	Narrative				6 NYCRR 703.2	-	TBEL
		7 Day Avg	45	45 Actual Max	25 / 0	**45**	TOGS 1.3.3								
	lbs/d	Monthly Avg	1751	1329 Actual Max	25 / 0	**1800**	6 NYCRR 750-1.10(c)								
		7 Day Avg	2627	2477 Actual Max	25 / 0	**2600**	6 NYCRR 750-1.10(c)								
	% Rem	Minimum	85	87 Actual Average	25 / 0	**85**	TOGS 1.3.3								
	Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given that adequate dilution is available, an effluent limitation equal to the TBEL will reasonably protect classified water use and assure compliance with applicable water quality standards. There is no numeric WQS or numeric interpretation of the narrative WQS.														
Total Suspended Solids (TSS) Nov. 1st – May 31st	mg/L	Monthly Avg	30	36 Actual Max	35 / 0	**30**	TOGS 1.3.3	-	Narrative				6 NYCRR 703.2	-	TBEL
		7 Day Avg	45	54 Actual Max	35 / 0	**45**	TOGS 1.3.3								
	lbs/d	Monthly Avg	3002	1923 Actual Max	35 / 0	**3000**	6 NYCRR 750-1.10(c)								
		7 Day Avg	4504	3021 Actual Max	35 / 0	**4500**	6 NYCRR 750-1.10(c)								
	% Rem	Minimum	85	87 Actual Average	35 / 0	**85**	TOGS 1.3.3								
	Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given that adequate dilution is available, an effluent limitation equal to the TBEL will reasonably protect classified water use and assure compliance with applicable water quality standards. There is no numeric WQS or numeric interpretation of the narrative WQS.														
Settleable Solids	mL/L	Daily Max	0.3	0.3 Actual Max	38 / 22	**0.3**	TOGS 1.3.3	-	Narrative				6 NYCRR 703.2	-	TBEL
	Consistent with TOGS 1.3.3, the effluent limitation is equal to the TBEL of 0.3 mL/L for POTWs providing secondary treatment without filtration. Given that adequate dilution is available, the TBEL will reasonably protect classified water use and assure compliance with applicable water quality standards. There is no numeric WQS or numeric interpretation of the narrative WQS.														

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage, Process Wastewater													
		Type of Treatment: Mechanical fine screen, aerated grit chamber, aerated ponds (3), secondary/settling ponds (2), tertiary/oxidation ponds (4), wetlands (3)													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Nitrogen, Ammonia (as N) June 1st – Oct. 31st	mg/L	Monthly Avg	2.4	2.7 Actual max	25 / 0	2.4	6 NYCRR 750-1.10(c)	0.082	1.9	1.2	A(C)	**1.2**	TOGS 1.1.1	-	WQBEL
	lbs/d	Monthly Avg	140	58 Actual Max	25 / 0	140	6 NYCRR 750-1.10(c)	-	-	-	-	-			
	The WQS for Ammonia was determined from TOGS 1.1.1 from a summer pH of 7.5 and a temperature of 25 °C. The pH and the temperature of the receiving waterbody were assumed values consistent with TOGS 1.3.1E. The projected instream concentration was calculated using the maximum reported effluent concentration of 2.7 mg/L and an ambient upstream concentration of 0.082 mg/L. A multiplier[10] of 1.3 was applied to the maximum effluent concentration to account for the number of samples. Consistent with TOGS 1.3.1E, the HEW dilution ratio was applied to calculate the projected instream concentration. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation. Therefore, the permit includes the WQBEL and will reasonably protect classified water use and assure compliance with applicable water quality standards.														
Nitrogen, Ammonia (as N) Nov. 1st – May 31st	mg/L	Monthly Avg	9.5	11.7 Actual Max	35 / 0	9.5	6 NYCRR 750-1.10(c)	0.082	5.9	1.9	A(C)	**2.1**	TOGS 1.1.1	-	WQBEL
	lbs/d	Monthly Avg	-	-	-	-	-	-	-	-	-	-			
	The WQS for Ammonia was determined from TOGS 1.1.1 from a winter pH of 7.5 and a temperature of 10 °C. The pH and the temperature of the receiving waterbody were assumed values consistent with TOGS 1.3.1E. The projected instream concentration was calculated using the maximum reported effluent concentration of 11.7 mg/L and an ambient upstream concentration of 0.082 mg/L. A multiplier[11] of 1.2 was applied to the maximum effluent concentration to account for the number of samples. Consistent with TOGS 1.3.1E, the HEW dilution ratio was applied to calculate the projected instream concentration. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation. Therefore, the permit includes the WQBEL and will reasonably protect classified water use and assure compliance with applicable water quality standards. Due to the downstream winter DO concentration that was modeled using Streeter-Phelps equations, the HEW dilution could not be used to calculate the WQBEL as the resulting effluent limitation would cause the critical DO point to drop below the 4.0 mg/L WQS. As a result, the WQBEL is equal to the WQS multiplied by a dilution of 1.1:1 to maintain the downstream winter DO.														
Total Kjeldahl Nitrogen (as N) (TKN)	mg/L	Daily Max	Monitor	16 Actual Max	60 / 0	**Monitor**	6 NYCRR 750-1.13	-	See Dissolved Oxygen			-	6 NYCRR 703.3	-	TBEL
	The TBELs reflect monitoring required for the calculation of UOD and will continue in the proposed permit.														
Total Phosphorus	mg/L	Monthly Avg	1.0	1.0 Actual Max	60 / 0	**1.0**	6 NYCRR 750-1.10(c)	-	Narrative			No RP	6 NYCRR 703.2	-	TBEL
	The TBEL reflects requirements from TOGS 1.3.3 and is in accordance with 6 NYCRR 750-1.10(c). Since a flow expansion has not been requested, the permit includes an effluent limitation equal to the TBEL and will reasonably protect classified water use and assure compliance with applicable water quality standards. There is no numeric WQS or numeric interpretation of the narrative WQS.														
Total Mercury	ng/L	Daily Max	-	1.0 Actual Max	1 / 0	-	-	-	-	0.7	H(FC)	**25**	TOGS 1.3.10	-	WQBEL
	See Mercury section of this fact sheet.														

[10] As recommended from EPA's Technical Support Document, Chapter 3.3
[11] As recommended from EPA's Technical Support Document, Chapter 3.3

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage, Process Wastewater														
		Type of Treatment: Mechanical fine screen, aerated grit chamber, aerated ponds (3), secondary/settling ponds (2), tertiary/oxidation ponds (4), wetlands (3)														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis			
Coliform, Fecal	#/100 mL	30d Geo Mean	-	2000 Actual Max	9 / 0	**200**	TOGS 1.3.3	-	3600	200	Narrative		6 NYCRR 703.4	-	TBEL	
		7d Geo Mean	-	-	-	**400**	TOGS 1.3.3	-								
	Consistent with TOGS 1.3.3, effluent disinfection is required seasonally from May 1st - October 31st, due to the class of the receiving waterbody. Fecal coliform limits equal to the TBEL are specified. The permittee expressed a desire for a variance for disinfection requirements. Based on submitted data with the NY-2A application, the facility is not able to meet the WQS for fecal coliform and total coliform prior to discharge. Therefore, the permit includes new fecal coliform limits as a comparison of the projected instream concentration and the water quality standard indicates a reasonable potential to cause or contribute to an exceedance of the water quality standard. The TBELs will protect classified water use and assure compliance with the applicable water quality standards.															
Total Residual Chlorine (TRC)	mg/L	Daily Max	-	-	-	2.0	TOGS 1.3.3	-	-	0.005	A(C)	0.008	6 NYCRR 703.5	**0.03**	ML	
	Seasonal effluent disinfection is being added to the permit. The WQBEL was calculated by multiplying the WQS by the chronic dilution ratio. Due to the low dilution, the calculated WQBEL is less than the TBEL and less than the minimum level of detection. Therefore, an effluent limitation equal to the minimum level of detection of 0.030 mg/L is appropriate. The permittee expressed a desire for a variance for disinfection requirements. Based on submitted data with the NY-2A application, the facility is not able to meet the standards for fecal coliform and total coliform prior to discharge. Therefore, the permit includes a new Total Residual Chlorine limit.															
Total Copper	µg/L	Daily Max	25 (AL)	< 25	0 / 20	**25 (AL)**	6 NYCRR 750-1.13	-	21	17	A(C)	28	6 NYCRR 703.5	-	TBEL	
	The TBEL reflects the current action level in the permit. The WQS was calculated using a hardness value of 212 mg/L based off RIBS Site ID 01_TONA-65.8. The projected instream concentration was calculated using an estimated maximum effluent value of 25 µg/L, an ambient upstream concentration of 0 µg/L, and a translator of 1.042 in accordance with EPA Document 823-B-96-007. A multiplier[12] of 1.4 was included in calculating the projected instream concentration to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation. The calculated WQBEL is the average of the summer WQBEL (17 µg/L multiplied by the summer chronic dilution of 1.6) and the winter WQBEL (17 µg/L multiplied by the winter chronic dilution of 1.7) and is less stringent than the TBEL. Although no detections were reported in the past five years, several industries present in the service area are potential sources of Total Copper. Therefore, the permit continues to include an action level equal to the TBEL and will reasonably protect classified water use and assure compliance with applicable water quality standards.															
Total Lead	µg/L	Daily Max	8.0	< 5.0	0 / 60	**8.0**	6 NYCRR 750-1.10(c)	-	-	8.5	A(C)	-	6 NYCRR 703.5	-	TBEL	
	The TBEL is the existing permit limit and is in accordance with 6 NYCRR 750-1.10(c). The WQS was calculated using a hardness value of 212 mg/L based off RIBS Site ID 01_TONA-65.8. The projected instream concentration was not calculated as all sample points have been reported as non-detect in the Discharge Monitoring Reports. Although no detections were reported in the past five years, several industries present in the service area are potential sources of Total Lead. Therefore, a limitation equal to the TBEL will be continued and will reasonably protect classified water use and assure compliance with applicable water quality standards.															
Total Nickel	µg/L	Daily Max	100 (AL)	< 40	0 / 20	**100 (AL)**	6 NYCRR 750-1.13	-	-	98	A(C)	-	6 NYCRR 703.5	-	TBEL	

[12] As recommended from EPA's Technical Support Document, Chapter 3.3

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage, Process Wastewater														
		Type of Treatment: Mechanical fine screen, aerated grit chamber, aerated ponds (3), secondary/settling ponds (2), tertiary/oxidation ponds (4), wetlands (3)														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis			
	The TBEL reflects the current action level in the permit. The WQS was calculated using a hardness value of 212 mg/L based off RIBS Site ID 01_TONA-65.8. The projected instream concentration was not calculated as all sample points have been reported as non-detect in the Discharge Monitoring Reports. Although no detections were reported in the past five years, several industries present in the service area are potential sources of Total Nickel. Therefore, an action level equal to the TBEL will be continued and will reasonably protect classified water use and assure compliance with applicable water quality standards.															
Total Zinc	µg/L	Daily Max	100 (AL)	26 Actual Max	3 / 17	**100 (AL)**	6 NYCRR 750-1.13	-	23	157	A(C)	No RP	6 NYCRR 703.5	-	TBEL	
	The TBEL reflects the current action level in the permit. The WQS was calculated using a hardness value of 212 mg/L based off RIBS Site ID 01_TONA-65.8. The projected instream concentration was calculated using a maximum effluent value of 26 µg/L, an ambient upstream concentration of 0 µg/L, and a translator of 1.014 in accordance with EPA Document 823-B-96-007. A multiplier[13] of 1.4 was included in calculating the projected instream concentration to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Although no reasonable potential exists, several industries present in the service area are potential sources of Total Zinc. Therefore, an action level equal to the TBEL will be continued and will reasonably protect classified water use and assure compliance with applicable water quality standards.															
Total Chromium	µg/L	Daily Max	450	10 Actual Max	1 / 59	**450**	6 NYCRR 750-1.10(c)	-	5.4	140	A(C)	No RP	6 NYCRR 703.5	-	TBEL	
	The TBEL is the existing permit limit and is in accordance with 6 NYCRR 750-1.10(c). The WQS was calculated using a hardness value of 212 mg/L based off RIBS Site ID 01_TONA-65.8. The projected instream concentration was calculated using a maximum effluent value of 10 µg/L, an ambient upstream concentration of 0 µg/L, and a translator of 1.163 in accordance with EPA document 823-B-96-007. A multiplier[14] of 1.0 was included in calculating the projected instream concentration to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Although no reasonable potential exists, several industries present in the service area are potential sources of Total Chromium. Therefore, a limitation equal to the TBEL will be continued and will reasonably protect classified water use and assure compliance with applicable water quality standards.															
Hexavalent Chromium	µg/L	Daily Max	20	< 20	0 / 60	**20**	6 NYCRR 750-1.10(c)	-	-	11 (as dissolved)	A(C)	-	6 NYCRR 703.5	-	TBEL	
	The TBEL is the existing permit limit and is in accordance with 6 NYCRR 750-1.10(c). The projected instream concentration was not calculated as all sample points have been reported as non-detect in the Discharge Monitoring Reports. Although no detections were reported in the past five years, several industries present in the service area are potential sources of Hexavalent Chromium. Therefore, a limitation equal to the TBEL will be continued and will reasonably protect classified water use and assure compliance with applicable water quality standards.															
Total Cyanide	µg/L	Daily Max	7.0	19 Actual Max	10 / 48	**7.0**	6 NYCRR 750-1.10(c)	-	12	5.2 (as free)	A(C)	8.6	6 NYCRR 703.5	-	TBEL	

[13] As recommended from EPA's Technical Support Document, Chapter 3.3
[14] As recommended from EPA's Technical Support Document, Chapter 3.3

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage, Process Wastewater														
		Type of Treatment: Mechanical fine screen, aerated grit chamber, aerated ponds (3), secondary/settling ponds (2), tertiary/oxidation ponds (4), wetlands (3)														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis			
	The TBEL is the existing permit limit and is in accordance with 6 NYCRR 750-1.10(c). The projected instream concentration was calculated using a maximum effluent value of 19 µg/L and an ambient upstream concentration of 0 µg/L. A multiplier[15] of 1.0 was included in calculating the projected instream concentration to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation. The WQS used within the analysis is the standard for free cyanide which can be measured directly by available analytical methods. The calculated WQBEL is the average of the summer WQBEL (5.2 µg/L multiplied by the summer chronic dilution of 1.6) and the winter WQBEL (5.2 µg/L multiplied by the winter chronic dilution of 1.7) and is less stringent than the TBEL. Therefore, a limitation for Total Cyanide equal to the TBEL is specified and is protective of water quality standards and additional monitoring is required to assess the presence of Free Cyanide.															
Phenolic Compounds (previously Total Phenolics)	µg/L	Monthly Avg	8.0	20 Actual Max	13 / 47	**8.0**	6 NYCRR 750-1.10(c)	-	13	5.0	E(FS)	8.2	6 NYCRR 703.5	-	TBEL	
	The TBEL is the existing permit limit and is in accordance with 6 NYCRR 750-1.10(c). The WQS and WQ type are based off the requirements for Total Unchlorinated Phenols per TOGS 1.3.1E. The projected instream concentration was calculated using a maximum effluent value of 20 µg/L and an ambient upstream concentration of 0 µg/L. A multiplier[16] of 1.0 was included in calculating the projected instream concentration to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation. The calculated WQBEL is the average of the summer WQBEL (5.0 µg/L multiplied by the summer chronic dilution of 1.6) and the winter WQBEL (5.0 µg/L multiplied by the winter chronic dilution of 1.7) and is less stringent than the TBEL. Therefore, a limitation equal to the TBEL is specified and will reasonably protect classified water use and assure compliance with applicable water quality standards. Since Total Unchlorinated Phenols cannot be measured independently by any single test, effluent limitations and the WQS will be permitted and met as Phenolic Compounds analyzed by a colorimetric or spectrophotometric method approved under 40 CFR 136.															
Additional Pollutants Detected																
Total Dissolved Solids (TDS)	mg/L	Daily Max	-	850	1 / 0	-	-	-	3316	500	Narrative	650	6 NYCRR 703.3	-	STHIM	
	The projected instream concentration was calculated using a maximum effluent of 850 mg/L as reported on the NY 2A application for Outfall 001 and an ambient upstream concentration of 0 mg/L. A multiplier[17] of 6.2 was included in calculating the projected instream concentration due to the limited amount of data (1 data point). A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation. In accordance with regulatory requirements in 6 NYCRR 750-1.13(a) and consistent with TOGS 1.2.1, a short-term high-intensity monitoring (STHIM) program has been added to the schedule of submittals due to the limited amount of data.															
Total Manganese	µg/L	Daily Max	-	72	1 / 0	-	-	-	280	-	Narrative	-	6 NYCRR 703.2	-	No Limitation	
	lbs/d	Daily Max	-	-	-	-	-	-	-	-	-	-				

[15] As recommended from EPA's Technical Support Document, Chapter 3.3
[16] As recommended from EPA's Technical Support Document, Chapter 3.3
[17] As recommended from EPA's Technical Support Document, Chapter 3.3

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage, Process Wastewater														
		Type of Treatment: Mechanical fine screen, aerated grit chamber, aerated ponds (3), secondary/settling ponds (2), tertiary/oxidation ponds (4), wetlands (3)														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
	The projected instream concentration was calculated using a maximum effluent of 72 µg/L as reported on the Application 2A for Outfall 001 and an ambient upstream concentration of 0 µg/L. A multiplier[18] of 6.2 was included in calculating the projected instream concentration due to the limited amount of data (1 data point). A numeric water quality standard for Total Manganese does not currently exist for Class C waterbodies. A numeric interpretation of the narrative water quality standard has not been developed and it is assumed there is no reasonable potential to cause or contribute to an exceedance of the narrative standard. Therefore, effluent limitations are not proposed.														
Fluoride	µg/L	Daily Max	-	360	1 / 0	-	-	-	1404	4200	A(C)	No RP	6 NYCRR 703.5	-	No Limitation
	lbs/d	Daily Max	-	-	-	-	-	-	-	-	-	-			
	The projected instream concentration was calculated using a maximum effluent of 360 µg/L as reported on the Application 2A for Outfall 001 and an ambient upstream concentration of 0 µg/L. A multiplier[19] of 6.2 was included in calculating the projected instream concentration due to the limited amount of data (1 data point). A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no effluent limitations are proposed.														

[18] As recommended from EPA's Technical Support Document, Chapter 3.3
[19] As recommended from EPA's Technical Support Document, Chapter 3.3

Appendix: Regulatory and Technical Basis of Permit Authorizations

The Appendix is meant to supplement the fact sheet for multiple types of SPDES permits. Portions of this Appendix may not be applicable to this specific permit.

Regulatory References

The provisions of the permit are based largely upon 40 CFR 122 subpart C and 6 NYCRR Part 750 and include monitoring, recording, reporting, and compliance requirements, as well as general conditions applicable to all SPDES permits. Below are the most common citations for the requirements included in SPDES permits:

- Clean Water Act (CWA) 33 section USC 1251 to 1387
- Environmental Conservation Law (ECL) Articles 17 and 70
- Federal Regulations
  - 40 CFR, Chapter I, subchapters D, N, and O
- State environmental regulations
  - 6 NYCRR Part 621
  - 6 NYCRR Part 750
  - 6 NYCRR Parts 700 - 704 – Best use and other requirements applicable to water classes
  - 6 NYCRR Parts 800 – 941 - Classification of individual surface waters
- NYSDEC water program policy, referred to as Technical and Operational Guidance Series (TOGS)
- USEPA Office of Water Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E

The following is a quick guide to the references used within the fact sheet:

SPDES Permit Requirements	Regulatory Reference
Anti-backsliding	6 NYCRR 750-1.10(c) and 750-1.10(d), CWA sections 402(o), 303(d)(4), ECL 17-0809, 40 CFR 122.44(*l*)
Best Management Practices (BMPS) for CSOs	6 NYCRR 750-2.8(a)(2)
Environmental Benefits Permit Strategy (EBPS)	6 NYCRR 750-1.18, NYS ECL 17-0817(4), TOGS 1.2.2 (revised January 25,2012)
Exceptions for Type I SSO Outfalls (bypass)	6 NYCRR 750-2.8(b)(2), 40 CFR 122.41
Mercury Multiple Discharge Variance	Division of Water Program Policy 1.3.10 (DOW 1.3.10)
Mixing Zone and Critical Water Information	TOGS 1.3.1 & Amendments
PCB Minimization Program	40 CFR Part 132 Appendix F Procedure 8, 6 NYCRR 750-1.13(a) and 750-1.14(f), and TOGS 1.2.1
Pollutant Minimization Program (PMP)	6 NYCRR 750-1.13(a), 750-1.14(f), TOGS 1.2.1
Schedules of Compliance	6 NYCRR 750-1.14
Sewage Pollution Right to Know (SPRTK)	NYS ECL 17-0826-a, 6 NYCRR 750-2.7
State Administrative Procedure Act (SAPA)	State Administrative Procedure Act Section 401(2), 6 NYCRR 621.11(l)
State Environmental Quality Review (SEQR)	6 NYCRR Part 617
USEPA Effluent Limitation Guidelines (ELGs)	40 CFR Parts 405-471
USEPA National CSO Policy	33 USC Section 1342(q)
Whole Effluent Toxicity (WET) Testing	TOGS 1.3.2
General Provisions of a SPDES Permit Department Request for Additional Information	NYCRR 750-2.1(i)

Outfall and Receiving Water Information

Impaired Waters

The NYS 303(d) List of Impaired/TMDL Waters identifies waters where specific best usages are not fully supported. The state must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) that restrict waterbody uses, in order to restore and protect such uses. SPDES permits must include effluent limitations necessary to implement a waste load allocation (WLA) of an EPA-approved TMDL (6 NYCRR 750-1.11(a)(5)(ii)), if applicable. In accordance with 6 NYCRR 750-1.13(a), permittees discharging to waters which are on the list but do not yet have a TMDL developed may be required to perform additional monitoring for the parameters causing the impairment. Accurate monitoring data is needed

to determine the existing capabilities of the wastewater treatment plants and to assure that WLAs are allocated equitably.

Interstate Water Pollution Control Agencies

Some POTWs may be subject to regulations of interstate basin/compact agencies including: Interstate Sanitation Commission (ISC), International Joint Commission (IJC), Delaware River Basin Commission (DRBC), Ohio River Valley Water Sanitation Commission (ORSANCO), and the Susquehanna River Basin Commission (SRBC). Generally, basin commission requirements focus principally on water quality and not treatment technology. However, interstate/compact agency regulations for the ISC, IJC, DRBC and NYC Watershed contain explicit effluent limits which must be addressed during permit drafting. 6 NYCRR 750-2.1(d) requires SPDES permits for discharges that originate within the jurisdiction of an interstate water pollution control agency, to include any applicable effluent standards or water quality standards (WQS) promulgated by that interstate agency.

Existing Effluent Quality

The existing effluent quality is determined from a statistical evaluation of effluent data in accordance with TOGS 1.2.1 and the USEPA Office of Water, Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E (TSD). The existing effluent quality is equal to the 95th (monthly average) and 99th (daily maximum) percentiles of the lognormal distribution of existing effluent data. When there are greater than three non-detects, a delta-lognormal distribution is assumed, and delta-lognormal calculations are used to determine the monthly average and daily maximum pollutant concentrations. Statistical calculations are not performed for parameters where there are less than ten data points. If additional data is needed, a monitoring requirement may be specified either through routine monitoring or a short-term high intensity monitoring program. The Pollutant Summary Table identifies the number of sample data points available.

Permit Requirements

Basis for Effluent Limitations

Sections 101, 301, 304, 308, 401, 402, and 405 of the CWA and Titles 5, 7, and 8 of Article 17 ECL, as well as their implementing federal and state regulations, and related guidance, provide the basis for the effluent limitations and other conditions in the permit.

When conducting a full technical review of an existing permit, the previous effluent limitations form the basis for the next permit. Existing effluent quality is evaluated against the existing effluent limitations to determine if these should be continued, revised, or deleted. Generally, existing limitations are continued unless there are changed conditions at the facility, the facility demonstrates an ability to meet more stringent limitations, or in response to updated regulatory requirements. Pollutant monitoring data is also reviewed to determine the presence of additional contaminants that should be included in the permit based on a reasonable potential analysis to cause or contribute to a water quality standards violation.

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law[20] and USEPA interpretation[21] anti-backsliding requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

[20] American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)
[21] U.S. EPA, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; 65 Fed. Reg. 31682, 31704 (May 18, 2000); Proposed Water Quality Guidance for the Great Lakes System, 58 Fed. Reg. 20802, 20837 & 20981 (April 16, 1993)

Antidegradation Policy

New York State implements the antidegradation portion of the CWA based upon two documents: (1) Organization and Delegation Memorandum #85-40, "Water Quality Antidegradation Policy" (September 9, 1985); and, (2) TOGS 1.3.9, "Implementation of the NYSDEC Antidegradation Policy – Great Lakes Basin (Supplement to Antidegradation Policy dated September 9, 1985) (undated)." The permit for the facility contains effluent limitations which ensure that the existing best usage of the receiving waters will be maintained. To further support the antidegradation policy, SPDES applications have been reviewed in accordance with the State Environmental Quality Review Act (SEQR) as prescribed by 6 NYCRR Part 617.

Effluent Limitations

In developing a permit, the DEC determines the technology-based effluent limitations (TBELs) and then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in the receiving water might result. If there is a reasonable potential for exceedances of water quality criteria to occur, water quality-based effluent limitations (WQBELs) are developed. A WQBEL is designed to ensure that the water quality standards of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL.

Technology-based Effluent Limitations (TBELs)

CWA sections 301(b)(1)(B) and 304(d)(1), 40 CFR 133.102, ECL section 17-0509, and 6 NYCRR 750-1.11 require technology-based controls, known as secondary treatment. These and other requirements are summarized in TOGS 1.3.3. Where the TBEL is more stringent than the WQBEL, the TBEL is applied as a limit in accordance with TOGS 1.3.3. Equivalent secondary treatment, as defined in 40 CFR 133.105, allow for effluent limitations of the more stringent of the consistently achievable concentrations or monthly/weekly averages of 45/65 mg/L, and the minimum monthly average of at least 65% removal. Consistently achievable concentrations are defined in 40 CFR 133.101(f) as the 95th percentile value for the 30-day (monthly) average effluent quality achieved by the facility in a period of two years. The achievable 7-day (weekly) average value is equal to 1.5 times the 30-day average value calculated above. Equivalent secondary treatment applies to those facilities where the principal treatment process is either a trickling filter or a waste stabilization pond; the treatment works provides significant biological treatment of municipal wastewater; and, the effluent concentrations consistently achievable through proper operation and maintenance of the facility cannot meet traditional secondary treatment requirements. There are no federal technology-based standards for toxic pollutants from POTWs. A statistical analysis of existing effluent data, as described in TOGS 1.2.1, may be used to establish other performance-based TBELs.

Water Quality-Based Effluent Limitations (WQBELs)

In addition to the TBELs, permits must include additional or more stringent effluent limitations and conditions, including those necessary to protect water quality. CWA sections 101 and 301(b)(1)(C), 40 CFR 122.44(d)(1), and 6 NYCRR 750-1.11 require that permits include limitations for all pollutants or parameters which are or may be discharged at a level which may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. Additionally, 6 NYCRR 701.1 prohibits the discharge of pollutants that will cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge. Water quality standards can be found under 6 NYCRR Parts 700-704. The limitations must be stringent enough to ensure that water quality standards are met at the point of discharge and in downstream waters and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1, 1.3.2, 1.3.5 and 1.3.6. The DEC considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

Mixing Zone Analyses

In accordance with TOGS 1.3.1., the DEC may perform additional analysis of the mixing condition between the effluent and the receiving waterbody. Mixing zone analyses using plume dispersion modeling are conducted in accordance with the following:

"EPA Technical Support Document for Water Quality-Based Toxics Control" (March 1991); EPA Region VIII's "Mixing Zones and Dilution Policy" (December 1994); NYSDEC TOGS 1.3.1, "Total Maximum Daily Loads and Water Quality-Based Effluent Limitations" (July 1996); "CORMIX v11.0" (2019).

Critical Flows

In accordance with TOGS 1.2.1 and 1.3.1, WQBELs are developed using dilution ratios that relate the critical low flow condition of the receiving waterbody to the critical effluent flow. The critical low flow condition used in the dilution ratio will be different depending on whether the limitations are for aquatic or human health protection. For chronic aquatic protection, the critical low flow condition of the waterbody is typically represented by the 7Q10 flow and is calculated as the lowest average flow over a 7-day consecutive period within 10 years. For acute aquatic protection, the critical low flow condition is typically represented by the 1Q10 and is calculated as the lowest 1-day flow within 10 years. However, NYSDEC considers using 50% of the 7Q10 to be equivalent to the 1Q10 flow. For the protection of human health, the critical low flow condition is typically represented by the 30Q10 flow and is calculated as the lowest average flow over a 30-day consecutive period within 10 years. However, NYSDEC considers using 1.2 x 7Q10 to be equivalent to the 30Q10. The 7Q10 or 30Q10 flow is used with the critical effluent flow to calculate the dilution ratio. The critical effluent flow can be the maximum daily flow reported on the permit application, the maximum of the monthly average flows from discharge monitoring reports for the past three years, or the facility design flow. When more than one applicable standard exists for aquatic or human health protection for a specific pollutant, a reasonable potential analysis is conducted for each applicable standard and corresponding critical flow to ensure effluent limitations are sufficiently stringent to ensure all applicable water quality standards are met as required by 40 CFR 122.44(d)(1)(i). For brevity, the pollutant summary table reports the results of the most conservative scenario.

Reasonable Potential Analysis (RPA)

The Reasonable Potential Analysis (RPA) is a statistical estimation process, outlined in the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (TSD), Appendix E. This process uses existing effluent quality data and statistical variation methodology to project the maximum amounts of pollutants that could be discharged by the facility. This projected instream concentration (PIC) is calculated using the appropriate ratio and compared to the water quality standard (WQS). When the RPA process determines the WQS may be exceeded, a WQBEL is required. The procedure for developing WQBELs includes the following steps:

1) identify the pollutants present in the discharge(s) based upon existing data, sampling data collected by the permittee as part of the permit application or a short-term high intensity monitoring program, or data gathered by the DEC;

2) identify water quality criteria applicable to these pollutants;

3) determine if WQBELs are necessary (i.e. reasonable potential analysis (RPA)). The RPA will utilize the procedure outlined in Chapter 3.3.2 of EPA's Technical Support Document (TSD). As outlined in the TSD, for parameters with limited effluent data the RPA may include multipliers to account for effluent variability; and,

4) calculate WQBELs (if necessary). Factors considered in calculating WQBELs include available dilution of effluent in the receiving water, receiving water chemistry, and other pollutant sources.

The DEC uses modeling tools to estimate the expected concentrations of the pollutant in the receiving water and develop WQBELs. These tools were developed in part using the methodology referenced above. If the estimated concentration of the pollutant in the receiving water is expected to exceed the ambient water quality standard or guidance value (i.e. numeric interpretation of a narrative water quality standard), then there is a reasonable potential that the discharge may cause or contribute to an exceedance of any State water quality standard adopted pursuant to

NYS ECL 17-0301. If a TMDL is in place, the facility's WLA for that pollutant is applied as the WQBEL.

For carbonaceous and nitrogenous oxygen demanding pollutants, the DEC uses a model which incorporates the Streeter-Phelps equation. The equation relates the decomposition of inorganic and organic materials along with oxygen reaeration rates to compute the downstream dissolved oxygen concentration for comparison to water quality standards.

The Division of Water has been using the TMDL approach in permit limit development for the control of toxic substances. Since the early 1980's, the loading capacity for specific pollutants has been determined for each drainage basin. Water quality-limiting segments and pollutants have been identified, TMDLs, wasteload allocations and load allocations have been developed, and permits with water quality-based effluent limits have been issued. In accordance with TOGS 1.3.1, the Division of Water implements a Toxics Reduction Strategy which is committed to the application of the TMDL process using numeric, pollutant-specific water quality standards through the Watershed Approach. The Watershed Approach accounts for the cumulative effect of multiple discharges of conservative toxic pollutants to ensure water quality standards are met in downstream segments.

Whole Effluent Toxicity (WET) Testing:

WET tests use small vertebrate and invertebrate species to measure the aggregate toxicity of an effluent. There are two different durations of toxicity tests: acute and chronic. Acute toxicity tests measure survival over a 96-hour test exposure period. Chronic toxicity tests measure reductions in survival, growth, and reproduction over a 7-day exposure. TOGS 1.3.1 includes guidance for determining when aquatic toxicity testing should be included in SPDES permits. The authority to require toxicity testing is in 6 NYCRR 702.9. TOGS 1.3.2 describes the procedures which should be followed when determining whether to include toxicity testing in a SPDES permit and how to implement a toxicity testing program. Per TOGS 1.3.2, WET testing may be required when any one of the following seven criteria are applicable:

1. There is the presence of substances in the effluent for which ambient water quality criteria do not exist.
2. There are uncertainties in the development of TMDLs, WLAs, and WQBELs, caused by inadequate ambient and/or discharge data, high natural background concentrations of pollutants, available treatment technology, and other such factors.
3. There is the presence of substances for which WQBELs are below analytical detectability.
4. There is the possibility of complex synergistic or additive effects of chemicals, typically when the number of metals or organic compounds discharged by the permittee equals or exceeds five.
5. There are observed detrimental effects on the receiving water biota.
6. Previous WET testing indicated a problem.
7. POTWs which exceed a discharge of 1 MGD. Facilities of less than 1 MGD may be required to test, e.g., POTWs <1 MGD which are managing industrial pretreatment programs.

Minimum Level of Detection

Pursuant to 40 CFR 122.44(i)(1)(iv) and 6 NYCRR 750-2.5(d), SPDES permits must contain monitoring requirements using sufficiently sensitive test procedures approved under 40 CFR Part 136. A method is "sufficiently sensitive" when the method's minimum level (ML) is at or below the level of the effluent limitation established in the permit for the measured pollutant parameter; or the lowest ML of the analytical methods approved under 40 CFR Part 136. The ML represents the lowest level that can be measured within specified limitations of precision and accuracy during routine laboratory operations on most effluent matrices. When establishing effluent limitations for a specific parameter (based on technology or water quality requirements), it is possible that the calculated limitation will fall below the ML established by the approved analytical method(s). In these instances, the calculated limitation is included in the permit with a compliance level set equal to the ML of the most sensitive method.

Monitoring Requirements

CWA section 308, 40 CFR 122.44(i), 6 NYCRR 750-1.13, and 750-2.5 require that monitoring be included in permits to determine compliance with effluent limitations. Additional effluent monitoring may also be required to gather data to determine if effluent limitations may be required. The permittee is responsible for conducting the monitoring and reporting results on Discharge Monitoring Reports (DMRs). The permit contains the monitoring requirements for the facility. Monitoring frequency is based on the minimum sampling necessary to adequately monitor the facility's performance and characterize the nature of the discharge of the monitored flow or pollutant. Variable effluent flows and pollutant levels may be required to be monitored at more frequent intervals than relatively constant effluent flow and pollutant levels (6 NYCRR 750-1.13). For industrial facilities, sampling frequency is based on guidance provided in TOGS 1.2.1. For municipal facilities, sampling frequency is based on guidance provided in TOGS 1.3.3.

Other Conditions

Mercury

Mercury is widespread in New York State (NYS) waters at levels above the most stringent dissolved mercury water quality standard (WQS) of 0.7 ng/L. SPDES permittees cannot comply with a Water Quality-Based Effluent Limitation (WQBEL) for mercury. Therefore, an MDV is appropriate, in accordance with 6 NYCRR 702.17(h), "to address widespread standard or guidance value attainment issues including the presence of a ubiquitous pollutant or naturally high levels of a pollutant in a watershed." The first MDV was issued in October 2010 and subsequently revised and reissued in 2015 and 2020. Each iteration of the MDV builds off the previous version supporting the State's effort to reduce mercury pollution and make reasonable progress toward achieving the WQBEL for mercury. This iteration of the MDV refines the content and application of the MDV for mercury.

The MDV does not change the WQS of 0.7 ng/L; it establishes a variance of the WQBEL which is based on the WQS. SPDES permits which include this variance comply with 40 CFR 122.44.

DOW 1.3.10 explains which surface water permittees are eligible for the MDV.

Schedules of Compliance

Schedules of compliance are included in accordance with 40 CFR Part 132 Attachment F, Procedure 9, 40 CFR 122.47 and 6 NYCRR 750-1.14. Schedules of compliance are intended to, in the shortest reasonable time, achieve compliance with applicable effluent standards and limitations, water quality standards, and other applicable requirements. Where the time for compliance is more than nine months, the schedule of compliance must include interim requirements and dates for their achievement. If the time necessary to complete the interim milestones is more than nine months, and not readily divisible into stages for completion, progress reports must be required.

Emerging Contaminants

Emerging Contaminants, such as Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), and 1,4-Dioxane (1,4-D), have been used in a wide variety of consumer and industrial products as well as in manufacturing processes for decades. Based on available research, water quality assessments for 1,4-D will follow existing WQBEL development. PFOA and PFOS do not break down easily; therefore, their presence in wastewater can remain a concern for years following their discontinued use. As the science surrounding these contaminants is still evolving, additional monitoring is needed to better understand potential sources and background levels. For more information on emerging contaminants, please see the DEC Division of Water web page: Emerging Contaminants In NY's Waters - NYSDEC.

Schedule(s) of Additional Submittals

Schedules of Additional Submittals are used to summarize the deliverables required by the permit not identified in a separate Schedule of Compliance.