Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**4952**	NAICS Code:	**221320**	SPDES Number:	**NY0026301**
Discharge Class (CL):	**05**			DEC Number:	**7-3504-00006/00001**
Toxic Class (TX):	**T**			Effective Date (EDP):	**EDP**
Major-Sub Drainage Basin:	**07 - 01**			Expiration Date (ExDP):	**ExDP**
Water Index Number:	**Ont. 66**	Item No.:	**897 – 003**	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 Fulton**	Attention:	**DPW Commissioner**		
Street:	**Fulton Municipal Building** **141 South First St.**				
City:	**Fulton**	State:	**NY**	Zip Code:	**13069**
Email:	**csmith@cityoffulton.com**	Phone:	**(315) 592-7303**		

is authorized to discharge from the facility described below:

	Fulton Water Pollution Control Plant																	
	1690 State Route 48													**Oswego**				
	Fulton							**NY**						**13069**				
			43		**20**		**07**			**76**		**25**		**17**				
	008	Latitude:	**43**	°	**20**	’	**05**	” N	& Longitude:	**76**	°	**25**	’	**15**	” W			
Outfall Description:	**Treated Sanitary**		Receiving Water:		**Oswego River**				Class:	**B**				Standard:	**B**			

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.

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:
CO BWP - Permit Coordinator
BWP – Permit Writer
CO BWC - SCIS
RWE
RPA
EPA Region II
NYSEFC

Permit Administrator:			
Address:	625 Broadway Albany, NY 12233-1750		
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 department 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 Department.
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

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
008	All Year	Oswego River	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly Average	3.4	MGD			Continuous	Meter		X	
pH	Daily Minimum	6.0	SU			2/day	Grab		X	
	Daily Maximum	9.0	SU							
Temperature	Daily Maximum	Monitor	ºC			2/day	Grab		X	
BOD_5	Monthly Average	37	mg/L	1000	lb/d	1/week	24-hr. Comp.	X	X	1
BOD_5	7-Day Average	56	mg/L	1600	lb/d	1/week	24-hr. Comp.		X	
Total Suspended Solids (TSS)	Monthly Average	39	mg/L	1100	lb/d	1/week	24-hr. Comp.	X	X	1
Total Suspended Solids (TSS)	7-Day Average	59	mg/L	1700	lb/d	1/week	24-hr. Comp.		X	
Settleable Solids	Daily Maximum	0.3	mL/L			2/day	Grab		X	
Ammonia (as N)	Monthly Average	Monitor	mg/L			1/month	24-hr. Comp.		X	
Total Phosphorus (as P)	Monthly Average	1.0	mg/L			1/week	24-hr. Comp.		X	
Total Cyanide (as CN)	Daily Maximum	Monitor	µg/L	2.7	lb/d	Quarterly	Grab		X	2
Total Mercury	Daily Maximum	50	ng/L			1/month	Grab		X	
Total Mercury	12 MRA	Monitor	ng/L			1/month	Calculated		X	3
Biennial Pollutant Scan						1/two years	-		X	4

EFFLUENT DISINFECTION Required All Year		Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Coliform, Fecal	30-Day Geometric Mean	200	No./ 100 mL			1/week	Grab		X	
Coliform, Fecal	7-Day Geometric Mean	400	No./ 100 mL			1/week	Grab		X	
Chlorine, Total Residual	Daily Maximum	2.0	mg/L			2/day	Grab		X	5

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			15	TUa	Quarterly	See footnote		X	6
WET - Acute Vertebrate	See footnote			15	TUa	Quarterly	See footnote		X	6
WET - Chronic Invertebrate	See footnote			100	TUc	Quarterly	See footnote		X	6

WET - Chronic Vertebrate	See footnote			100	TUc	Quarterly	See footnote		X	6

Footnotes on next page

FOOTNOTES:

1. Effluent shall not exceed 15% and 20% of influent concentration values for BOD_5 and TSS respectively.
2. Quarterly samples shall be collected in off-calendar quarters: Q1 – March 1st to May 31st; Q2 – June 1st to August 31st; Q3 – September 1st to November 30th; Q4 – December 1st to February 28th).
3. The 12-month rolling average for total mercury is defined as the sum of the current month's monthly average concentration added to the monthly averages from the eleven previous months, divided by the number of months for which samples were collected in the 12-month period.
4. 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. Data shall be submitted with the next submission of the NY-2A form.
5. 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.
6. **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 Department. 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 50:1 for acute, and 100:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

   Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 4 and 9 for the duration of the permit.

   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 Department 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 Department 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 March 24, 2022, certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and/or stormwater runoff. 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 NYSDEC website.

MERCURY MINIMIZATION PROGRAM (MMP) - Type I

1. General - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below, to reduce mercury effluent levels with the goal of achieving the WQBEL of 0.7 ng/L.
2. MMP Elements - The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements as described in detail below:
   a. Monitoring - Monitoring at Outfall 008, influent and other locations tributary to compliance points shall be performed using either USEPA Method 1631 or another sufficiently sensitive method, as approved under 40 CFR Part 136[1]. 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.

      Minimum required monitoring is as follows:
      i. Sewage Treatment Plant Influent and/or Effluent – The permittee must collect samples at the location(s) and frequency as specified in the SPDES permit limitations table.
      ii. *Key Locations* and *Potential Mercury Sources* – The permittee must sample *key locations*, chosen to identify *potential mercury sources*, at least semi-annually. Sampling of discharges from dental facilities in compliance with 6 NYCRR 374.4 is not required.
      iii. Hauled Wastes – The permittee must establish procedures for the acceptance of hauled waste to ensure the hauled waste is not a potential mercury source. Loads which may exceed 500 ng/L,[2] must receive approval from the Department prior to acceptance.
      iv. Decreased Monitoring Requirements - Facilities with EEQ at or below 12 ng/L are eligible for the following:
         1) Reduced requirements, through a permittee-initiated permit modification
            a) Conduct influent monitoring, sampling quarterly, in lieu of monitoring within the collection system, such as at *key locations*; and
            b) Conduct effluent compliance sampling quarterly.
         2) If a facility with reduced requirements reports discharges above 12 ng/L for two of four consecutive effluent samples, the Department may undertake a Department-initiated modification to remove the allowance of reduced requirements.
         3) Under the decreased permit requirements, the facility must continue to conduct a status report, as applicable in accordance with 2.c of this MMP, to determine if any waste streams have changed.
      v. Additional monitoring must be completed as required elsewhere in this permit (e.g., locations tributary to

[1] Outfall monitoring must be conducted using the methods specified in Table 8 of *DOW 1.3.10.*
[2] A level of 0.2 mg/L (200,000 ng/L) or more is considered hazardous per 40 CFR Part 261.11. 500 ng/L is used here to alert the permittee that there is an unusual concentration of mercury and that it will need to be managed appropriately.

compliance points).

b. Control Strategy - The control strategy must contain the following minimum elements:
   i. Pretreatment/Sewer Use Law - The permittee must review pretreatment program requirements and the Sewer Use Law (SUL) to ensure it is up-to-date and enforceable with applicable permit requirements and will support efforts to achieve a dissolved mercury concentration of 0.70 ng/L in the effluent.

MERCURY MINIMIZATION PROGRAM (MMP) - Type I (continued)

   ii. Monitoring and Inventory/Inspections -
      1) Monitoring shall be performed as described in 2.a above. As mercury sources are found, the permittee must enforce its sewer use law to track down and minimize these sources.
      2) The permittee must inventory and/or inspect users of its system as necessary to support the MMP.
         a) Dental Facilities
            1. The permittee must maintain an inventory of each dental facility.
            2. The permittee must inspect each dental facility at least once every five years to verify compliance with the wastewater treatment operation, maintenance, and notification elements of 6 NYCRR 374.4. Alternatively, the permittee may develop and implement an outreach program,[3] which informs users of their responsibilities, and collect the "Amalgam Waste Compliance Report for Dental Dischargers"[4] form, as needed, to satisfy the inspection requirements. The permittee must conduct the outreach program at least once every five years and ensure the "Amalgam Waste Compliance Report for Dental Dischargers" are submitted by new users, as necessary. The outreach program could be supported by a subset of site inspections.
            3. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)a) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.
         b) Other *potential mercury sources*
            1. The permittee must maintain an inventory of other *potential mercury sources.*
            2. The permittee must inspect other *potential mercury sources* once every five years. Alternatively, the permittee may develop and implement an outreach program which informs users of their responsibilities as *potential mercury sources.* The permittee must conduct the outreach program at least once every five years. The outreach program should be supported by a subset of site inspections.
            3. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)b) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.
   iii. Systems with CSO & Type II SSO Outfalls – Permittees must prioritize *potential mercury sources* upstream of CSOs and Type II SSOs for mercury reduction activities and/or controlled-release discharge.
   iv. Equipment and Materials – Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.
   v. Bulk Chemical Evaluation – For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. If possible, the permittee must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.

(MMP continued on next page)

[3] For example, the outreach program could include education about sources of mercury and what to do if a mercury source is found.
[4] 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)

c. **Status Report -** An annual status report must be developed and maintained on site in accordance with the Schedule of Additional Submittals, summarizing:
   i. All MMP monitoring results for the previous reporting period;
   ii. A list of known and *potential mercury sources*;
      1) If the permittee meets the criteria for MMP Type IV, the permittee must notify the Department for a permittee-initiated modification;
   iii. All actions undertaken, pursuant to the control strategy, during the previous reporting period;
   iv. Actions planned, pursuant to the control strategy, for the upcoming reporting period; and
   v. Progress towards achieving a dissolved mercury concentration of 0.70 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation and/or installation/modification of a treatment system).

   The permittee must maintain a file with all MMP documentation. The file must be available for review by Department representatives and copies must be provided upon request in accordance with 6 NYCRR 750-2.1(i) and 750-2.5(c)(4).

3. MMP Modification - The MMP must be modified whenever:
   a. Changes at the facility, or within the collection system, increase the potential for mercury discharges;
   b. Effluent discharges exceed the current permit limitation(s); or
   c. A letter from the Department identifies inadequacies in the MMP.

   The Department may use information in the status reports, as applicable in accordance with 2.c of this MMP, to determine if the permit limitations and MMP Type is appropriate for the facility.

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) Upon request, the permittee shall make available electronic or hard copies of the sampling data to the public. 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.

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 entitled Development of an Industrial Pretreatment Program, City of Fulton, dated November 1983, submitted in accordance with 40 CFR 403.11 or 403.18 and approved by USEPA on September 28, 1984.

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 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.

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 Department or the USEPA determines any source contributes pollutants to the POTW in violation of Pretreatment Standards or Requirements the Department 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 NYSDEC, and USEPA as long as USEPA remains the approval authority, 60 days prior to any major proposed change in the sludge disposal plan. NYSDEC 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).

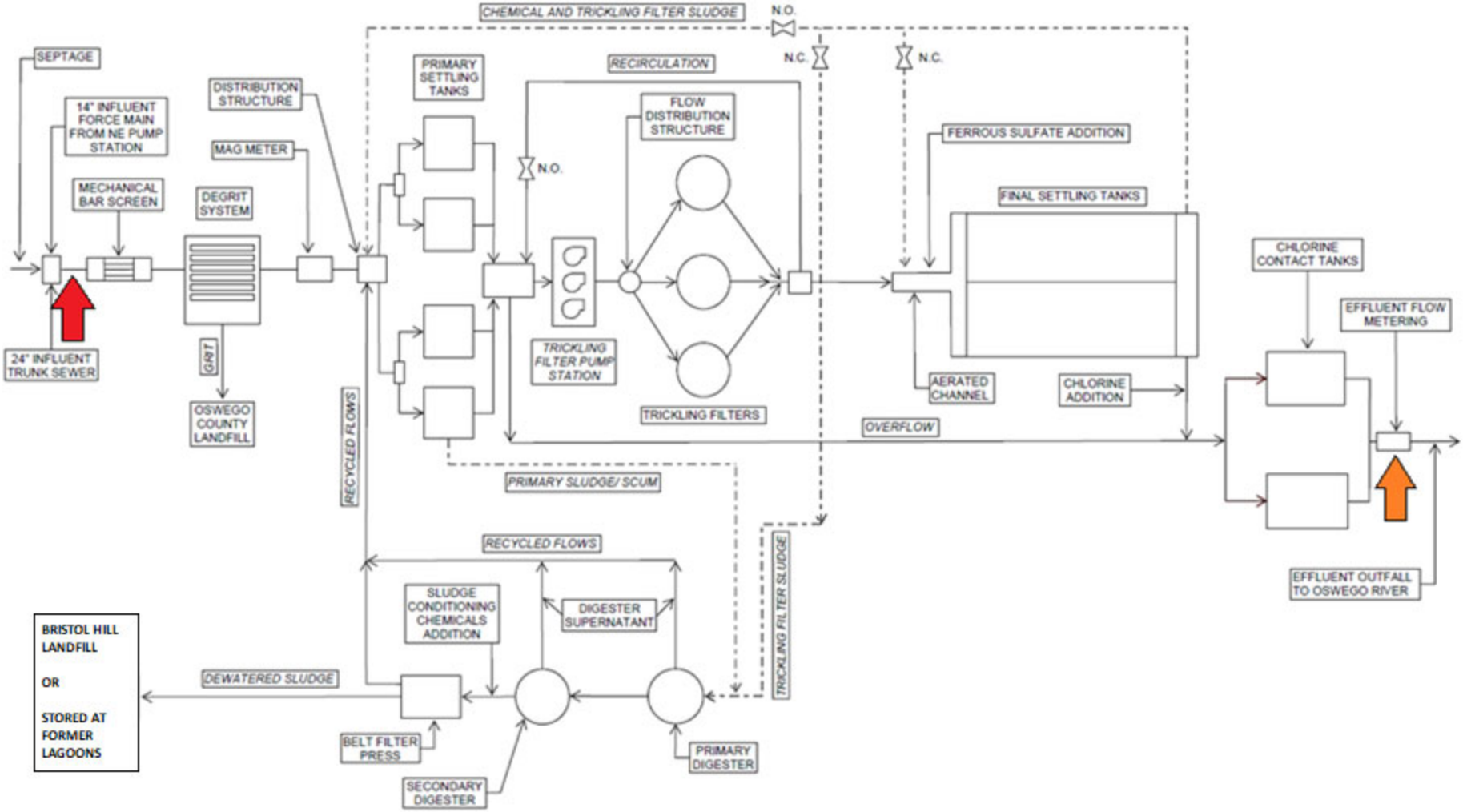
2. Implementation Status: Status of Program Implementation, to include:
   a) Any interference, upset or permit violations experienced at the POTW directly attributable to industrial users.
   b) Listing of SIUs issued permits.
   c) Listing of SIUs inspected and/or monitored during the previous reporting 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: Facility shall notify the NYSDEC prior to the addition 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)). The noticed act is prohibited until the Department determines whether a permit modification is necessary pursuant to 750-2.9(a)(2).

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: Sampling location after 24” influent trunk sewer before mechanical bar screen, indicated by red arrow

Effluent: Sampling location at effluent flow metering, indicated by orange arrow

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)(94) & 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. The permittee shall give notice to the Department as soon as possible of 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 Department, 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.

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 Department, 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 Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The Department will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. 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 Department. 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 Department.
   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 Department'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 Department or its designated agent.

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

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by NYSDEC. Instructions on the use of NetDMR can be found at https://www.dec.ny.gov/chemical/103774.html. **Hardcopy paper DMRs will only be received at the address listed below, directed to the Bureau of Water Compliance, 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 RWE 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 7
615 Erie Boulevard West, Syracuse, New York, 13204-2400 Phone: (315) 426-7500

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 Department'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.

SPDES Permit Fact Sheet
City of Fulton
Fulton Water Pollution Control Plant
NY 002 6301

NEW YORK STATE OF OPPORTUNITY | Department of Environmental Conservation

Contents

Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) EBPS permit renewal has been drafted for the Fulton Water Pollution Control Plant (WPCP). The changes to the permit are summarized below:

- Updated permit format, definitions, monitoring locations diagram, discharge notification act language, and general conditions.
- Added Permittee contact information.
- Removed pump station sanitary sewer overflow (SSO) Outfalls 001, 002, 003, 004, 007, and 009, and list of additional outfalls.
- Permit limits, levels and monitoring – Outfall 008
    - Removed influent sampling requirements for pH, temperature, BOD5 and TSS 7-day average, settleable solids, and ammonia.
    - Rounded BOD_5 and TSS mass loading monthly average and 7-day average limits to two significant figures.
    - Updated ammonia monitoring from "as NH_3" to "as N," and reduced frequency from 1/week to 1/month.
    - Removed Total Kjeldahl Nitrogen (TKN) monitoring.
    - Added concentration monitoring for total cyanide (load limit is unchanged).
    - Reduced daily max mercury concentration limit from 200 ng/L to 50 ng/L.
        - Added 12-month rolling average monitoring requirement.
    - Added requirement for the biennial pollutant scan.
    - Removed action levels for: copper, aluminum, cadmium, chromium, lead, nickel, zinc, methylene chloride, bis (2-ethylhexyl) phthalate, di-n-butyl phthalate, total phenols, 4-methylphenol, 2-methylnaphthalene, and iron.
    - Added whole effluent toxicity (WET) testing.
    - Added and updated corresponding footnotes.
- Added Stormwater Pollution Prevention language.
- Added Mercury Minimization Program (MMP) Type I requirements.
- Added Section E. for "Notification of Material Change" to the industrial pretreatment requirements.
- Added a schedule of additional submittals.
    - Changed due date for annual Industrial Pretreatment Program Report from 30 to 60 days after the end of the reporting period.

This factsheet 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 factsheet.

Administrative History

8/29/2007 The last full technical review was performed and the modified SPDES permit became effective. The 2004 permit, along with all subsequent modifications, has formed the basis of this permit.

The permit was administratively renewed in 2009 and again in 2014. The current permit administrative renewal was effective until 6/30/2019.

6/30/2019 The current permit was extended pursuant to SAPA[1].

12/7/2016 Permit was modified to include a new plant schematic identifying new flow monitoring location at effluent stream.

9/15/2010 Permit was modified to include changes to the Industrial Pretreatment Program after the construction of sewer extension.

12/2/2021 Department issued a Request for Information (RFI) to modify and renew the SPDES permit due to the facility's EBPS score[2]. At the time of the RFI, the facility had an EBPS score of 160.

3/24/2022 The City of Fulton submitted an 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 (POTW) that receives flow from domestic and industrial users, including waste from categorical industrial users, with effluent consisting of treated sanitary and process wastewater. The collection system consists of both separate and combined sewers. Approximately 0.5 miles of the total 66 miles of collection system is combined sewer, with no Combined Sewer Overflows (CSOs).

The current 3.4 MGD treatment plant consists of:

- Preliminary Treatment: Screening, Grit Removal
- Primary Treatment: Primary Settling Tanks
- Secondary Treatment: Trickling Filters, Final Settling Tanks
- Disinfection: Chlorine

Sludge is digested anaerobically, pressed, and hauled to Bristol Hill Landfill (owned by Oswego County) or on the WPCP site where the former lagoons used to be.

The primary outfall (Outfall 008) is located 5 ft. from the bank of the Oswego River (Class B) and consists of a 48 in. pipe submerged at normal flow conditions.

[1] State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(*l*)
[2] Pursuant to 6 NYCRR 750-1.18 and NYS Environmental Benefit Permit Strategy (EBPS)

The Permittee is planning several facility upgrades/improvements to their biosolids handling, secondary clarifiers, trickling filters, and disinfection. A Preliminary Engineering Report dated June 1, 2022, was submitted to DEC and approved by letter dated July 6, 2022. Construction is estimated for 2023-2025. The scope of the work does not increase the permitted flow and is not expected to affect their SPDES permit limits.

The facility accepts wastewater from the following municipalities:

Municipality	POSS # or SPDES #	Collection System
City of Fulton	NY 002 6301	Separate[3]
Town of Granby	NYS700069	Separate
Town of Volney	NYS700011	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)
Attis Ethanol, LLC	2869	Part 414
Huhtamaki Company	2654	NA
K&N Foods USA	5144	NA
Oswego County Landfill	4953	Part 445

The Permittee also has known Sanitary Sewer Overflow (SSO) discharges. Type I SSOs are classified as permanent emergency overflow structures which are intended only for emergency discharges and are typically located at pump stations or the headworks of the treatment plant. Discharge from these outfalls is prohibited, with limited exceptions[4]; therefore, these outfalls are being removed from the permit. Each discharge event is evaluated against emergency discharge criteria and must be reported in accordance with the Sewage Pollution Right to Know Act (SPRTK)[5].

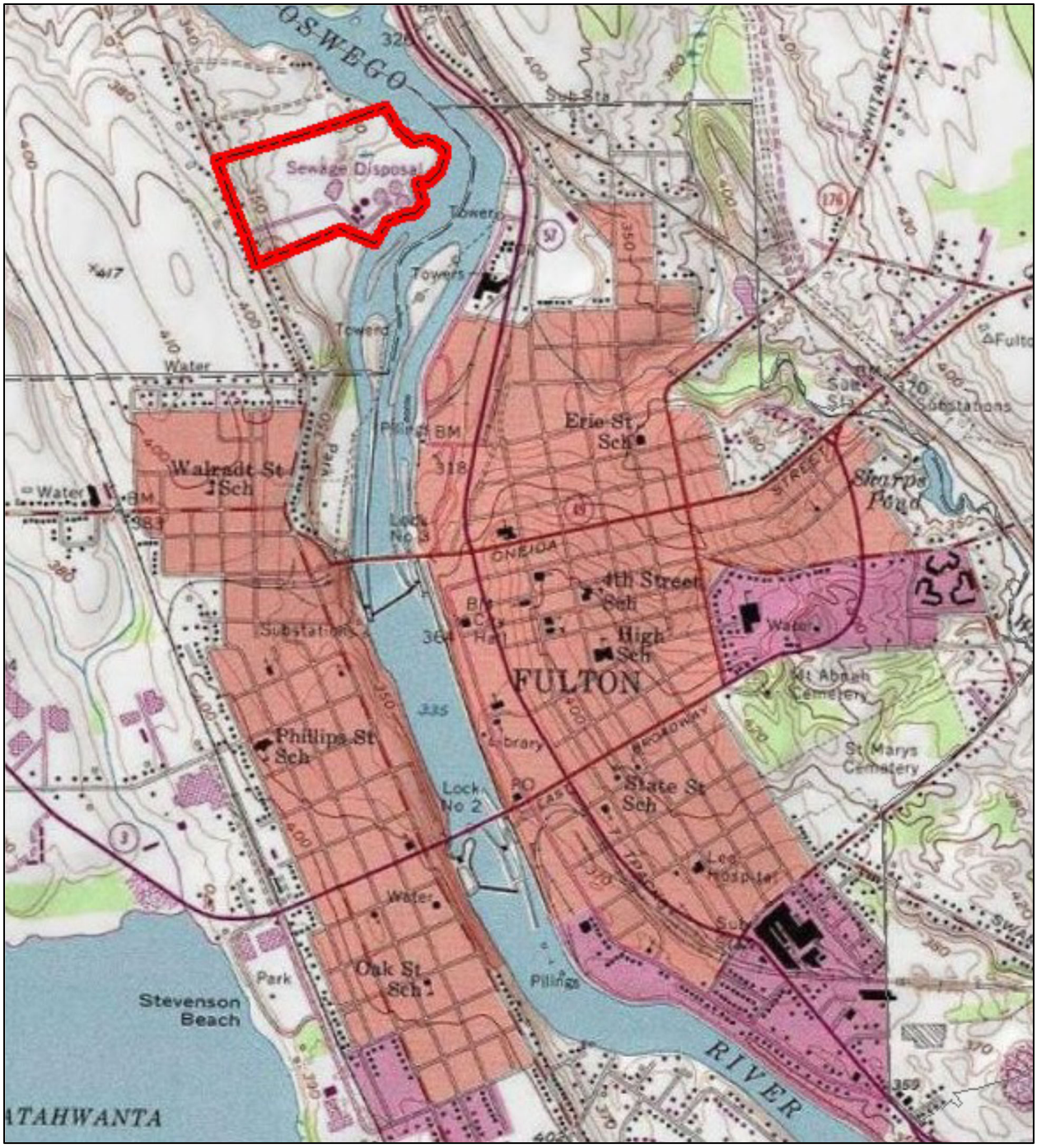
The following Type I SSO outfalls have been removed from the permit:

- SSO Outfall 001 – Northeast Pump Station Overflow, North First Street
- SSO Outfall 002 – Southeast Pump Station Overflow, Union Street
- SSO Outfall 003 – Southwest Pump Station Overflow, Green Street
- SSO Outfall 004 – Forest Avenue Pump Station Overflow
- SSO Outfall 007 – East Edgewater Drive Pump Station Overflow
- SSO Outfall 009 – 24” Trunk Sewer Overflow Manhole, Wroth Street and Foster Park Access Road

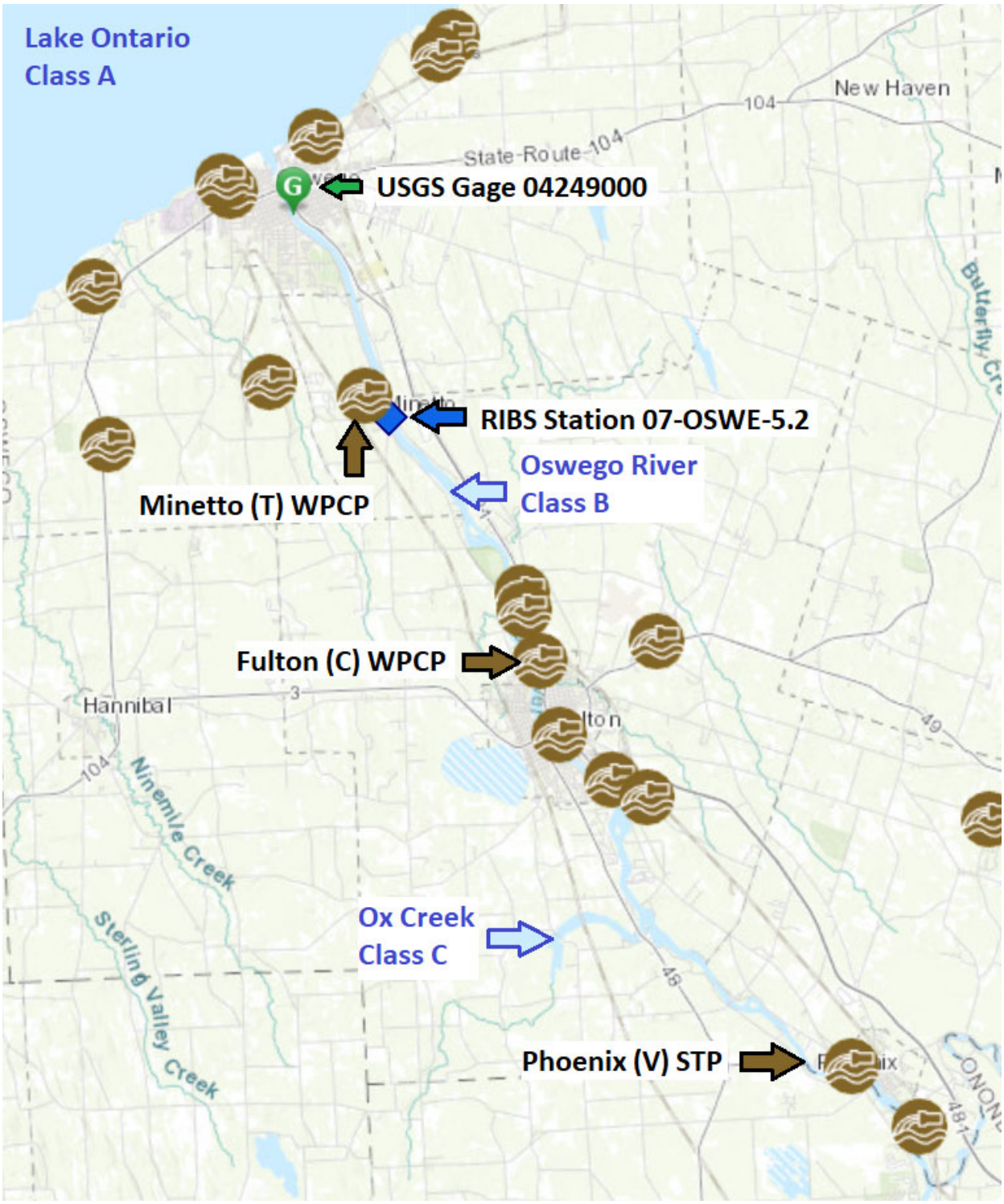
[3] The City of Fulton collection system consists of 65 miles of separate sewer and approximately 0.5 miles of combined sewer. There are no combined sewer overflows (CSOs) in the relatively short combined sewer section.
[4] Exceptions noted in 6 NYCRR 750-2.8(b)(2) and 40 CFR § 122.41(m)(4)(i)
[5] NYS Environmental Conservation Law Section 17-0826-a and 6 NYCRR 750-2.7

Site Overview

Satellite view of the City of Fulton WPCP showing the main outfall and receiving waterbody.



Map showing City of Fulton WPCP location (red outline).



Map showing location of the City of Fulton WPCP, Oswego River, gage stations used for ambient data, and significant nearby facilities. Approximate distances from Fulton (C) WPCP:

- Phoenix (V) STP – 10 miles upstream
- Confluence with Ox Creek – 5 miles upstream
- RIBS Station 07-OSWE-5.2 – 6 miles downstream
- Minetto (T) WPCP – 6 miles downstream
- USGS Gage 04249000 – 11 miles downstream

Enforcement History

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 (EEQ) and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports submitted by the Permittee for the period 2017-2022, and the NY-2A application. Appendix Link

Interstate Water Pollution Control Agencies

Outfall 008 is located within the Great Lakes watershed and International Joint Commission (IJC) compact area. Appendix Link

Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
008	4952	Treated sanitary and process wastewater	Oswego River, Class B
SSO Outfall 001 – Removed from Permit			
SSO Outfall 002 – Removed from Permit			
SSO Outfall 003 – Removed from Permit			
SSO Outfall 004 – Removed from Permit			
SSO Outfall 007 – Removed from Permit			
SSO Outfall 009 – Removed from Permit			

Impaired Waterbody Information

The Oswego River segment (PWL No. 0701-0006) was first listed on the 1998 New York State Section 303(d) List of Impaired/TMDL Waters as impaired due to PCBs from contaminated sediment. The segment continues to be listed as of the 2018 NYS Section 303(d) List. The Draft 2020-2022 NYS Section 303(d) List (public notice date December 29, 2021) proposed to remove the PCB impairment listing due to flaws in the original analysis; and proposed to add an impairment listing for total dissolved solids. A TMDL has not been developed to address these impairments, and therefore, there are no applicable wasteload allocations (WLAs) for this facility at this time.

Critical Receiving Water Data & Mixing Zone

The low flow condition for the Oswego River, Lower Main Stem was obtained from a drainage basin ratio analysis with USGS gage station 04249000, OSWEGO RIVER AT LOCK 7, OSWEGO NY, located 11 miles downstream at 43º 27' 06" N, 76º 30' 19" W. The 1Q10, 7Q10 and 30Q10 flows at the gage were found from the USGS SW Toolbox software and an analysis of data from 1900 to 2021.

DRAINAGE BASIN RATIO	1Q10	7Q10	30Q10
Gage Name	OSWEGO RIVER AT LOCK 7, OSWEGO NY		
Gage ID Number	04249000		
Low Flow at Gage (cfs)	420	884	1035
Drainage Area at Gage (mi^2)	5100	5100	5100
Drainage Area at Facility (mi^2)	5020	5020	5020
Drainage Basin Ratio (facility / gage)	0.98	0.98	0.98
Calculated Flow at Facility (cfs)	**414**	**870**	**1019**
Calculated Flow at Facility (MGD)	**267**	**562**	**658**

The 1Q10, 7Q10, and 30Q10 flows were used to calculate the acute, chronic, and human, aesthetic, wildlife (HEW) dilution ratios, 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
008	50:1	100:1	100:1	TOGS 1.3.1

Consistent with TOGS 1.3.1, for large rivers, acute and chronic dilution ratios are limited to a max of 50:1 and 100:1 respectively. 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

The facility is greater than 1 MGD and has been given new requirements for WET testing. No previous WET data was available to perform a reasonable potential analysis. Consistent with TOGS 1.3.2, given the dilution available and location within the Great Lakes basin, the permit requires chronic WET testing. WET testing action levels of 15 TUa and 100 TUc have been included in the permit for each species. The acute action level for each species represent the acute dilution ratio times a factor of 0.3. The chronic action levels represent the chronic dilution ratio. Samples will be collected quarterly in years ending in 3 and 8. Appendix Link

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)[6] determination. Appendix Link

[6] As prescribed by 6 NYCRR Part 617

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 is being continued from the previous permit.

Additionally, the permit contains a requirement to make the DMR sampling data available to the public upon request. This requirement has been continued 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 March 24, 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 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.

Mercury[7]

The multiple discharge variance (MDV) for mercury provides the framework for NYSDEC to require mercury monitoring and mercury minimization programs (MMPs), through SPDES permitting. Appendix Link

The facility is an EPA Major, Class 05 POTW located in the Great Lakes and the permit has been updated to include requirements for the implementation of MMP Type I. This requirement is new.

Based on 10 mercury effluent samples collected from 2017- 2022, the facility is expected to meet the new daily max permit limit of 50 ng/L, sampled monthly. The limit represents the general level currently achievable (GLCA). The data collected will be used to establish an additional 12-month rolling average effluent limit during the next permit review.

A mercury minimization program consisting of the following is also required:

- Additional monitoring at key locations
- Control strategy for implementation of the MMP
- Annual status report (maintained onsite)

Biennial Pollutant Scan

Three effluent samples for applicable parameters must be submitted with an NY-2A Application[8]. 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 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 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. The due date for the

[7] In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.
[8] Pursuant to 40 CFR 122.21(j)(4)(vi).

annual Industrial Pretreatment Program Report has been changed from 30 to 60 days after the end of the reporting period to provide additional time to prepare and submit.

Schedule(s) of Compliance

A Schedule of Compliance is being included[9] for attainment of final effluent limits for total mercury of 50 ng/L (see Mercury Section & Appendix Link):

- The treatment facility is currently unable to meet the GLCA and a significant amount of time is needed to properly plan and implement the newly required Mercury Minimization Program (MMP) and track down requirements.
- The schedule includes submittal of semi-annual mercury minimization status reports summarizing the monitoring and control actions taken during the previous reporting period, actions planned for the upcoming reporting period, and progress towards achieving the final effluent limitation.

Schedule(s) of Additional Submittals

A schedule of additional submittals has been included for the following (Appendix Link):

- Water Treatment Chemical (WTC) Annual Report Form
- Annual Flow Certification
- Biennial Pollutant Scan
- Whole Effluent Toxicity (WET) Testing
- Stormwater No Exposure Certification
- Mercury Minimization Plan (MMP) Status Report
- Pretreatment Program Annual Report

[9] Pursuant to 6 NYCRR 750-1.14

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 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
008	43° 20' 05" N	76° 25' 15" W	Oswego River, Lower, Main Stem	B	Ont. 66 PWL: 0701-0006	07 / 01	206[10]	267	562	658	3.4	50:1	100:1	100:1

POLLUTANT SUMMARY TABLE

Outfall 008

Outfall #	008	**Description of Wastewater:** Treated Sanitary Sewage and Process Wastewater													
		Type of Treatment: Screening, Grit Removal, Primary Settling Tanks, Trickling Filters, Final Settling Tanks, Chlorine Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[11]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 3/31/2017 to 2/28/2022 was obtained from Discharge Monitoring Reports provided by the Permittee. All applicable water quality standards (WQS) were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	MGD	Monthly Avg	3.4	1.8 Average	60 / 0	**3.4**	Design Flow	Narrative: No alterations that will impair the waters for their best usages.					6 NYCRR 703.2	-	TBEL
	Consistent with TOGS 1.3.3, a monthly average flow limitation equal to the average daily design capacity of the treatment plant is specified.														
pH	SU	Minimum	6.0	6.59 Min	60 / 0	**6.0**	TOGS 1.3.3	7.6*	-	6.5 – 8.5	Range	-	6 NYCRR 703.3	-	TBEL
		Maximum	9.0	7.96 Max	60 / 0	**9.0**									
	Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given the available dilution an effluent limitation equal to the TBEL is reasonably protective of the WQS. *Ambient pH was obtained from RIBS Station 07-OSWE-5.2 in Minetto, NY as the average of 65 samples taken from 1995-2016.														
Temperature	°C	Daily Max	Monitor	24.4 Max	60 / 0	**Monitor**	6 NYCRR 750-1.13 Monitor	-	Narrative (Non-Trout): The water temperature at the surface of a stream shall not be raised to more than 90F at any point and... shall not be raised or lowered to more than 5F over the temperature that existed before the addition				6 NYCRR 704.2	-	Monitor
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions. This requirement has been continued from the previous permit.														

[10] Ambient hardness data obtained from RIBS Station 07-OSWE-5.2 in Minetto, NY as the average of 105 samples.

[11] Existing Effluent Quality (EEQ): Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 non-detects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 non-detects)

Outfall #	008	**Description of Wastewater:** Treated Sanitary Sewage and Process Wastewater **Type of Treatment:** Screening, Grit Removal, Primary Settling Tanks, Trickling Filters, Final Settling Tanks, Chlorine Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[11]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Basis for Permit Requirement
Dissolved Oxygen (DO) SUMMER 6/1 – 10/31	mg/L	Daily Min	-	-	-	-	-	-	7.3 Critical Point	(Non-Trout) 4.0 mg/L	Narrative	No Reasonable Potential	6 NYCRR 703.3	-	No Limitation
The downstream DO concentration was modeled using the Streeter-Phelps equations and the following assumptions: effluent DO = 2.0 mg/l (assumed value consistent with TOGS 1.3.1D), effluent BOD_5 = 56 mg/L (existing permit limit), effluent TKN = 24 mg/L (EEQ from 3/2017 – 2/2022), effluent temperature = 23.6°C (75th percentile of DMR summer data), ambient temperature = 25°C (assumed value consistent with TOGS 1.3.1D) Reach Description: The Village of Phoenix STP located ~10.3 miles upstream, additional flow from the confluence with Ox Creek ~5.3 miles upstream, and the Town of Minetto WPCP ~5.8 miles downstream. The model showed that DO standards are maintained and consequently WQBELs for DO and BOD are unnecessary and the TBELs are protective of water quality.														
Dissolved Oxygen (DO) WINTER 11/1 – 5/31	mg/L	Daily Min	-	-	-	-	-	-	10 Critical Point	(Non-Trout) 4.0 mg/L	Narrative	No Reasonable Potential	6 NYCRR 703.3	-	No Limitation
The downstream DO concentration was modeled using the Streeter-Phelps equations and the following assumptions: effluent DO = 2.0 mg/L (assumed value consistent with TOGS 1.3.1D), effluent BOD_5 = 56 mg/L (existing permit limit), effluent TKN = 24 mg/L (EEQ from 3/2017 – 2/2022), effluent temperature = 16°C (75th percentile of the DMR winter data), ambient temperature = 10°C (assumed value) Reach Description: The model included the Phoenix STP located ~10.3 miles upstream, additional flow from the confluence with Ox Creek ~5.3 miles upstream, and the Town of Minetto WPCP ~5.8 miles downstream. The model showed that DO standards are maintained and consequently WQBELs for DO and BOD are unnecessary and the TBELs are protective of water quality.														
5-day Biochemical Oxygen Demand (BOD_5)		Monthly Avg	37	21*	52 / 8	**37**	TOGS 1.3.3	-	See Dissolved Oxygen			No Reasonable Potential	6 NYCRR 703.3	-	TBEL
		7 Day Avg	56	38**	60 / 0	**56**	TOGS 1.3.3								
	lbs/d	Monthly Avg	1049	412	50 / 8	**1000**	TOGS 1.3.3								
		7 Day Avg	1574	1183	58 / 0	**1600**	TOGS 1.3.3								
	% Rem	Minimum	85	93 Avg	57 / 0	**85**	TOGS 1.3.3								
The permit includes equivalent to secondary treatment standards for operation of the trickling filters. Dissolved oxygen modeling showed TBELs for BOD_5 are protective of water quality. Due to the age and reliability concerns regarding the primary clarifiers (documented in inspection letters dated July 13, 2021, and July 8, 2022) the equivalent to secondary standards have been maintained. Consistent with 750-2.5(e)(2), the mass loading limitations have been adjusted to two significant digits. *The existing effluent quality of 21 mg/L was calculated as the 95th percentile of the delta-lognormal data set for BOD_5 monthly average. **The existing effluent quality of 38 mg/L was calculated as the 99th percentile of the lognormal data set for BOD_5 7-day average.														

Outfall #	008	**Description of Wastewater:** Treated Sanitary Sewage and Process Wastewater **Type of Treatment:** Screening, Grit Removal, Primary Settling Tanks, Trickling Filters, Final Settling Tanks, Chlorine Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[11]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Suspended Solids (TSS)	mg/L	Monthly Avg	39	14*	60 / 0	**39**	TOGS 1.3.3	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				6 NYCRR 703.2	-	TBEL
		7 Day Avg	59	26**	60 / 0	**59**	TOGS 1.3.3								
	lbs/d	Monthly Avg	1106	272	58 / 0	**1100**	TOGS 1.3.3								
		7 Day Avg	1659	814	58 / 0	**1700**	TOGS 1.3.3								
	% Rem	Minimum	80	96 Avg	60 / 0	**80**	TOGS 1.3.3								
	The permit includes equivalent to secondary treatment standards for operation of the trickling filters. Dissolved oxygen modeling showed TBELs for BOD_5 are protective of water quality. Due to the age and reliability concerns regarding the primary clarifiers (documented in inspection letters dated July 13, 2021, and July 8, 2022) the equivalent to secondary standards have been maintained. Consistent with 750-2.5(e)(2), the mass loading limitations have been adjusted to two significant digits. *The existing effluent quality of 14 mg/L was calculated as the 95th percentile of the lognormal data set for TSS monthly average. **The existing effluent quality of 26 mg/L was calculated as the 99th percentile of the lognormal data set for TSS 7-day average.														
Settleable Solids	mL/L	Daily Max	0.3	0.24	4 / 56	**0.3**	TOGS 1.3.3	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				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 is reasonably protective of WQS.														
Nitrogen, Ammonia (as N) June 1st – Oct. 31st	mg/L	Monthly Avg	Monitor	12 Max as NH_3 9.9 as N	24 / 1	**Monitor**	6 NYCRR 750-1.13 Monitor	0.082 as N	0.26 as NH_3 0.21 as N	1.5 as NH_3 1.2 as N	A(C)	No Reasonable Potential	6 NYCRR 703.5	-	Monitor
	The WQS for Ammonia was determined from TOGS 1.1.1 from a pH of 7.6 and a summer temperature of 25°C. The temperature of the receiving waterbody was an assumed value and consistent with TOGS 1.3.1E. The projected instream concentration was calculated using the maximum reported effluent concentration of 12 mg/L as NH_3 (9.9 mg/L as N) and an assumed ambient upstream concentration of 0.082 mg/L (consistent with TOGS 1.3.1D). A multiplier[12] of 1.30 was applied to the maximum effluent concentration to account for the number of samples. In accordance 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 no reasonable potential to cause or contribute to a WQS violation. Therefore, year-round monitoring will continue. The sampling frequency has been reduced from 1/week to 1/month. Reporting for Ammonia has been changed from (as NH_3) to (as N) for simpler data reporting, as this is consistent with the laboratory reporting units. Values can be converted using the equation: Ammonia (as N) = Ammonia (as NH_3) x 0.8224.														

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

Outfall #	008	**Description of Wastewater:** Treated Sanitary Sewage and Process Wastewater **Type of Treatment:** Screening, Grit Removal, Primary Settling Tanks, Trickling Filters, Final Settling Tanks, Chlorine Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[11]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Nitrogen, Ammonia (as N) Nov. 1st – May 31st	mg/L	Daily Max	Monitor	16 Max as NH_3 13 Max as N	32 / 2	**Monitor**	6 NYCRR 750-1.13 Monitor	0.082 as N	0.29 as NH_3 0.24 as N	2.2 as NH_3 1.9 as N	A(C)	No Reasonable Potential	6 NYCRR 703.5	-	Monitor
	The WQS for Ammonia was determined from TOGS 1.1.1 from a pH of 7.6 and a winter temperature of 10°C. The temperature of the receiving waterbody was an assumed value and consistent with TOGS 1.3.1E. The projected instream concentration was calculated using the maximum reported effluent concentration of 16 mg/L as NH3 (13 mg/L as N) and an assumed ambient upstream concentration of 0.082 mg/L (consistent with TOGS 1.3.1D). A multiplier[13] of 1.20 was applied to the maximum effluent concentration to account for the number of samples. In accordance 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 no reasonable potential to cause or contribute to a WQS violation. Therefore, year-round monitoring will continue. The sampling frequency has been reduced from 1/week to 1/month. Reporting for Ammonia has been changed from (as NH_3) to (as N) for simpler data reporting, as this is consistent with the laboratory reporting units. Values can be converted using the equation: Ammonia (as N) = Ammonia (as NH_3) x 0.8224.														
Nitrogen, TKN (as N)	mg/L	Daily Max	Monitor	24	60 / 0	-	-	-	-	Narrative (Nitrogen): None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.			6 NYCRR 703.2	-	Discontinued Monitoring
	There is no applicable numeric water quality standard for total Kjeldahl nitrogen (TKN) to class B waters. Monitoring for ammonia will continue and be protective in controlling toxicity. Therefore, TKN monitoring is has been discontinued.														
Total Phosphorus (as P)	mg/L	Monthly Avg	1.0	0.46	46 / 14	**1.0**	TOGS 1.3.3	-	-	Narrative: None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.			6 NYCRR 703.2	-	TBEL
	This facility discharges to a tributary of Lake Ontario with no intermediate ponded waterbody between the discharge and the Great Lakes and is subject to the requirements under TOGS 1.3.3. In accordance with TOGS 1.3.3, the total phosphorus limit will remain 1.0 mg/L due to the design flow of 3.4 MGD and monthly average flow of 1.8 MGD.														

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

Outfall #	008	**Description of Wastewater:** Treated Sanitary Sewage and Process Wastewater **Type of Treatment:** Screening, Grit Removal, Primary Settling Tanks, Trickling Filters, Final Settling Tanks, Chlorine Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[11]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Cyanide, Total (as CN)	µg/L	Daily Max	-	100	16	**Monitor**	6 NYCRR 750-1.13 Monitor	-	1.5	5.2	A(C)	No Reasonable Potential	6 NYCRR 703.5	-	TBEL
	lb/d	Daily Max	2.7	1.3	8 / 12	**2.7**	Antibacksliding	-	-	-		15		-	
	The projected instream concentration was calculated using the max effluent concentration of 100 µg/L (reported out of 16 samples in the NY-2A application), a negligible upstream concentration, a multiplier of 1.50 to account for the number of samples, and the chronic dilution ratio. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. The calculated WQBEL has been converted to a load of 15 lb/d at the design flow of the facility for comparison with the existing limit. The existing load limit is less than the calculated WQBEL and protective of water quality and will remain due to anti-backsliding. The requirement to monitor concentration has been added to give additional data for future reviews.														
Mercury, total	ng/L	Daily Max	200*	51.66 Max	10 / 0	-	-	-	-	0.7	H(FC)	**50**	GLCA	-	TOGS 1.3.10
	See Mercury section of this factsheet. *200 ng/L was the previous compliance limit.														
Coliform, Fecal	#/100 ml	30d Geo Mean	200	55	11 / 49	**200**	TOGS 1.3.3	-	Narrative: The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.				6 NYCRR 703.4	-	TBEL
		7d Geo Mean	400	540 Max[14]	47 / 13	**400**	TOGS 1.3.3	-							
	The existing requirement for year-round effluent disinfection has been continued. Fecal coliform effluent limitations equal to the TBEL are specified.														
Total Residual Chlorine (TRC)	mg/L	Daily Max	2.0	2.0	60 / 0	**2.0**	TOGS 1.3.3	-	-	0.005	A(C)	2.5	6 NYCRR 703.5	-	TBEL
	Effluent disinfection is currently required year-round and will remain a permit requirement. The WQBEL was calculated by multiplying the WQS by the chronic dilution ratio and a decay factor of five. Due to the high dilution, the calculated WQBEL is greater than the TBEL and an effluent limitation of 2.0 mg/L is appropriate.														
Action Levels and Monitoring															
Aluminum, total (as Al)	lb/d	Daily Max	3.8 Action Level	< 2.1	0 / 10	-	-	-	-	Narrative: None in amounts that will adversely affect the taste, color or odor thereof, or impair the waters for their best usages.			6 NYCRR 703.2	-	Discontinued Action Level
	There is no numeric WQS for total aluminum. There is a WQS of 100 µg/L for ionic aluminum; however, consistent with TOGS 1.3.1E, when the pH of the receiving waterbody is > 6.5, TBELs for aluminum are protective of water quality. Ambient pH of 7.6 was obtained from RIBS Station 07-OSWE-5.2 in Minetto, NY as the average of 65 samples taken from 1995-2016. The effluent pH is limited to the range 6.0-9.0. There are no identified TBELs in TOGS 1.2.1 for Biological Treatment. Since all reported loading data has been non-detect and the existing pH limits are protective, the action level has been discontinued.														

[14] Data for fecal coliform had high variability, therefore maximum is reported for Existing Effluent Quality.

Outfall #	008	**Description of Wastewater:** Treated Sanitary Sewage and Process Wastewater **Type of Treatment:** Screening, Grit Removal, Primary Settling Tanks, Trickling Filters, Final Settling Tanks, Chlorine Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[11]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Cadmium, total (as Cd)	µg/L	-	-	ND	0 / 11	-	-	-	Not Detected	3.7 dissolved	A(C)	No Reasonable Potential	6 NYCRR 703.5	-	Discontinued Action Level
	lb/d	Daily Max	0.25 Action Level	< 0.16	0 / 10	-	-	-	-	-		-		-	
	A max concentration of “non-detect” was reported out of 11 samples in the NY-2A application and is consistent with the non-detect loading data reported on the DMRs. Based on the non-detect data, the action level has been discontinued. An EPA translator of 1.138 was used to convert from the dissolved to total form.														
Chromium, total (as Cr)	µg/L	-	-	ND	0 / 11	-	-	-	Not Detected	134 dissolved	A(C)	No Reasonable Potential	6 NYCRR 703.5	-	Discontinued Action Level
	lb/d	Daily Max	0.58 Action Level	< 0.2	0 / 9	-	-	-	-	-		-		-	
	A max concentration of “non-detect” was reported out of 11 samples in the NY-2A application and is consistent with the non-detect loading data reported on the DMRs. Based on the non-detect data, the action level has been discontinued. An EPA translator of 1.163 was used to convert from the dissolved to total form.														
Copper, total (as Cu)	µg/L	Daily Max	-	13 total, Max	11	-	-	-	0.21 dissolved	17 dissolved	A(C)	No Reasonable Potential	6 NYCRR 703.5	-	Discontinued Action Level
	lb/d	Daily Max	2.5 Action Level	0.32 Max	5 / 5	-	-	-	-	-		-		-	
	The projected instream concentration was calculated using the max effluent concentration of 13 µg/L as total copper (reported out of 11 samples in the NY-2A application), a negligible upstream concentration, a multiplier of 1.70 to account for the number of samples, and the chronic dilution ratio. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation, therefore a WQBEL is unnecessary, and this action level has been removed. An EPA translator of 1.042 was used to convert from dissolved to total form.														
Iron, total (as Fe)	µg/L	Daily Max	-	-	-	-	-	-	-	Narrative: None in amounts that will adversely affect the taste, color or odor thereof, or impair the waters for their best usages.			6 NYCRR 703.2	-	Discontinued Monitoring
	lb/d	Daily Max	Monitor	60 Max	10 / 0	-	-	-	-					-	
	There is currently no applicable numeric water quality standard for total iron to a Class B waterbody. The facility is required to perform ongoing WET testing which will be protective in controlling toxicity, and the monitoring requirement for iron has been removed.														

Outfall #	008	**Description of Wastewater:** Treated Sanitary Sewage and Process Wastewater **Type of Treatment:** Screening, Grit Removal, Primary Settling Tanks, Trickling Filters, Final Settling Tanks, Chlorine Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[11]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Lead, total (as Pb)	µg/L	-	-	ND	0 / 11	-	-	-	Not Detected	8.2 dissolved	A(C)	No Reasonable Potential	6 NYCRR 703.5	-	Discontinued Action Level
	lb/d	Daily Max	1.9 Action Level	< 0.2	0 / 10	-	-	-	-	-		-		-	
	A max concentration of "non-detect" was reported out of 11 samples in the NY-2A application and is consistent with the non-detect loading data reported on the DMRs. Based on the non-detect data, the action level has been discontinued. An EPA translator of 1.458 was used to convert from the dissolved to total form.														
Nickel, total (as Ni)	µg/L	-	-	ND	0 / 11	-	-	-	Not Detected	96 dissolved	A(C)	No Reasonable Potential	6 NYCRR 703.5	-	Discontinued Action Level
	lb/d	Daily Max	2.1 Action Level	< 0.2	0 / 10	-	-	-	-	-		-		-	
	A max concentration of "non-detect" was reported in the NY-2A application and is consistent with the non-detect loading data reported on the DMRs. Based on the non-detect data, the action level has been discontinued. An EPA translator of 1.003 was used to convert from the dissolved to total form.														
Zinc, total (as Zn)	µg/L	Daily Max	-	28 total, Max	11	-	-	-	0.47 dissolved	153 dissolved	A(C)	No Reasonable Potential	6 NYCRR 703.5	-	Discontinued Action Level
	lb/d	Daily Max	2.6 Action Level	0.47 Max	2 / 8	-	-	-	-	-		-		-	
	The projected instream concentration was calculated using the max effluent concentration of 28 µg/L as total zinc (reported out of 11 samples in the NY-2A application), a negligible upstream concentration, a multiplier of 1.70 to account for the number of samples, and the chronic dilution ratio. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation, therefore a WQBEL is unnecessary, and this action level has been removed. An EPA translator of 1.014 was used to convert from the dissolved to total form.														
Methylene chloride	µg/L	-	-	< 10	3	-	-	-	Not Detected	200	H(FC)	No Reasonable Potential	6 NYCRR 703.5	-	Discontinued Action Level
	lb/d	Daily Max	1.5 Action Level	< 0.04	0 / 10	-	-	-	-	-		-		-	
	A max concentration of < 10 µg/L was reported out of 3 samples in the NY-2A application and is consistent with the non-detect loading data reported on the DMRs. Based on the non-detect data, the action level has been discontinued.														

Outfall #	008	**Description of Wastewater:** Treated Sanitary Sewage and Process Wastewater **Type of Treatment:** Screening, Grit Removal, Primary Settling Tanks, Trickling Filters, Final Settling Tanks, Chlorine Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[11]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Di (2-ethylhexyl) phthalate	µg/L	Daily Max	-	12	12	-	-	-	0.19	0.6	A(C)	No Reasonable Potential	6 NYCRR 703.5	-	Discontinued Monitoring
	lb/d	Daily Max	Monitor	0.084 Max	2 / 8	-	-	-	-	-		-		-	
	The projected instream concentration was calculated using the max effluent concentration of 12 µg/L (reported out of 12 samples in the NY-2A application), a negligible upstream concentration, a multiplier of 1.60 to account for the number of samples, and the chronic dilution ratio. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation, therefore a WQBEL is unnecessary, and this action level has been removed.														
Di-n-butyl phthalate	µg/L	Daily Max	-	< 5	3	-	-	-	-	Narrative: None in amounts that will adversely affect the taste, color or odor thereof, or impair the waters for their best usages.			6 NYCRR 703.2	-	Discontinued Monitoring
	lb/d	Daily Max	Monitor	0.12 Max	1 / 9	-	-	-	-					-	
	A max concentration of < 5 µg/L was reported out of 3 samples in the NY-2A application and is consistent with the non-detect loading data reported on the DMRs (single detection reported in September 2017). There is no applicable numeric water quality standard for di-n-butyl phthalate to a Class B waterbody. Based on the non-detect data and lack of an applicable numeric WQS, monitoring is discontinued. Addition of WET testing and the biennial pollutant scan to the permit will be protective.														
Phenols, total	µg/L	Daily Max	-	< 2	9	-	-	-	Not Detected	5.0	E(FS)	No Reasonable Potential	6 NYCRR 703.5	-	Discontinued Monitoring
	lb/d	Daily Max	Monitor	0.08 Max	1 / 9	-	-	-	-	-		-		-	
	A max concentration of < 2 ug/L was reported out of 9 samples in the NY-2A application and is consistent with the non-detect loading data reported on the DMRs (single detection reported in March 2017). Based on the non-detect data, the load monitoring requirement has been removed. Addition of WET testing and the biennial pollutant scan to the permit will be protective.														
4-Methylphenol	lb/d	Daily Max	Monitor	< 0.2	0 / 10	-	-	-	-	Narrative: None in amounts that will adversely affect the taste, color or odor thereof, or impair the waters for their best usages.			6 NYCRR 703.2	-	Discontinued Monitoring
	This parameter has been discontinued due to non-detection (< 0.2 lb/d) in the last five years of sampling, and lack of an applicable numeric water quality standard for 4-methylphenol to a Class B waterbody.														
2-Methylnaphthalene	lb/d	Daily Max	Monitor	< 0.1	0 / 10	-	-	-	-	Narrative: None in amounts that will adversely affect the taste, color or odor thereof, or impair the waters for their best usages.			6 NYCRR 703.2	-	Discontinued Monitoring
	This parameter has been discontinued due to non-detection (<0.1 lb/d) in the last five years of sampling, and lack of an applicable numeric water quality standard for 2-methylnaphthalene to a Class B waterbody														

Outfall #	008	**Description of Wastewater:** Treated Sanitary Sewage and Process Wastewater													
		Type of Treatment: Screening, Grit Removal, Primary Settling Tanks, Trickling Filters, Final Settling Tanks, Chlorine Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[11]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Additional Pollutants Detected															
Total dissolved solids (TDS)	mg/L	-	-	1200 Max	3	-	-	404*	436	500	Narrative	No Reasonable Potential	6 NYCRR 703.3		No Limitation
	The projected instream concentration was calculated using the maximum reported effluent concentration of 1200 mg/L, an ambient background concentration of 404 mg/L*, a multiplier of 3.00, and the chronic dilution ratio. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation and therefore no limitations or monitoring is required. *Ambient TDS was obtained from downstream RIBS Station 07-OSWE-5.2 in Minetto, NY as the average of 105 samples taken from 2001-2020. This station is located downstream from the discharge and includes contribution from Fulton (C) WPCP. It was used to represent the ambient upstream concentration in this conservative analysis because the flow from Fulton (C) WPCP is relatively small compared with the flow of the river and the impact of the facility on TDS is likely small.														
Nitrate (as N)	mg/L	-	-	0.64 Max	3	-	-	-	-	Narrative (Nitrogen): None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.			6 NYCRR 703.2	-	No Limitation
	Nitrate was detected in the effluent and reported in the NY-2A application. There is no applicable numeric water quality standard for nitrate to a Class B waterbody. Addition of WET testing, ongoing ammonia monitoring, and the biennial pollutant scan will be protective of water quality. Therefore, no limitation for nitrate is required.														
Nitrite (as N)	mg/L	-	-	4.5 Max	3	-	-	-	-	Narrative (Nitrogen): None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.			6 NYCRR 703.2	-	No Limitation
	Nitrite was detected in the effluent and reported in the NY-2A application. There is no applicable numeric water quality standard for nitrate to a Class B waterbody. Addition of WET testing, ongoing ammonia monitoring, and the biennial pollutant scan will be protective of water quality. Therefore, no limitation for nitrite is required.														

Appendix: Regulatory and Technical Basis of Permit Authorizations

The Appendix is meant to supplement the factsheet 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 factsheet:

SPDES Permit Requirements	Regulatory Reference
Anti-backsliding	6 NYCRR 750-1.10(c)
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	6 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 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 wasteload allocations (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 (EEQ) 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, and/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 factsheet. Consistent with current case law[15] and USEPA interpretation[16] 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.

[15] American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)
[16] 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 Department 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 Parts 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. 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 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 Department 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 Department 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 Department;

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 Department 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 Department 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.

A Watershed Maximum Daily Load (WMDL) may be developed by the Department to account for the cumulative effect of multiple discharges of conservative toxic pollutants to ensure water quality standards are met in downstream segments. The WMDL uses a simple dilution model, assuming full mix in the receiving stream, to calculate the maximum allowable pollutant load that can be discharged and still meet water quality standards during critical low flow in downstream segments such as those with sensitive receptors (e.g. public water supply) or higher water classification. WQBELs are established to ensure that the cumulative mass load from point source discharges does not exceed the maximum allowable load to ensure permit limits are protective of water quality.

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 6NYCRR 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

The multiple discharge variance (MDV) for mercury was developed 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; each subsequent iteration of the MDV is designed to build off the previous version, to make reasonable progress towards the water quality standard (WQS) of 0.7 ng/L dissolved mercury. The MDV is necessary because human-caused conditions or sources of mercury prevent attainment of the WQS and cannot be remedied (i.e., mercury is ubiquitous in New York waters at levels above the WQS and compliance with a water quality based effluent limitation (WQBEL) for mercury cannot be achieved with demonstrated effluent treatment technologies). The Department has determined that the MDV is consistent with the protection of public health, safety, and welfare. During the effective period of this MDV, any increased risks to human health are mitigated by fish consumption advisories issued periodically by the NYSDOH.

All surface water SPDES permittees are eligible for authorization by the MDV provided they meet the requirements specified in DOW 1.3.10.

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.

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.