State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**4952**	NAICS Code:	**221320**	SPDES Number:	**NY0021903**
Discharge Class (CL):	**05**			DEC Number:	**7-0501-00003/00002**
Toxic Class (TX):	**T**			Effective Date (EDP):	
Major-Sub Drainage Basin:	**07 - 06**			Expiration Date (ExDP):	
Water Index Number:	**Ont. 66-12-43**	Item No.:	**898 - 035**	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 Auburn**	Attention:	**Seth Jensen, Director of Municipal Facilities**		
Street:	**35 Bradley Street**				
City:	**Auburn**	State:	**NY**	Zip Code:	**13021**
Email:	**sjensen@auburnny.gov**	Phone:	**(315) 255-4146**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL																
Name:	**Auburn Sewage Treatment Plant**															
Address / Location:	**35 Bradley Street**											County:	**Cayuga**			
City:	**Auburn**						State:	**NY**				Zip Code:	**13021**			
Facility Location:		Latitude:	**42**	°	**56**	'	**28**	" N	& Longitude:	**76**	°	**35**	'	**43**	" W	
Primary Outfall No.:	**001**	Latitude:	**42**	°	**56**	'	**37**	" N	& Longitude:	**76**	°	**35**	'	**47**	" W	
Outfall Description:	**Treated Sanitary**	Receiving Water:	**Owasco Lake Outlet**						Class:	**C**		Standard:	**C**			

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

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

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

Permit Administrator:	
Address:	625 Broadway Albany, NY 12233-1750
Signature	Date

Contents

SUMMARY OF COMBINED SEWER OVERFLOW OUTFALLS

Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
01A	Combined Sewer Overflow Retention Facility at 35 Bradley St.	**42** ° **56** ' **33** " N	**76** ° **35** ' **46** " W
Receiving Water:	**Owasco Lake Outlet**		Class: **C**
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
005	Combined Sewer Overflow Facility at 12 Wadsworth St.	**42** ° **56** ' **28** " N	**76** ° **35** ' **20** " W
Receiving Water:	**Owasco Lake Outlet**		Class: **C**
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
007	Combined Sewer Overflow Facility at 1 Venice St.	**42** ° **55** ' **54** " N	**76** ° **34** ' **45** " W
Receiving Water:	**Owasco Lake Outlet**		Class: **C**
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
017	Combined Sewer Overflow Facility at 1 Miller St.	**42** ° **55** ' **46** " N	**76** ° **33** ' **33** " W
Receiving Water:	**Owasco Lake Outlet**		Class: **C**
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
29A	Combined Sewer Overflow Facility at 20 Genesee St.	**42** ° **55** ' **56** " N	**76** ° **33** ' **49** " W
Receiving Water:	**Owasco Lake Outlet**		Class: **C**

DEFINITIONS

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

PERMIT LIMITS, LEVELS AND MONITORING – Outfall 001

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All Year (unless otherwise specified)	Owasco Lake Outlet	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	12	MGD			Continuous	Recorder	X		
Flow, Owasco Outlet (June 1 – June 30)	Daily Minimum	60	CFS			1/day	USGS Gage	-	-	
Flow, Owasco Outlet (July 1 – May 31)	Daily Minimum	30	CFS			1/day	USGS Gage	-	-	
pH	Daily Minimum	6.0	SU			3/day	Grab	X	X	
	Daily Maximum	9.0	SU							
Temperature	Daily Maximum	Monitor	ºF			3/day	Grab	X	X	
$CBOD_5$ (June 1 – October 31)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	2/week	24-hr. Comp.	X	X	1
$CBOD_5$ (June 1 – October 31)	7-Day Average	Monitor	mg/L	Monitor	lbs/d	2/week	24-hr. Comp.	X	X	
$CBOD_5$ (Nov. 1 – May 31)	Monthly Average	25	mg/L	2,500	lbs/d	2/week	24-hr. Comp.	X	X	1
$CBOD_5$ (Nov. 1 – May 31)	7-Day Average	40	mg/L	4,000	lbs/d	2/week	24-hr. Comp.	X	X	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	3,000	lbs/d	2/week	24-hr. Comp.	X	X	1
Total Suspended Solids (TSS)	7-Day Average	45	mg/L	4,500	lbs/d	2/week	24-hr. Comp.	X	X	
Settleable Solids	Daily Maximum	0.3	mL/L			3/day	Grab	X	X	
Total Dissolved Solids	Daily Maximum	Monitor	mg/L			1/month	Grab		X	
Dissolved Oxygen	Daily Minimum	7.0	mg/L			2/week	Grab		X	
UOD (June 1 – June 30)	Daily Maximum	43	mg/L	4,300	lbs/d	2/week	Calculated		X	2
UOD (July 1 – October 31)	7-Day Average	30	mg/L	2,900	lbs/d	2/week	Calculated		X	2
Total Kjeldahl Nitrogen (TKN) (as N) (June 1 – October 31)	Monthly Average	Monitor	mg/L			2/week	24-hr. Comp.		X	
Ammonia (as N) (July 1 – October 31)	Monthly Average	2.5	mg/L			2/week	24-hr. Comp.	X	X	
Ammonia (as N) (Nov. 1 – June 30)	Monthly Average	3.7	mg/L			2/week	24-hr. Comp.	X	X	
Total Phosphorus (as P)	Monthly Average	1.0	mg/L			2/week	24-hr. Comp.		X	
Total Mercury	12 MRA	6.5	ng/L			1/quarter	Calculated		X	3,8
Total Mercury	Daily Maximum	50	ng/L			1/quarter	24-hr. Comp.		X	8
Copper, Total Recoverable	Daily Maximum	Monitor	ug/L	3.8	lbs/d	1/month	24-hr. Comp.		X	

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Iron, Total Recoverable	Daily Maximum	Monitor	ug/L	72	lbs/d	1/month	24-hr. Comp.		X	
Biennial Pollutant Scan	-	-	-	-	-	1/Two Years	-		X	4
ACTION LEVEL PARAMETERS	Type	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Zinc, Total Recoverable	Daily Maximum	Monitor	ug/L	10	lbs/d	1/quarter	24-hr. Comp.		X	8,9
Lead, Total Recoverable	Daily Maximum	Monitor	ug/L	0.5	lbs/d	1/quarter	24-hr. Comp.		X	8,9
Methylene Chloride	Daily Maximum	Monitor	ug/L	0.8	lbs/d	1/quarter	24-hr. Comp.		X	7,8,9
Toluene	Daily Maximum	Monitor	ug/L	3.1	lbs /d	1/quarter	24-hr. Comp.		X	7,8,9

EFFLUENT DISINFECTION Required Seasonal from May 1 to October 31		Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Coliform, Fecal	30-Day Geometric Mean	200	No./ 100 mL			2/week	Grab		X	
Coliform, Fecal	7-Day Geometric Mean	400	No./ 100 mL			2/week	Grab		X	
Chlorine, Total Residual	Daily Maximum	0.03	mg/L			3/day	Grab		X	5, 6

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			0.3	TUa		See footnote		X	10
WET - Acute Vertebrate	See footnote			0.3	TUa		See footnote		X	10
WET - Chronic Invertebrate	See footnote			2.6	TUc		See footnote		X	10
WET - Chronic Vertebrate	See footnote			2.6	TUc		See footnote		X	10

FOOTNOTES:

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

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

3. The 12-month rolling average for Mercury is defined as the sum of the current month's monthly average concentration or load 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. Monitoring results shall not be submitted on the DMR. 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. This is a Compliance Level. The calculated WQBEL is 0.013 mg/L, which is less than the ML of 0.03.

7. At least 4 individual manual grab samples must be collected over the course of 24 hours analyzed separately and the concentrations averaged. Alternatively, grab samples may be collected in the field and composited in the laboratory and analyzed as a single sample if the results are equivalent to the arithmetic averaging of individual grab samples. Where effluent flows do not vary more than 10 percent over the course of composite sample collection, composite samples may be composed of equal size grab samples taken at equal time intervals. Where effluent flows do vary more than 10 percent over the course of sample collection, composite samples must be flow-proportioned.

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

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

10. **Whole Effluent Toxicity (WET) Testing:**
Testing Requirements – Chronic WET testing is required, but report both the acute and chronic results. Testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the DEC. The test species shall be Ceriodaphnia dubia (water flea - invertebrate) and Pimephales promelas (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 2.6:1 for acute, and 2.6:1 for chronic.

Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 3 and 8.

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: TUa = (100)/(48-hr LC50) [note that Acute data is generated by both Acute and Chronic testing] and TUc = (100)/(7-day NOEC) or (100)/(7-day IC25) when Chronic testing has been performed or TUc = (TUa) x (10) when only Acute testing has been performed and is used to predict Chronic test results, where the 48-hr LC50, 7-day NOEC and/or IC25 are all expressed in % effluent. This must be done, including the Chronic prediction from the Acute data, for both species unless otherwise directed. For Chronic results, report the most sensitive endpoint (i.e. survival, growth and/or reproduction) corresponding to the lowest 7-day NOEC or IC25 and resulting highest TUc. For Acute results, report a TUa of 0.3 if there is no statistically significant mortality in 100% effluent as compared to the control. Report a TUa of 1.0 if there is statistically significant mortality in 100% effluent as compared to the control, but insufficient mortality to generate a 48-hr LC50. Also, in the absence of a 48-hr LC50, use 1.0 TUa for the Chronic prediction from the Acute data, and report a TUc of 10.0.

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

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

EMERGING CONTAMINANT LEVELS AND MONITORING – Outfall 001

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All Year	Owasco Lake Outlet	EDP	ExDP

EMERGING CONTAMINANTS		Limit	Units	Action Level	Units	Sample Frequency[1]	Sample Type	Inf.	Eff.	FN
Perfluorobutanoic Acid (PFBA) CAS No. 375-22-4	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluoropentanoic Acid (PFPeA) CAS No. 2706-90-3	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluorohexanoic Acid (PFHxA) CAS No.307-24-4	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluoroheptanoic Acid (PFHpA) CAS No. 375-85-9	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluorooctanoic Acid (PFOA) CAS No. 335-67-1	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluorononanoic Acid (PFNA) CAS No. 375-95-1	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluoro-decanoic Acid (PFDA) CAS No. 335-76-2	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluoroundecanoic Acid (PFUnA) CAS No. 2058-94-8	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluorododecanoic Acid (PFDoA) CAS No. 307-55-1	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluorotridecanoic Acid (PFTiA) CAS No. 72629-94-8	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluorotetradecanoic Acid (PFTeA) CAS No. 376-06-7	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluorobutanesulfonic Acid (PFBS) CAS No. 375-73-5	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluoropentanesulfonic Acid (PFPeS) CAS No. 2706-91-4	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluorohexanesulfonic Acid (PFHxS) CAS No. 355-46-4	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluoroheptanesulfonic Acid (PFHpS) CAS No. 375-92-8	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluorooctanesulfonic Acid (PFOS) CAS No. 1763-23-1	Daily Maximum			10	ng/L	1/quarter	Grab		X	1, 2, 3
Perfluorononanesulfonic Acid (PFNS) CAS No. 68259-12-1	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluorodecanesulfonic Acid (PFDS) CAS No. 335-77-3	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluorododecanesulfonic Acid (PFDoS) CAS No. 79780-39-5	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluorooctanesulfonamide (FOSA) CAS No. 754-91-6	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA) CAS No. 2355-31-9	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3

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EMERGING CONTAMINANT LEVELS AND MONITORING – Outfall 001

EMERGING CONTAMINANTS		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA) CAS No. 2991-50-6	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (4:2 FTS) CAS No. 757124-72-4	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
1H,1H,2H,2H- Fluorotelomer Sulfonic Acid (6:2 FTS) CAS No. 27619-97-2	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
1H,1H,2H,2H- Fluorotelomer Sulfonic Acid (8:2 FTS) CAS No. 39108-34-4	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
N-ethyl Perfluoro-octanesulfon-amide (NEtFOSA) CAS No. 4151-50-2	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) CAS No. 31506-32-8	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) CAS No. 24448-09-7	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) CAS No. 1691-99-2	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS) CAS No. 756426-58-1	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA or GenX) CAS No. 13252-13-6	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS) CAS No. 763051-92-9	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA) CAS No. 919005-14-4	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
3-Perfluoropropyl Propanoic Acid (3:3 FTCA) CAS No. 356-02-5	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3 FTCA) CAS No. 914637-49-3	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
3-Perfluoroheptyl Propanoic Acid (7:3 FTCA) CAS No. 812-70-4	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA) CAS No. 151772-58-6	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3

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EMERGING CONTAMINANT LEVELS AND MONITORING – Outfall 001

EMERGING CONTAMINANTS		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Perfluoro-4-Methoxybutanoic Acid (PFMBA) CAS No. 863090-89-5	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluoro-3-Methoxypropanoic Acid (PFMPA) CAS No. 377-73-1	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA) CAS No. 113507-82-7	Daily Maximum	Monitor	ng/L			1/quarter	Grab		X	1, 3

FOOTNOTES:

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

2. Emerging Contaminants Action Level: The permittee must collect one (1) confirmatory sample within seven (7) days of receiving the test result(s) when an Action Level is exceeded. If confirmed exceedance, the permittee must notify DEC emergingcontaminantsdow@dec.ny.gov and initiate minimization program and continuous reporting as outlined in the Schedule of Additional Submittals. Upon initiation of the minimization program, confirmatory sampling is no longer required when an Action Level is exceeded. If the reporting limit (RL) exceeds the Action Level, and the laboratory method shows no detection, the permittee must provide the DEC with documentation from the laboratory supporting the RL, including the basis for any matrix interference or method limitations.

3. All PFAS compound sampling shall use EPA Method 1633/1633A. Note that "DMR code" corresponds to the 5-digit code displayed in the top left of each parameter line on the DMR page within NetDMR

PERMIT LIMITS, LEVELS AND MONITORING – Outfall 01A

OUTFALL	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
01A	All Year, Only During 01A Discharges	Owasco Lake Outlet	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow (Discharged from Outfall)	Monthly Total	Monitor	MG	-	-	Continuous	Recorder		X	1,7
Flow (Pumped Back Volume)	Monthly Total	Monitor	MG	-	-	Monthly	Estimated		X	8
BOD_5	Daily Max	Monitor	mg/L	-	-	1/event	Composite		X	
BOD_5	Monthly Total	Monitor	lbs/month	-	-	1/event	Composite		X	3
Solids, Total Suspended (TSS)	Monthly Total	Monitor	lbs/month	-	-	1/event	Composite		X	3
Solids, Settleable	Daily Maximum	0.8	mL/L	-	-	1/event	Grab		X	2, 4
Oil & Grease	Daily Maximum	15	mg/L	-	-	1/event	Composite		X	2, 4
Floatable Material	Daily Maximum	None	Visual Observation	-	-	1/event	Visual Observation		X	2,4,6
Precipitation	Daily Maximum	Monitor	Inches	-	-	Hourly, each day of event	Onsite Rain Gauge		X	2,7
Number of Discharge Events	Monthly Total	Report	Number	-	-	Daily	Report		X	7
Effluent Disinfection Required: Seasonally from May 1 to October 31										
Coliform, Fecal	Daly Maximum	400	No./ 100 mL	-	-	1/event	Grab		X	2,4,5
Chlorine, Total Residual	Daily Maximum	0.1	mg/L	-	-	1/event	Grab		X	2,4

FOOTNOTES:

1. Flow shall be continuously recorded and totalized. Flow reported on the DMR shall be the total flow discharge for the calendar month. The monthly operating report shall include the total flow discharged for the calendar month reporting period as well as the Individual Event Totals during the month.
2. Daily min/max shall be calculated based on the arithmetic mean of samples taken during any calendar day.
3. Representative composite sample shall be a composite of grab samples, one taken every four hours. Sampling shall begin within 30 minutes of the start of the discharge from the ORF.
4. *Grab samples* and *visual observation* shall be collected a minimum of once every FOUR hours during each event, except bacteria which shall be collected/tested at a rate of one per 8-hour period and Oil & Grease which shall be collected/tested at a rate of one per event. Sampling shall begin within 2 hours of the start of the discharge from the ORF.
5. The No./100 mL calculated as the geometric mean of the grab samples taken during each day of overflow.
6. Report the number of days during the month where at least one visual observation indicates the presence of floatable material. Visual observations shall be summarized and reported on the monthly operating report.
7. A discharge event is defined as the flow occurring between start and end of each overflow from the ORF. Precipitation data shall be collected from the rain gauge at the City's filtration plant.
8. Flow reported shall represent the total volume of all capture events that *did not* result in a discharge.

SPECIAL CONDITIONS FOR OPERATION OF OVERFLOW RETENTION FACILITY

a) The permittee shall monitor the effluent from the ORF for all permitted parameters cited above at the specified monitoring frequency and sample type. This data and the sampling information required by the "Permit Limits, Levels and Monitoring – Outfall 01A" table above, shall be submitted with the monthly operating report.

b) The facilities shall be operated in conjunction with the tributary sewer system, pump stations and the POTW treatment plant to maximize pollutant removal.

c) The permittee shall not divert flow into the ORF unless either the peak hourly flow or the maximum daily design flow of the treatment process (50.46 MGD) or of the sewage transmission system is exceeded.

d) The permittee shall not discharge from the ORF unless the retention tank is full, and the treatment process cannot accept additional wastewater.

e) Once discharge from the ORF has ceased, the remaining contents of the ORF (i.e. captured wastewater) shall be delivered to the WWTP for treatment. ORF contents shall not be delivered to the WWTP at a rate which would exceed the peak daily or peak hourly flow or loading.

f) Flow shall not be delivered to the POTW treatment plant at a rate that will cause an upset as defined by 6 NYCRR Part 750-2, "Operating in Accordance with a SPDES Permit."

g) **Wet Weather Operation Plan**
The permittee shall develop and implement a Wet Weather Operation Plan (WWOP). The WWOP shall outline the optimum operational procedures to transition from dry weather operation mode to wet weather operation mode, and back to dry weather operation mode. These procedures shall be used to optimize the treatment of the maximum volume of wet weather flows possible at the treatment plant during wet weather events, while minimizing discharges through the permitted overflow retention facility (ORF) and meeting the effluent limitations in this permit. The WWOP shall be submitted to the DEC Regional Water Engineer and to the Bureau of Water Compliance in accordance with the Schedule of Submittals.

BEST MANAGEMENT PRACTICES FOR COMBINED SEWER OVERFLOWS

The permittee shall implement the following Best Management Practices (BMPs). These BMPs are designed to implement operation & maintenance procedures, utilize the existing treatment facility and collection system to the maximum extent practicable, and implement sewer design, replacement and drainage planning, to maximize pollutant capture and minimize water quality impacts from combined sewer overflows. The BMPs are equivalent to the "Nine Minimum Control Measures" required under the USEPA National Combined Sewer Overflow policy. The EPA's policy is available at https://www.epa.gov/npdes/combined-sewer-overflows-csos

1. CSO Maintenance/Inspection - The permittee shall develop a written maintenance and inspection program for all CSOs. This program shall include all regulators tributary to these CSOs and shall be conducted during periods of both dry and wet weather. This is to ensure that no discharges occur during dry weather and that the maximum amount of wet weather flow is conveyed to the City of Auburn POTW for treatment. This program shall consist of inspections with required repair, cleaning and maintenance done as needed. This program shall consist of weekly inspections.

   Inspection reports shall be completed indicating visual inspection, any observed flow, incidence of rain or snowmelt, condition of equipment and work required. These reports shall be in a format approved by the Region 7 Office and submitted to the Region with the monthly operating report (Form 92-15-7).

2. Maximum Use of Collection System for Storage - The permittee shall optimize the collection system by operating and maintaining it to minimize the discharge of pollutants from CSOs. It is intended that the maximum amount of in-system storage capacity be used (without causing service backups) to minimize CSOs and convey the maximum amount of combined sewage to the treatment plant in accordance with Item 4 below. This shall be accomplished by an evaluation of the hydraulic capacity of the system but should also include a continuous program of flushing or cleaning to prevent deposition of solids and the adjustment of regulators and weirs to maximize storage.

3. Industrial Pretreatment - The approved Industrial Pretreatment Program shall consider CSOs in the calculation of local limits for indirect discharges. Discharge of persistent toxics upstream of CSOs will be in accordance with guidance under **(NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.3.8 New Discharges to POTWs**. (http://www.dec.ny.gov/docs/water_pdf/togs138.pdf). For industrial operations characterized by use of batch discharge, consideration shall be given to the feasibility of a schedule of discharge during conditions of no CSO. For industrial discharges characterized by continuous discharge, consideration must be given to the collection system capacity to maximize delivery of waste to the treatment plant. Non-contact cooling water should be excluded from the combined system to the maximum extent practicable. Direct discharges of cooling water must apply for a SPDES permit.

   To the maximum extent practicable, consideration shall be given to maximize the capture of nondomestic waste containing toxic pollutants and this wastewater should be given priority over residential/commercial service areas for capture and treatment by the POTW.

4. Maximize Flow to POTW - Factors cited in Item 2. above shall also be considered in maximizing flow to the POTW. Maximum delivery to the POTW is particularly critical in treatment of "first-flush" flows. The treatment plant shall be capable of receiving and treating: the peak design hydraulic loading rates for all process units; i.e., a minimum of 50.46 MGD through the plant headworks; a minimum of 25.46 MGD through the primary treatment works and disinfection works if applicable; and a minimum of 25 MGD through the secondary treatment works during wet weather. The collection system and headworks must be capable of delivering these flows during wet weather. If the permittee cannot deliver maximum design flow for treatment, the permittee shall submit a plan and schedule for accomplishing this requirement within 12 months after the effective date of this permit.

5. Prohibition of Dry Weather Overflow - Dry weather overflows from the combined sewer system are prohibited. The occurrence of any dry weather overflow shall be promptly abated and reported to the NYSDEC Region 7 Office in accordance with 6 NYCRR Part 750-2.7.

BEST MANAGEMENT PRACTICES FOR COMBINED SEWER OVERFLOWS (continued)

6. Wet Weather Operating Plan (WWOP) - The permittee shall maximize treatment during wet weather events. This shall be accomplished by having a WWOP containing procedures so as to operate unit processes to treat maximum flows while not appreciably diminishing effluent quality or destabilizing treatment upon return to dry weather operation. The WWOP shall be developed in accordance with the DEC guidance, Wet Weather Operating Practices for POTWs With Combined Sewers, (http://www.dec.ny.gov/docs/water_pdf/wwtechtran.pdf), and submitted to the Regional Water Engineer and the Bureau of Water Permits for review and approval in accordance with the Schedule of Submittals.

   The submission of a WWOP is a one-time requirement that shall be done to the Department's satisfaction once. However, a revised wet weather operating plan must be submitted whenever the POTW or sewer collection system is replaced or modified. When this permit is administratively renewed by DEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT", the permittee is not required to repeat the submission. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT".

7. Control of Floatable and Settleable Solids - The discharge of floating solids, oil and grease, or solids of sewage origin which cause deposition in the receiving waters, is a violation of the NYS Narrative Water Quality Standards contained in Part 703. As such, the permittee shall implement best management practices in order to eliminate or minimize the discharge of these substances. All of the measures cited in Items 1, 2, 4 & 5 above shall constitute approvable "BMPs" for mitigation of this problem. If aesthetic problems persist, the permittee should consider additional BMPs including but not limited to: street sweeping, litter control laws, installation of floatables traps in catch basins (such as hoods), booming and skimming of CSOs, and disposable netting on CSO outfalls. In cases of severe or excessive floatables generation, booming and skimming should be considered an interim measure prior to implementation of final control measures. Public education on harmful disposal practices of personal hygienic devices may also be necessary including but not limited to: public broadcast television, printed information inserts in sewer bills, or public health curricula in local schools.

8. Combined Sewer System Replacement - Replacement of combined sewers shall not be designed or constructed unless approved by DEC. When replacement of a combined sewer is necessary it shall be replaced by separate sanitary and storm sewers to the greatest extent possible. These separate sanitary and storm sewers shall be designed and constructed simultaneously but without interconnections to maximum extent practicable. When combined sewers are replaced, the design should contain cross sections which provide sewage velocities which prevent deposition of organic solids during low flow conditions.

9. Combined Sewer/Extension - Combined sewer/extension, when allowed should be accomplished using separate sewers. These sanitary and storm sewer extensions shall be designed and constructed simultaneously but without interconnections. No new source of stormwater shall be connected to any separate sanitary sewer in the collection system.

   If separate sewers are to be extended from combined sewers, the permittee shall demonstrate the ability of the sewerage system to convey, and the treatment plant to adequately treat, the increased dry-weather flows. Should the Regional Water Engineer determine additional justification for sewer extension is necessary, the permittee shall assess the effects of the increased flow of sanitary sewage or industrial waste on the character and frequency of CSOs and the effects on the best use of the receiving water. This assessment should use techniques such as collection system and water quality modeling contained in the 1999 Water Environment Federation Manual of Practice FD-17 entitled, Prevention and Control of Sewer System Overflows, 2nd edition.

10. Sewage Backups - If, there are documented, recurrent instances of sewage backing up into house(s) or discharges of raw sewage onto the ground surface from surcharging manholes, the permittee shall, upon letter notification from DEC, prohibit further connections that would exacerbate the surcharging/back-up problems.

11. Septage and Hauled Waste - The discharge or release of septage or hauled waste upstream of a CSO is prohibited.

12. Control of Runoff - It is recommended that the impacts of runoff from development and redevelopment in areas served by combined sewers be reduced by requiring compliance with the New York Standards for Erosion and Sediment Control and the quantity control requirements included in the New York State Stormwater Management Design Manual. (http://www.dec.ny.gov/chemical/8694.html.)

BEST MANAGEMENT PRACTICES FOR COMBINED SEWER OVERFLOWS (continued)

13. Public Notification – The permittee shall maintain identification signs at all CSO outfalls owned and operated by the permittee. The permittee shall place the signs at or near the CSO outfalls and ensure that the signs are easily readable by the public. 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**
> **(wet weather discharge)**
> **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: ( ) - ### -####

14. Characterization and Monitoring - The permittee shall characterize the combined sewer system, determine the frequency of overflows, and identify CSO impacts in accordance with Combined Sewer Overflows, Guidance for Nine Minimum Controls, EPA, 1995, Chapter 10. These are minimum requirements, more extensive characterization and monitoring efforts which may be required as part of the Long-Term Control Plan.

15. Annual Report - The permittee shall electronically submit the Combined Sewer Overflows (CSO) Annual Report using nForm (https://www.dec.ny.gov/chemical/48595.html), which summarizes the implementation of the above BMPs and the CSO Long-Term Control Plan. The CSO Annual Report shall be submitted by January 31st of each year. The complete documentation shall be stored at a central location and be made available to DEC upon request.

SPECIAL CONDITIONS: CSO CONTROL POLICY

A. Water Quality Requirements for Combined Sewer Overflows

Long-Term Control Plan

Pursuant to a 1989 Order on Consent (R7-0382-89-05), the permittee was required to produce a CSO Abatement Study. This Study Report was submitted to the Department in May 1993 and was approved on April 4, 1994. Since this study preceded the USEPA Control Policy, the Department considers this report to satisfy the CSO Control Policy Long-Term Control Plan (LTCP) requirement. The 1989 Order was modified in October 1993 and August 1997 for milestone extensions. The permittee completed implementation of the approved LTCP in 2005, which included the following:

- Elimination of 31 sanitary and interceptor sewer overflows
- Installation of a series of parallel relief interceptor sewers designed to capture and carry all excess flows up to a 6-month, 6-hour, twice per year precipitation event to the CSO high-rate treatment facility before discharge;
    - A 6.5 MGD wet weather flow storage and release facility on the City's North Interceptor sewer
    - Four (4) high rate CSO treatment at overflow locations 005, 007, 024A, and 017.

Water Quality Criterion – Presumption Approach

The permittee shall not discharge any pollutant at a level that causes an in-stream excursion of the applicable water quality requirements. The EPA 1994 CSO Control Policy indicates that a CSO control plan that meets the criteria below would provide an adequate level on control to meet the water quality requirements of the CWA. Following implementation of the approved LTCP, the following criteria shall be an enforceable performance metric under this permit:

- The permittee shall not discharge more than an average of 4 CSO events per year.

Any additional discharges of combined sewage flow during wet weather shall receive the minimum treatment specified below:

- Primary clarification or equivalent, and
- Solids and floatables disposal, and
- Disinfection, if required to meet WQS, protect designated uses, and protect human health, including removal of harmful disinfection chemical residuals

B. Monitoring Requirements – Post Construction Compliance Monitoring Program

1. In accordance with the Schedule of Submittals, the permittee shall submit an approvable post-construction monitoring plan (PCCMP) that (a) is adequate to ascertain the effectiveness of the CSO controls and (b) can be used to verify attainment of water quality standards. The PCCMP must include the proposed sampling locations, sampling schedule, details on how effectiveness of the CSO controls will be assessed, and a Quality Assurance Project Plan[1] (QAPP) that details the laboratory that will be performing the analysis[2], monitoring protocols to be followed, where appropriate, including CSO and ambient monitoring. The sampling schedule shall be developed to target the periods for which CSO events are most likely to occur. Ambient sampling must be conducted, at a minimum, for all pollutants listed in Section B below and for all pollutants for which the 303(d) list identifies CSOs as a source of the pollutant to the receiving water(s). Guidance on CSO post construction compliance monitoring and reporting can be found at: https://www.epa.gov/sites/default/files/2015-10/documents/final_cso_pccm_guidance.pdf.

2. The PCCM Program sampling shall be implemented, in accordance with the approved PCCMP, for an initial period of two years, beginning in the year following PCCMP approval. Following the initial 2-year PCCM period, subsequent PCCM shall be conducted during years ending in 3 and 8.

PARAMETER	Units	Sample Type
BOD_5	mg/L	Grab
Coliform, Fecal	#/100ml	Grab
Dissolved Oxygen	mg/L	Grab

[1] The QAPP shall be developed as outlined in the EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations, EPA QA/R-5.

[2] All chemical analyses must be conducted by a laboratory certified by the NYS Health Department under the National Environmental Laboratory Approval Program (NELAP) for test or sample results which require certificates of approval. Tests for pH, temperature, dissolved oxygen and settleable solids do not require certificates of approval but a description of the equipment used, and the calibration schedule of appropriate equipment is required.

PARAMETER	Units	Sample Type
Floatable Material	-	Visual Observation
Ammonia (as NH_3)	mg/L	Grab
Phosphorus	mg/L	Grab
Solids, Settleable	mL/L	Grab
Solids, Suspended	mg/L	Grab

3. By March 31st of the year following PCCM sampling, the permittee shall submit an approvable PCCM Program Report. The PCCM Program Report shall include:
    a. Analytical results of the PCCM sampling,
    b. The number of CSO events and volume of CSO discharged during the PCCM period,
    c. An assessment of whether CSO receiving water quality complies with applicable water quality standards,
    d. Recommendations for potential improvements in CSO controls for when water quality standards are not attained, and
    e. A discussion of whether the CSO controls are meeting the frequency goals of the Presumptive Approach, selected by the permittee in the LTCP, to verify the effectiveness of the CSO controls.

C. Special Conditions

1. Sensitive Area[3] Reassessment
   The permittee shall reassess overflows to sensitive areas stated in the LTCP, where elimination or relocation of the overflows is not physically possible or economically achievable. The permittee shall also assess whether new or additional sensitive areas may be affected by overflows that were not initially identified in the LTCP. The permittee shall consider new or improved techniques to eliminate or relocate overflows or changed circumstances that influence economic achievability. The permittee shall prepare and submit to the Regional Water Engineer a report, separately from the PCCM Program Report, that presents the results of this reassessment, feasible improvements to eliminate or minimize overflows to sensitive areas, and the permittee's recommendation regarding the elimination or relocation of these outfalls. The permittee shall submit such reports by December 31st in the same year the PCCM Program Report is submitted.

2. Reopener

   This permit may be modified or revoked and reissued, as provided pursuant to 6 NYCRR 750-1.18, 6 NYCRR 750-1.20, 40 CFR 122.62 and 124.5, for the following reasons:

   I. To include new or revised conditions developed to comply with any state of federal law or regulation that addresses CSOs that are adopted or promulgated subsequent to the effective date of this permit.
   II. To include new or revised conditions if new information, not available at the time of permit issuance, indicates that CSO controls imposed under the permit have failed to ensure the attainment of applicable water quality requirements.

STORMWATER POLLUTION PREVENTION REQUIREMENTS

NO EXPOSURE CERTIFICATION

The permittee submitted a Conditional Exclusion for No Exposure Form on 6/27/2024, certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and stormwater runoff except as allowed under 40 CFR 122.26(g)(2). The permittee must maintain a condition of no exposure for the exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to stormwater, the permittee must notify the Regional Water Engineer. The permittee must recertify a condition of no exposure every five years by completing the "No Exposure Certification Form" found on the DEC website.

[3] Sensitive areas include designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threated or endangered species and their habitat, waters with primary contact recreation, public drinking water intakes or their designated protection areas, and shellfish beds, waters listed on the NYSDEC 303(d) list, or any other area determined by the Department.

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 001, 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[4]. 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 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,[5] must receive approval from the DEC prior to acceptance.

      iv. Decreased Monitoring Requirements – The permittee has an EEQ at or below 12 ng/L and the permit includes the following requirements:

         1) Reduced requirements
            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 DEC 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 compliance points).

[4] Outfall monitoring must be conducted using the methods specified in Table 8 of *DOW 1.3.10.*
[5] 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.

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

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.
   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,[6] which informs users of their responsibilities, and collect the "Amalgam Waste Compliance Report for Dental Dischargers"[7] 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 DEC 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 DEC 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.

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 DEC for a permittee-initiated modification;

[6] For example, the outreach program could include education about sources of mercury and what to do if a mercury source is found.
[7] The form, "Amalgam Waste Compliance Report for Dental Dischargers," can be found here: https://www.dec.ny.gov/docs/water_pdf/dentalform.pdf

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 DEC identifies inadequacies in the MMP.

   The DEC 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 submitted in accordance with 40 CFR 403.11 or 403.18 and approved by USEPA on 9/15/1986.

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 DEC or the USEPA determines any source contributes pollutants to the POTW in violation of Pretreatment Standards or Requirements the DEC or the USEPA shall notify the permittee. Failure by the permittee to commence an appropriate investigation and subsequent enforcement action within 30 days of this notification may result in appropriate enforcement action against the source and permittee.

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

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

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

INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

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

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

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

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

E. ADDITIONAL PRETREATMENT CONDITIONS:
1. Notification of Material Change: Facility shall notify the DEC 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 DEC determines whether a permit modification is necessary pursuant to 750-2.9(a)(2).

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date[8]
01A	COMPLETE CONSTRUCTION The permittee shall provide a Construction Completion Certification[9] to the DEC (send to the Regional Water Engineer and NetDMR@dec.ny.gov) that the disposal system has been fully completed in accordance with the approved Design Documents.	Upon Construction Completion + 7 Days
Unless noted otherwise, the above actions are one-time requirements.		

b) The permittee shall submit a Report of Non-Compliance Event form with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All notifications shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

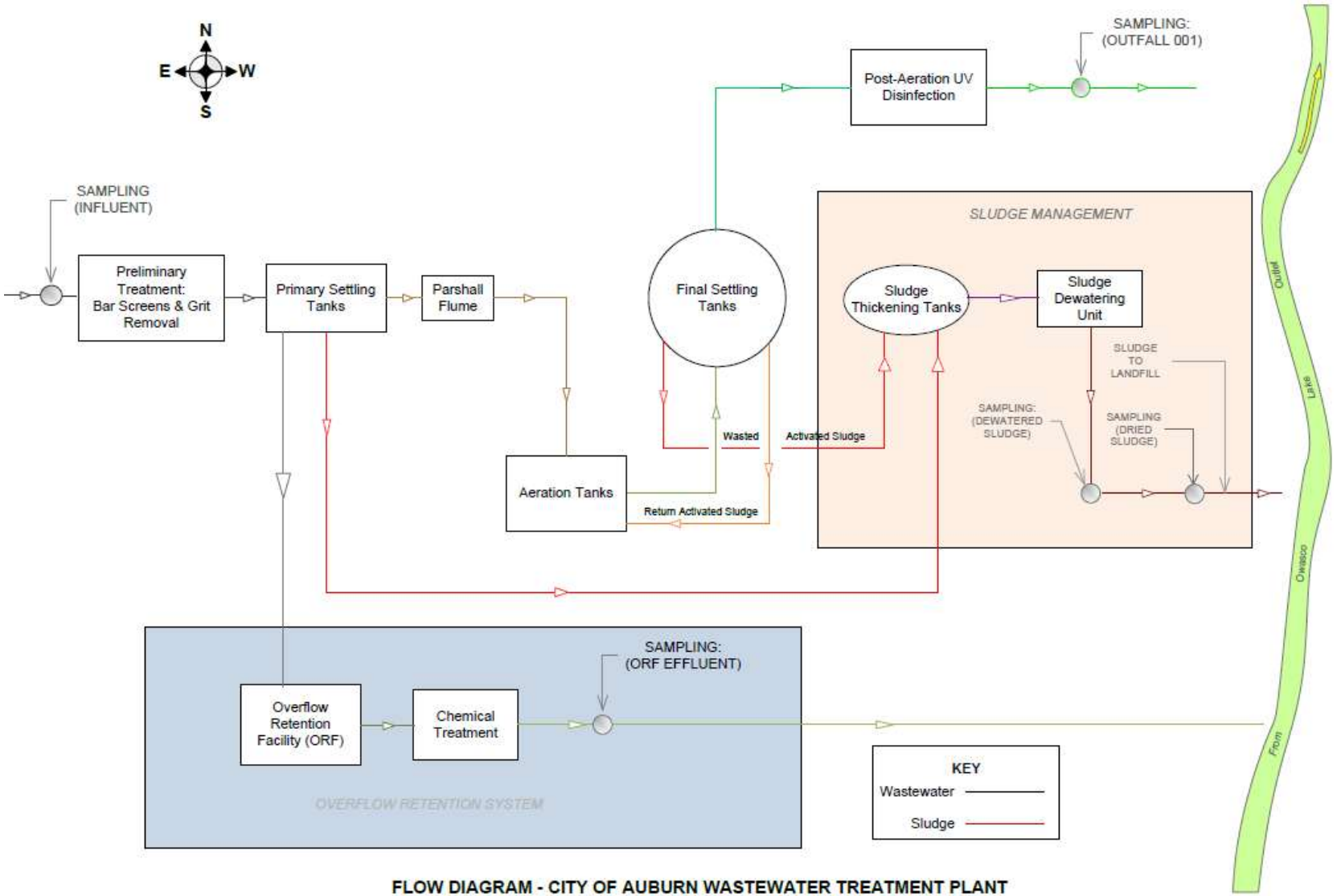
1. A short description of the non-compliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
3. Any details which tend to explain or mitigate an instance of non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

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

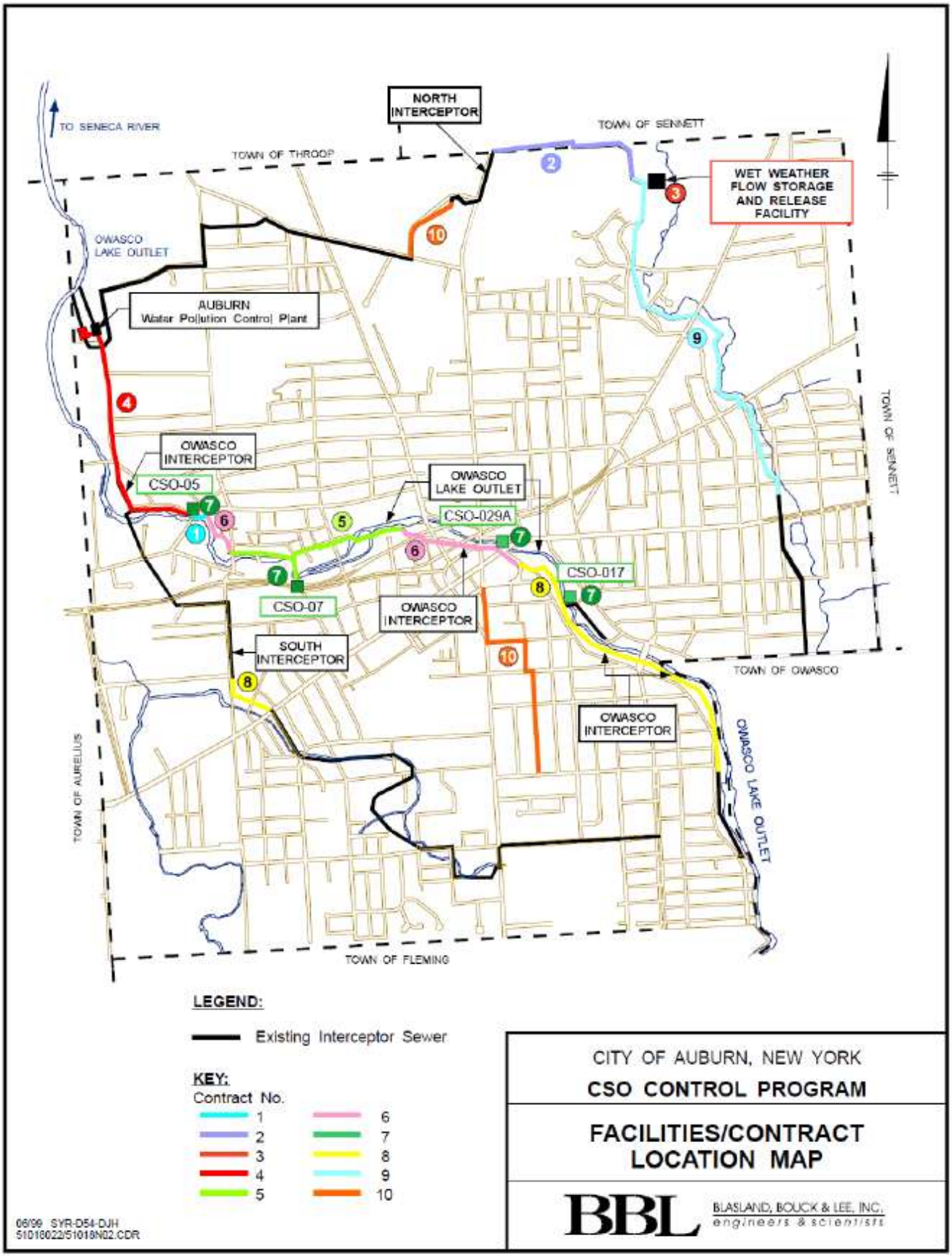
[8] 6 NYCRR 750-1.14 (a)
[9] 6 NYCRR 750-2.10 (c)

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:



FLOW DIAGRAM - CITY OF AUBURN WASTEWATER TREATMENT PLANT


TO SENECA RIVER
NORTH INTERCEPTOR
TOWN OF SENNETT
TOWN OF THROOP
WET WEATHER FLOW STORAGE AND RELEASE FACILITY
OWASCO LAKE OUTLET
AUBURN Water Pollution Control Plant
OWASCO INTERCEPTOR
CSO-05
OWASCO LAKE OUTLET
CSO-029A
CSO-017
CSO-07
OWASCO INTERCEPTOR
SOUTH INTERCEPTOR
OWASCO INTERCEPTOR
TOWN OF OWASCO
TOWN OF AURELIUS
OWASCO LAKE OUTLET
TOWN OF FLEMING
LEGEND:
Existing Interceptor Sewer
KEY:
Contract No.
1
2
3
4
5
6
7
8
9
10
06/09 SYR-D54-DJH
51D16022/51018N02.CDR
CITY OF AUBURN, NEW YORK
CSO CONTROL PROGRAM
FACILITIES/CONTRACT LOCATION MAP
BBL
BLASLAND, BOUCK & LEE, INC.
engineers & scientists

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

GENERAL REQUIREMENTS (continued)

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

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

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

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

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

I. Water Treatment Chemicals (WTCs)
   New or increased use and discharge of a WTC requires prior DEC review and authorization. At a minimum, the permittee must notify the DEC in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The DEC will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed 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 DEC. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.
   1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized in writing by the DEC.
   2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure that excessive levels of WTCs are not used.
   3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The *WTC Notification Form and WTC Annual Report Form* are available from the DEC's website at: http://www.dec.ny.gov/permits/93245.html

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

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

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by DEC. Instructions on the use of NetDMR can be found at https://www.dec.ny.gov/chemical/8461.html. **Hardcopy paper DMRs will only be accepted if a waiver from the electronic submittal requirements has been granted by DEC to the facility.**

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

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

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

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

Department of Environmental Conservation
Regional Water Engineer, Region 7
State Office Building, Watertown, New York, 13601-3787 Phone: (315) 785-2513

D. Annual SPDES Monitoring Reports: An annual report shall be submitted to DEC by February 1st each year. The report shall summarize information for January to December of the previous year and shall be submitted electronically, or in hardcopy format, utilizing the SPDES Annual Report Form available on the DEC's website.

Hard copy submission of the Annual Report shall be submitted to the Regional Water Engineer at the address below:

Department of Environmental Conservation
Regional Water Engineer, Region 7
5786 Widewaters Parkway, Syracuse, NY 13214-1867 Phone: (315) 426-7500

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

F. Schedule of Additional Submittals:

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

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	**Required Action**	**Due Date**
002	EMERGING CONTAMINANT (EC) MINIMIZATION PROGRAM The permittee shall initiate and continue track down of potential sources by utilizing the "Emerging Contaminants Investigation Checklist for POTWs" available at Emerging Contaminants In NY's Waters - NYSDEC and submit reports summarizing: a. All EC monitoring results taken to date; b. A list of known and potential EC sources; c. All actions taken to reduce EC contaminants; and Proposed next steps, including a monitoring plan to identify/confirm EC sources, and ensure continued progress towards minimization/eliminating contaminants.	Confirmation of initial Action Level exceedance + 12 months and every 6 months thereafter until effluent falls below action levels for at least 12 months or until further notified by the Department
	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	December DMR Annually (January 28th)
	ANNUAL FLOW CERTIFICATION The permittee shall submit an Annual Flow Certification form each year in accordance with 750-2.9(C)(4). The form shall be attached to the February DMR or submitted through nForm.	February DMR Annually (March 28th)
	BIENNIAL POLLUTANT SCAN The permittee shall implement an ongoing monitoring program and perform effluent sampling every two years as specified in footnote of the permit limits table.	Retain and submit with next NY-2A Application
	WHOLE EFFLUENT TOXICITY (WET) TESTING WET testing shall be performed as required in the footnote of the permit limits table. The toxicity test report including all information requested of this permit shall be attached to your WET DMRs and sent to the WET@dec.ny.gov email address.	Within 60 days following the end of each monitoring period
	WET WEATHER OPERATIONS PLAN (WWOP) The permittee shall submit an updated Wet Weather Operation Plan (WWOP). The WWOP shall outline the optimum operational procedures to transition from dry weather operation mode to wet weather operation mode, and back to dry weather operation mode. These procedures shall be used to optimize the treatment of the maximum volume of wet weather flows possible at the treatment plant during wet weather events, while minimizing discharges through the permitted overflow retention facility (ORF) and meeting the effluent limitations in this permit.	EDP + 6 months
	COMBINED SEWER OVERFLOW (CSO) ANNUAL REPORT The permittee shall submit a Combined Sewer Overflows (CSO) Annual Report, which summarizes the implementation of BMPs and the Long-Term Control Plan (if applicable) via nForm (https://www.dec.ny.gov/pubs/95925.html). Additional information regarding CSO Annual Report is available on-line at https://www.dec.ny.gov/chemical/48595.html.	January 31st Each Year

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	**Required Action**	**Due Date**
	POST-CONSTRUCTION COMPLIANCE MONITORING PLAN (PCCMP) The permittee shall submit an approvable PCCMP that (a) is adequate to ascertain the effectiveness of the CSO controls and (b) can be used to verify attainment of water quality standards. The PCCMP must include the proposed sampling locations, sampling schedule, details on how effectiveness of the CSO controls will be assessed, and a Quality Assurance Project Plan (QAPP) that details the monitoring protocols to be followed, where appropriate, including CSO and ambient monitoring.	EDP + 12 Months
	POST-CONSTRUCTION COMPLIANCE MONITORING (PCCM) PROGRAM REPORT The permittee shall submit a PCCM Program Report as detailed in the SPECIAL CONDITIONS: CSO CONTROL POLICY section of this permit. The initial report shall be due by March 31st in the year following the initial 2-year sampling period. Subsequent PCCM Program Reports shall be submitted by March 31st in years ending in 3 and 8).	March 31st of PCCMP Approval + 2 Years, and March 31st of subsequent years ending in 3 and 8 thereafter
	SENSITIVE AREA REASSESSMENT REPORT The permittee shall submit a report, separately from the PCCM Program Report, that presents the results of the sensitive area reassessment, feasible improvements to eliminate or minimize overflows to sensitive areas, and the permittee's recommendation regarding the elimination or relocation of these outfalls. The permittee shall submit such reports by December 31st in the same year the PCCM Program Report is submitted.	December 31st of same year PCCM Program Report submitted
	STORMWATER NO EXPOSURE CERTIFICATION Permittee must recertify every five years a condition of no exposure to stormwater in order to continue to qualify for the no exposure exclusion. The No Exposure Certification Form can be found on the DEC website.	06/26/2029, and every 5 years thereafter
	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	***Maintained Onsite*** EDP + 12 months, annually thereafter
	PRETREATMENT PROGRAM Submit a report that briefly describes the permittee's program activities over the previous year (July 1st – June 30th). The report shall follow the guidelines contained in this permit and be submitted to the Regional Water Engineer and the Bureau of Water permits as well as the USEPA Region II office.	Annually by August 30th

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

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

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

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

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

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

SPDES Permit Fact Sheet
City of Auburn
Auburn Sewage Treatment Plant
NY0021903

NEW YORK STATE | Department of Environmental Conservation

Contents

Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) EBPS permit renewal has been drafted for the Auburn Sewage Treatment Plant. The changes to the permit are summarized below:

- Added Biennial Pollutant Scan requirement.
- Added Stormwater Pollution Prevention Requirements section.
- Added Schedule of Additional Submittals for several items.
- Added Schedule of Compliance for ORF Reconstruction Project.
- Changed latitude and longitude for facility location.
- Consolidated PERMIT LIMITS, LEVELS AND MONITORING tables into 1 table.
- Updated footnotes throughout permit.
- Updated "Special Conditions – Operation of the Overflow Retention Facility" language.
- Updated language for BMPs for CSOs, CSO Long-Term Control Plan (now Special Conditions: CSO Control Policy), and Mercury Minimization Program sections.
- Removed Outfall 002, as this outfall is no longer permittable.
- Removed Outfalls 05E, 07E, 17E, and 29E.
- Removed any completed Schedule of Submittal items from 2017 Permit.

Outfall 001 Changes:

- Added 12-Month Rolling Average Limit of 6.5 ng/L for Mercury.
- Added concentration reporting (ug/L) for Total Iron & Total Copper.
- Added concentration reporting (ug/L) for all Action Levels: Zinc, Lead, Methylene Chloride, & Toluene.
- Added Action Level of 10 ng/L for PFOS.
- Added Monitoring requirements for 39 Emerging Contaminants.
- Changed disinfection season to May 1 – October 31.
- Changed TRC limit from 0.1 mg/L to 0.030 mg/L.
- Changed Ammonia reporting from "as NH3" to "as N."
- Changed WET testing frequency from monthly every five years to quarterly every five years.
- Changed the chronic WET action level from 3.6 TUc to 2.6 TUc.
- Revised $CBOD_5$ loading, UOD loading, and TSS loading limitations to round to 2 significant figures.
- Removed requirement to report *influent* UOD & TKN data.

Outfall 01A Changes:

- Removed CSO Overflow Retention Facility Prohibition language.
- Removed "Flow (Retained Volume)" reporting.
- Removed "Flow (Overflow Volume)" reporting.
- Removed influent reporting for Fecal Coliform.
- Renamed "Flow" reporting to "Flow (Discharged from Outfall)".
- Changed disinfection season to May 1 – October 31.
- Changed effluent type to "Monthly Total" for "Flow (Discharged from Outfall)".
- Changed effluent type to "Monthly Total" for "Flow (Pumped Back Volume)".

This fact sheet summarizes the information used to determine the effluent limitations (limits) and other conditions contained in the permit. General background information

including the regulatory basis for the effluent limitations and other conditions are in the Appendix linked throughout this fact sheet.

Administrative History

7/1/2017 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 6/30/2022. The 2017 permit, along with all subsequent modifications, has formed the basis of this permit.

6/30/2022 The current permit was allowed to stay in effect pursuant to SAPA[1] issued on 11/8/2021 bevause the permittee submitted a timely and sufficient renewal application.

4/2/2024 DEC 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 210 and ranking of 95.

6/27/2024 The City of Auburn submitted a NY-2A permit application.

7/19/2024 DEC issued a Notice of Incomplete Application (NOIA).

8/30/2024 The City of Auburn submitted a revised NY-2A permit application.

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

Facility Information

This facility is a publicly owned treatment works that receives flow from domestic and industrial users, with effluent consisting of treated combined sewage. The facility discharges treated sewage to surface water through primary Outfall 001. The collection system consists of both separate and combined sewers.

The current 12 MGD treatment plant process consists of:

- Preliminary Treatment: Manually Cleaned Trash-Rack, Mechanical Bar Screen, Aerated Grit Chamber.
- Primary Treatment: Primary Settling Tanks
- Secondary Treatment: Activated Sludge, Final Clarification (Settling Tanks), Post-Aeration Unit
- Disinfection: UV Disinfection.

Sludge is pumped into a gravity-thickener unit, then guided to a belt-press for dewatering, and finally disposed of by off-site landfilling.

The facility discharges treated sewage through the primary outfall (Outfall 001), which is a 42" diameter pipe located at the bank of the Owasco Lake Outlet, approximately 2.0 ft below the water surface.

[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 City is authorized to discharge from combined sewer overflow outfalls (listed in the first Table of the Receiving Water Information section) during wet weather. Under conditions specified in the permit (See Special Conditions), flows in excess of the STP capacity are directed, following screening at the STP headworks, to the Overflow Retention Facility (ORF) where flows receive settling and chemical disinfection before discharging via Outfall 01A. The ORF is also located along the bank of the Owasco Lake Outlet with a pipe diameter of 48" located approximately 2.0 ft below the water surface.

In addition to the ORF, excess wet weather flow from interceptor sewers may be routed to constructed high-rate CSO treatment facilities for discharge from Outfalls 005, 007, 017, and 029A. The high-rate CSO treatment facilities consist of swirl concentrators that use centrifugation technology for the reduction of floatables and settleable solids, followed by disinfection of supernatant flows prior to discharge. Each high-rate CSO facility is equipped with an engineered emergency bypass, previously permitted as Outfalls 005E, 007E, 017E, and 029E. While these structures still exist and are maintained, they are considered internal Outfalls, as such they will no longer be permitted as CSO Outfalls.

The high rate treatment facilities provide relief from overflows from the design storm event, plus capture and conveyance of flows over the threshold storm flow. The installation of these CSO treatment facilities under the 1989 Order on Consent (R7-0382-89-05) satisfied the USEPA CSO Control Policy and the Department's CSO Control Strategy. A subsequent environmental review resulted in a City agreement with the Cayuga County Health Department for additional treatment of overflows representing the difference between the 6-month, 6-hour and one-year storm.

Under the 2017 permit, discharge from the Storage and Release facility (S&RF) from Outfall 002 was permitted during wet weather events. Historically, the S&RF received combined storm and sanitary flows however, in accordance with the 2020 CSO Engineering Study Report, all flow upstream of the S&RF have been separated. Therefore, in accordance with Department practice, the S&RF has been reclassified as a Type II Sanitary Sewer Overflow (SSO) and discharge from Outfall 002 can no longer be permitted. As such, Outfall 002 will be removed from the permit.

The facility is currently under construction for the following upgrades/improvements:

- Replace the Primary Scum mechanisms.
- Rehab the Gravity Thickener and four (4) final clarifiers.
- Construct three (3) anaerobic digesters.
- Replace one (1) belt dewatering press.
- Install a belt sludge dryer.
- Replace four (4) aeration blowers, four (4) aeration basin pipe systems and diffusers.

The facility is also planning to construct a new onsite Overflow Retention Facility to discharge from the existing Outfall 01A, replacing the exisiting aging infrastructure.

The facility accepts wastewater from the following municipalities:

Municipality	POSS # or SPDES #	Collection System
City of Auburn	NY0021903	Combined
Town of Fleming	NYS700073	Separate
Town of Owasco	NYS700002	Separate
Town of Sennett	NYS700003	Separate
Town of Aurelius	NYS700001	Separate

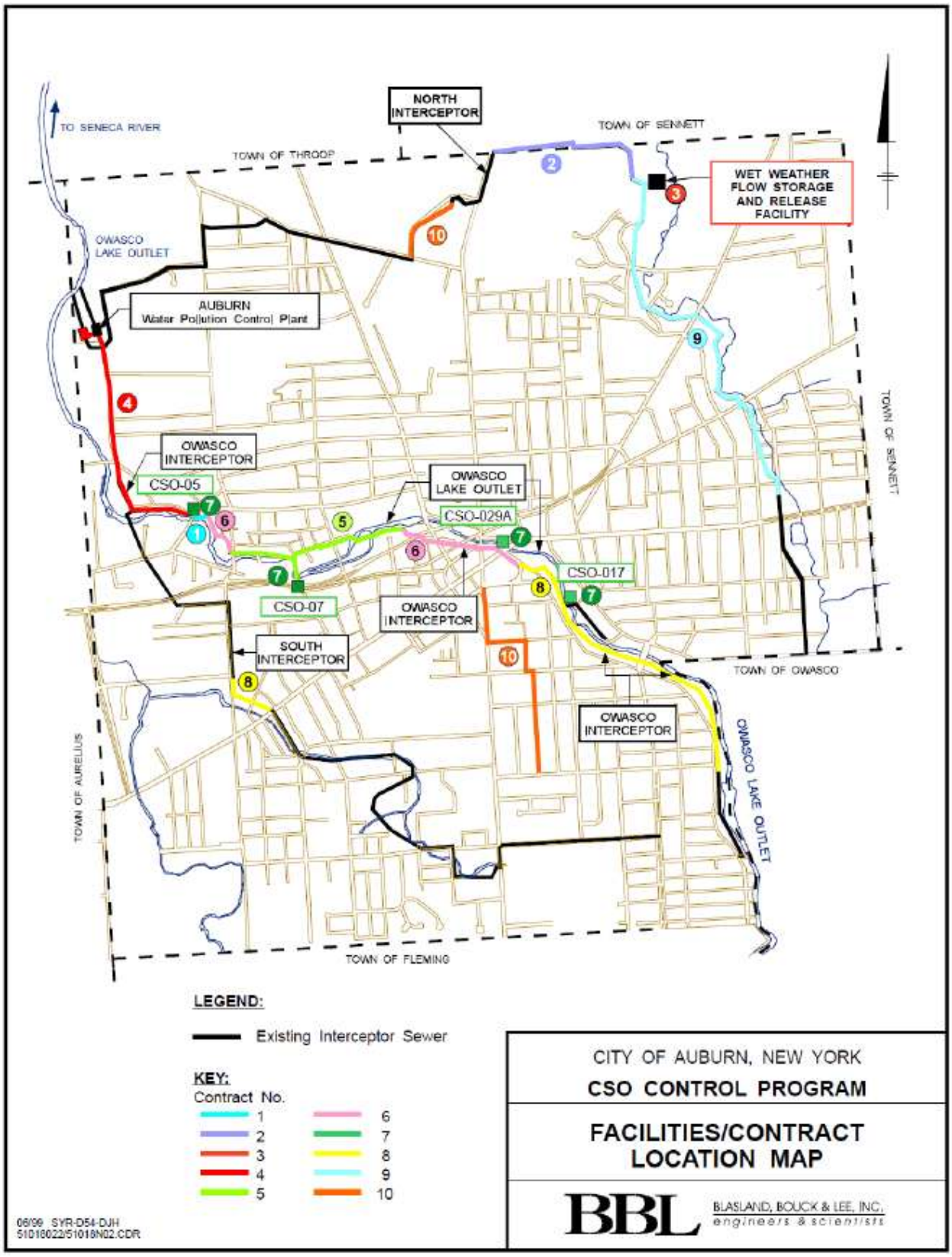
The facility accepts wastewater from the following significant industrial users (SIUs):

Significant Industrial User (SIU)	SIC Code	Categorical Reference (if applicable to 40 CFR)
City of Auburn Landfill	4953	Part 437
Brewer Road Landfill	4953	N/A
Casella Waste Services of Ontario, Inc.	4953	N/A
Cayuga Milk Ingredients, LLC	2023	Part 405
D&W Diesel, Inc.	7538	N/A
EM-Com, Inc.	3672	N/A
Finger Lakes Fish, LLC	0273	N/A
General Electric Company/Powerex	3629	N/A
Grober Nutrition, LLC	2048	N/A
Hammond & Irving, Inc.	3312	N/A
Meier's Creek Brewing Company	2082	N/A
Nucor Steel Auburn	3312	Part 420
Onco Fermentations Inc.	2082	N/A
Owens-Brockway Glass Container, Inc.	3221	Part 426.86
Page Transportation	4213	N/A
Pollution Abatement Services (PAS)	4953	N/A
Prison City Farm House, LLC	2082	N/A
Xylem Water Systems USA, LLC	3479	Part 433.17

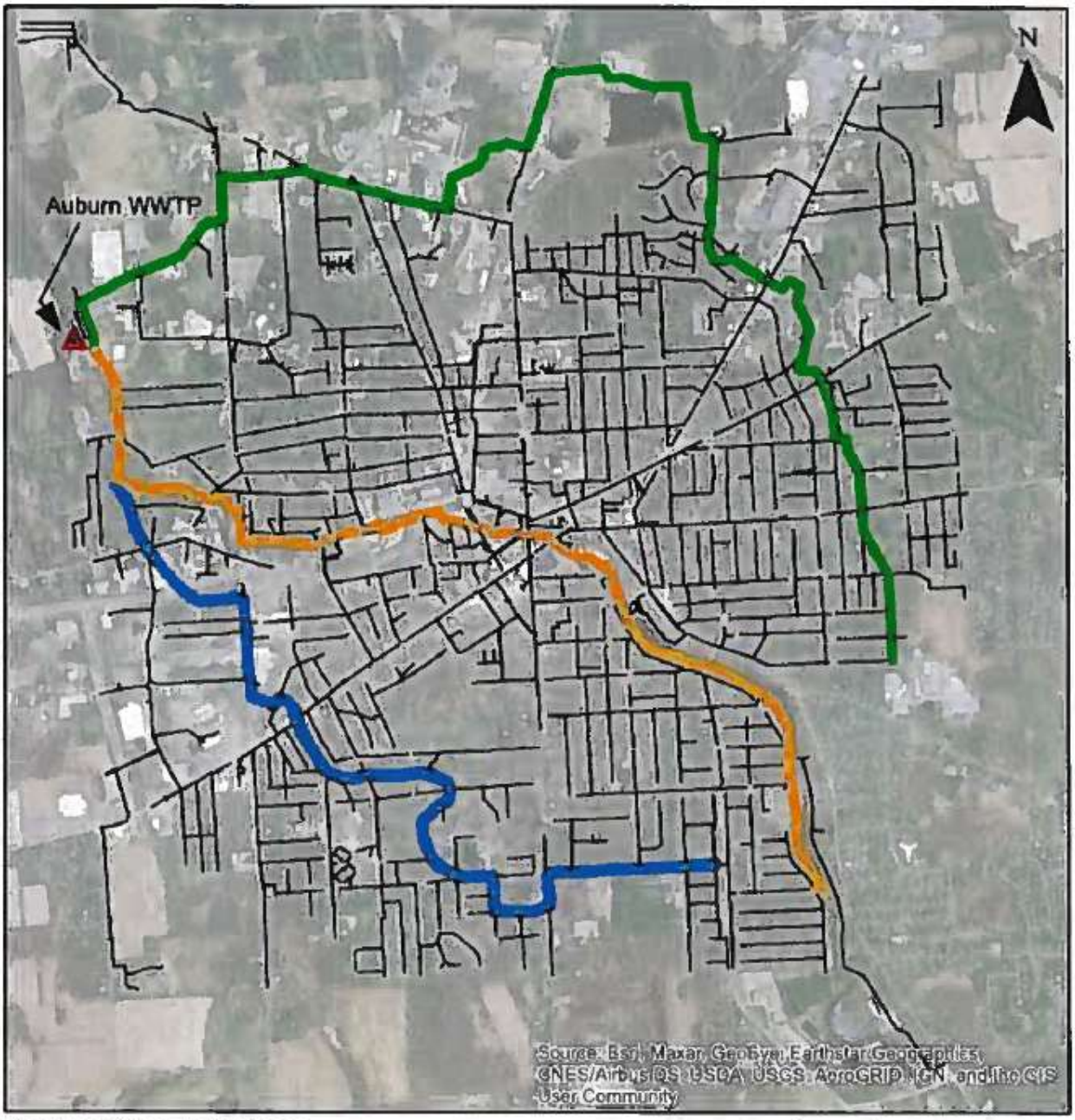
Since the last full technical review, the City no longer accepts waste from "BCS Access Systems," formerly known as "ZF TRW Automotive Electronics," after the facility closed down in July 2021 and their permit expired on 11/30/22. Additionally, the Town of Camillus' Landfill (SIC 4953, Part 437) does not use the Auburn POTW, and their permit expired on 9/10/22 and was not renewed.

Site Overview

Aerial Photo of the City of Auburn STP Primary Outfalls



The City of Auburn's Facilities & Contract Location Map



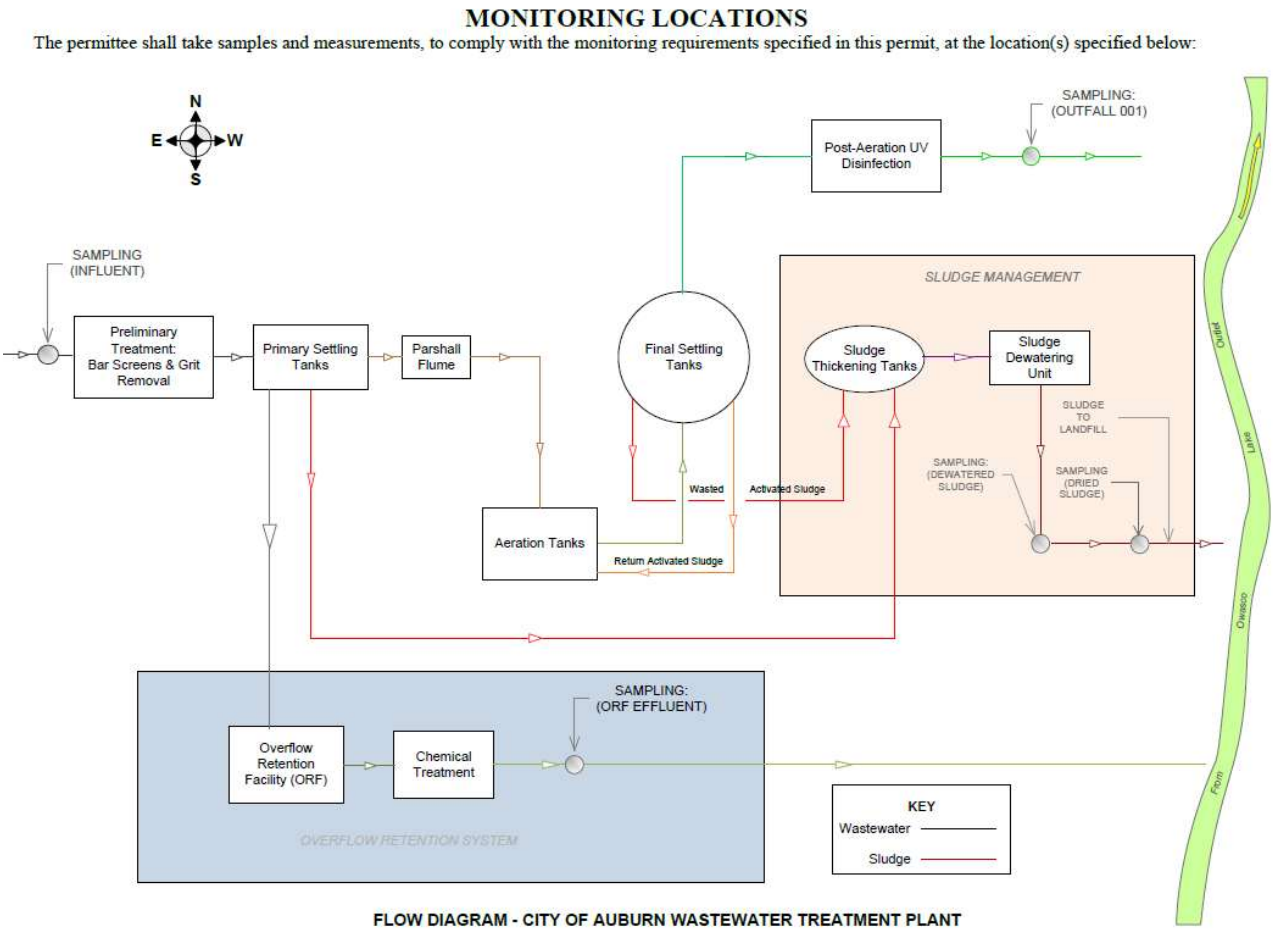
Auburn Sewer System
City of Auburn, Cayuga County, New York
Date: 2/05/2021
Notes:

Legend
- North Interceptor
- Owasco Interceptor
- South Interceptor
- Local Sewers

CDM Smith

1 inch = 3,000 feet

City of Auburn Sewer System Map



The City of Auburn's Water Pollution Control Plant Schematic

Enforcement History

At the time of this review, the City of Auburn is not currently operating under any Order of Consent nor was the City issued any Notice of Violation (NOV) that would affect the development of this permit.

However, it is important to note that the City's current LTCP requirement is a result of a 1989 Order on Consent. After the City completed all required work in 2005, they received a modified permit which lead to the City being released from the 1989 Consent Order in 2006.

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

Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports and the application submitted by the permittee for the period 1/1/2019 to 12/31/2023.

Interstate Water Pollution Control Agencies

Outfalls 001, 01A, 002, 005, 007, 017, 29A are located within the Great Lakes watershed and International Joint Commission (IJC) compact area which places additional requirements in the SPDES permit.

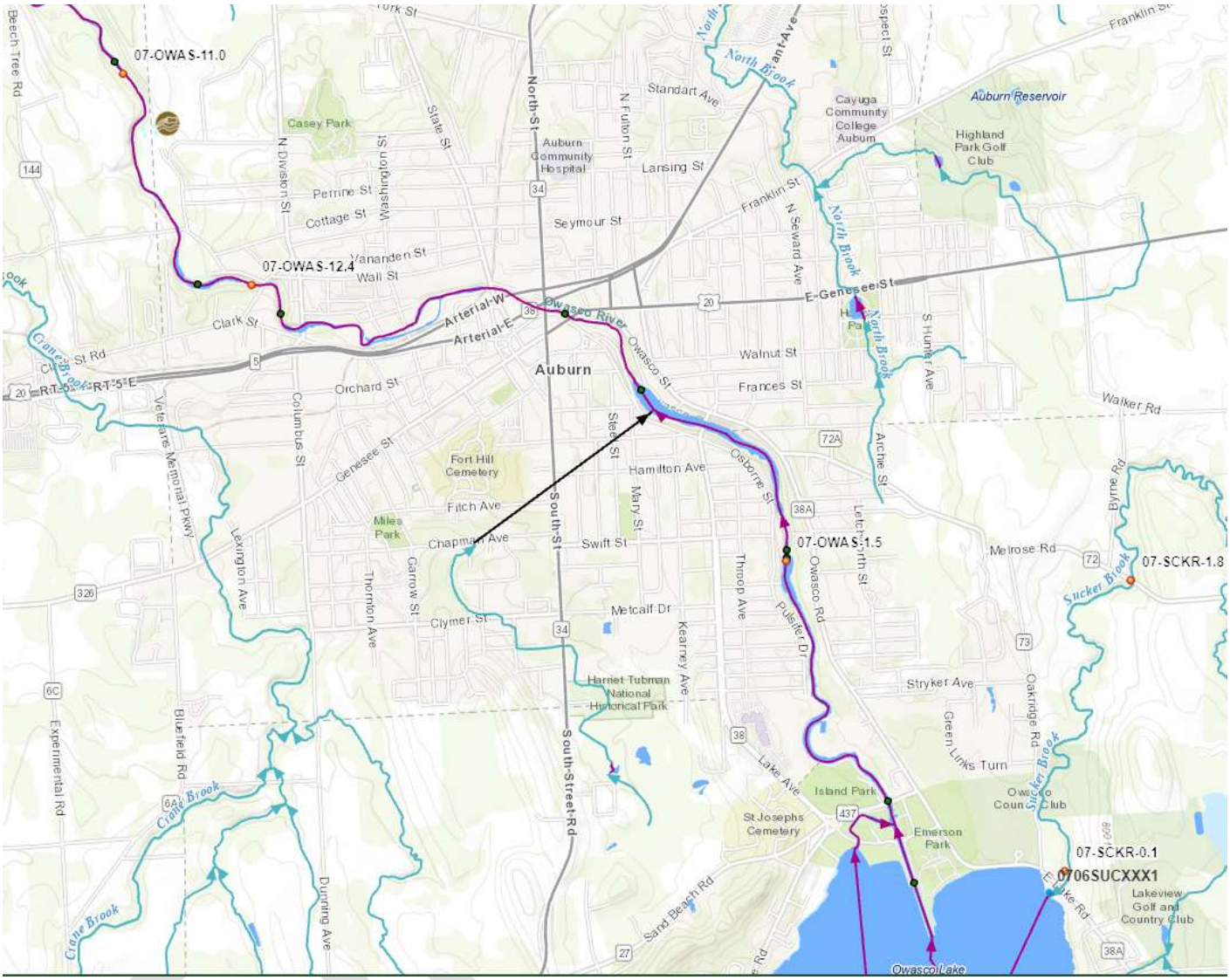
Receiving Water Information

The facility discharges via the following outfalls:

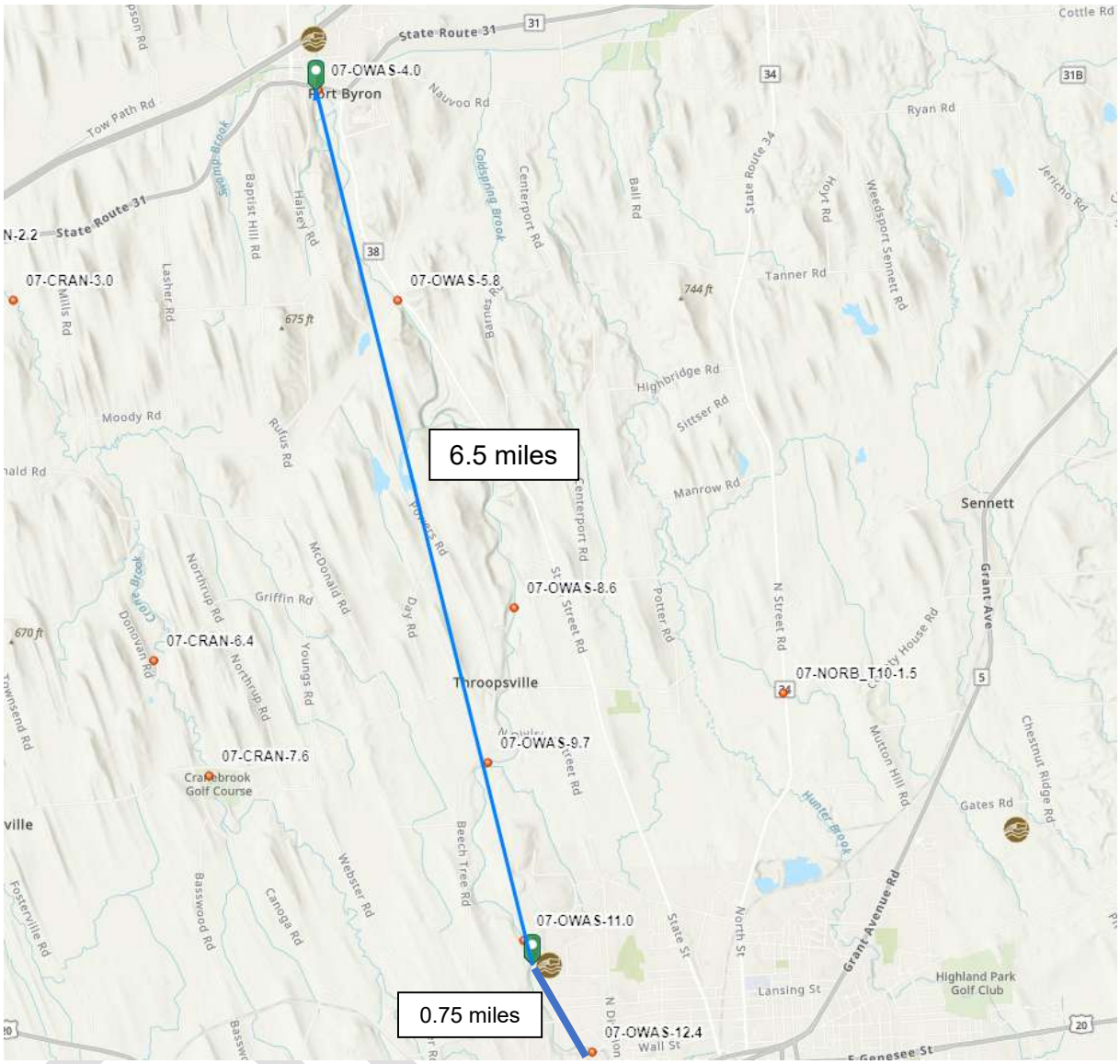
Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	4952	Treated Combined Sewage	Owasco Lake Outlet, Class C
01A	4952	Partially Treated Combined Sewage	Owasco Lake Outlet, Class C
005	4952	Disinfected Combined Sewage	Owasco Lake Outlet, Class C
007	4952	Disinfected Combined Sewage	Owasco Lake Outlet, Class C
017	4952	Disinfected Combined Sewage	Owasco Lake Outlet, Class C
029A	4952	Disinfected Combined Sewage	Owasco Lake Outlet, Class C

Reach Description: The Owasco Lake Outet flows north from the upper end of the Owasco Lake for approximately 12-13 miles before discharging into the Seneca River. The minimum flow through the outlet is controlled by a State Dam about 0.5 miles upstream of the STP. About 7 miles downstream of the facility is the Village of Port Byron's Wastewater Treatment Plant (NY0020338) which was not considered as having a substantial impact to the City of Auburn's STP. NYSDEC Rotating Integrated Basin Studies (RIBS) Site 07-OWAS-12.4 is the closest upstream monitoring site for the facility but it did not contain sufficient ambient data. Because of this, site 07-OWAS-4.0, located approximately 6.5 miles downstream of the facility was used for ambient data in the water quality analysis. Both segments are classified as Class C, having a best use for propagation and growth of fish and other aquatic resources as well as non-contact recreational use.

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



NYSDEC DOW Data Monitoring Portal Screenshot – Owasco Lake Flow to Facility



NYSDEC DOW Data Monitoring Portal Screenshot – Distance from facility to monitoring points used in this permit development

Impaired Waterbody Information

The Owasco Lake Outlet segment near the facility is identified by PWL No. 0707-001, which is not listed on the 2020-2022 New York State Section 303(d) List of Impaired/TMDL Waters, therefore, there are no applicable wasteload allocations (WLAs) for this facility.

Critical Receiving Water Data & Mixing Zone

The low flow condition for the Owasco Lake Outlet was obtained from a drainage basin ratio analysis with USGS gage station 4235500, Owasco Outlet Near Auburn NY located at 42.95° latitude and -76.60° longitude. The 7Q10 flow and drainage area at the gage were found from the USGS/NYSDEC Bulletin 74, 1979. The 1Q10 flow was estimated as half the 7Q10 and the 30Q10 flow was estimated as 1.2 x 7Q10.

The low flows at the facility location were found from a drainage basin ratio analysis and are shown below.

DRAINAGE BASIN RATIO	1Q10	7Q10	30Q10	
Gage Name	Owasco Outlet			
Gage ID Number	4235500			GIS USGS NY Stream Gages
Low Flow at Gage (cfs)	9.5	19	22.8	Bulletin 74
Drainage Area at Gage (mi^2)	206	206	206	Bulletin 74
Drainage Area at Facility (mi^2)	206	206	206	StreamStats
Drainage Basin Ratio (facility / gage	1.0	1.0	1.0	
Calculated Flow at Facility (cfs)	9.50	19.00	22.80	

Since the minimum stream flow within the Outlet is controlled by operation of a State Dam, the minimum required streamflow of 30 CFS (19.39 MGD) through the Outet was used to calculate the acute, chronic, and human, aesthetic, wildlife (HEW) dilution ratios. This requirement is applicable during the months of July-May. In June, the streamflow requirement is raised to a minimum of 60 CFS through the Outlet, resulting in a different allowable dilution. Both scenarios are illustrated in the table below. This permit, however, will follow one dilution year round, consistent with the minimum required Outlet streamflow of 30 CFS.

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

Outfall No.	Flow (CFS)	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001	30	X:X	2.6:1	2.6:1	TOGS 1.3.1
	60	4.2:1	4.2:1	4.2:1	TOGS 1.3.1

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

Permit Requirements

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

Whole Effluent Toxicity (WET) Testing

An evaluation of the discharge indicates the potential for toxicity based on the following criteria: Appendix Link.
The applicable WET testing criteria for this facility is #7:

- Treatment plants which equal or exceed a discharge of 1 MGD.

Consistent with TOGS 1.3.2, a reasonable potential analysis was performed using the existing WET data for this facility (see data below). It was determined that while the analysis indicated no potential for toxicity in the effluent, WET testing is required based on the criteria listed above and WET action levels are being continued in the permit. Given the dilution available and location within the Great Lakes basin, the permit requires chronic only WET testing. Samples will be collected quarterly during years ending in 3 and 8. Under the 2017 permit, WET testing action levels were miscalculated. As such, WET testing action levels of 0.3 TUa and 2.6 TUc have been

included in the permit for each species. Since the acute dilution ratio is less than 3.3, the acute action level has been set equal to the default value of 0.3 TUa. The chronic action levels represent the chronic dilution ratio.

Test Date	[1]MSS 48H LC50 (%Effluent)	[2]MSS TUa	[3]TUa Action Level	[4]MSS Survival 100% Effluent	[5]Acute Test Result	[6]MSS RPD TUa	[7]Acute WET Limit Required	[8]MSS 7D NOEC/IC25 (%Effluent)	[9]MSS NOEC/IC25 TUc	[10]TUc Action Level	[11]Chronic Test Result NOEC/IC25	[12]MSS RPD IC25 TUc	[13]Chronic WET Limit Required
01/23	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.3	No	>100% (FI)/>100% (FI)	<1.0 (FI)/<1.0 (FI)	2.6	Pass/Pass	<1.3	No
02/23	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.3	No	>100% (FI)/>100% (FI)	<1.0 (FI)/<1.0 (FI)	2.6	Pass/Pass	<1.3	No
03/23	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.3	No	>100% (FI)/>100% (FI)	<1.0 (FI)/<1.0 (FI)	2.6	Pass/Pass	<1.3	No
^04/23	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.3	No	25% (I)/49% (I)	4.0 (I)/2.0 (I)	2.6	**Fail**/Pass	2.6	No
05/23	>100% (FI)	<0.3 (FI)	0.3	90% (I)	Pass	<0.3	No	>100% (FI)/>100% (FI)	<1.0 (FI)/<1.0 (FI)	2.6	Pass/Pass	<1.3	No
#06/23	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.3	No	>100% (F)/>100% (F)	<1.0 (FI)/<1.0 (F)	2.6	Pass/Pass	<1.3	No
07/23	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.3	No	>100% (FI)/>100% (FI)	<1.0 (FI)/<1.0 (FI)	2.6	Pass/Pass	<1.3	No
08/23	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.3	No	>100% (FI)/97.5% (I)	<1.0 (FI)/1.0 (I)	2.6	Pass/Pass	1.3	No
09/23	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.3	No	>100% (FI)/>100% (FI)	<1.0 (FI)/<1.0 (FI)	2.6	Pass/Pass	<1.3	No
10/23	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.3	No	>100% (FI)/>100% (FI)	<1.0 (FI)/<1.0 (FI)	2.6	Pass/Pass	<1.3	No
11/23	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.3	No	>100% (FI)/>100% (FI)	<1.0 (FI)/<1.0 (FI)	2.6	Pass/Pass	<1.3	No
12/23	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.3	No	>100% (FI)/>100% (FI)	<1.0 (FI)/<1.0 (FI)	2.6	Pass/Pass	<1.3	No

2023 WET Testing Analysis

Footnotes:

^The NOEC fails but the IC25 passes with averages of 45.2, 44.3, 43.5, 43.3, 33.5 (26% effect), and 17.5 (61% effect) young produced in the Receiving Water Control (RWC), 6.25%, 12.5%, 25%, 50%, and 100% effluent respectively. Although the Percent Minimum Significant Difference (PMSD) is below the lower bound at 8% meaning the test is very sensitive, the dose response is clear. Notably, the primary RWC did perform better than the secondary Lab Water Control (LWC) with an average of 39.8 young produced. Given that the IC25 passes and the eight additional monthly tests that followed were overwhelmingly non-toxic, the April results are considered passing overall with no follow-up testing required.

#The invertebrate results were anomalous as the Receiving Water control (RWC) failed to meet the Test Acceptability Criteria (TAC), with suppressed reproduction across all effluent concentrations disallowing further interpretation. Survival increased across concentrations with 80% (RWC), 80% (6.25% effluent), 90% (12.5% effluent), 90% (25% effluent), 90% (27.8% effluent), 90% (50% effluent), and 100% (100% effluent). Conversely, reproduction was atypical relative to dose response with averages of 9.9, 9.4, 12.2, 13.1, 18.8, 8.0, and 16.6 young produced respectively. That said, 100% effluent performed well with 100% survival and an average of 16.6 young produced which exceeds EPA's TAC, but is also significantly lower than the secondary LWC with 90% survival and an average of 46.5 young produced. However, given that all subsequent months tests passed and were overwhelmingly non-toxic, the June reproduction results are considered borderline passing with no RP, similar to April's results.

[1]Most Sensitive Species 48-hour Lethal Concentration: (F=Fish; I=Invertebrate) is the concentration or percentage of effluent that is lethal to 50% of the exposed organisms over a 48-hour period, and often indicates one species is more sensitive than the other during effluent testing.

[2]Most Sensitive Species Toxic Units Acute: is calculated as (100 / MSS 48H LC50). However, because $\leq$ 0.3 TUa is defined as the acceptable amount of Acute toxicity at the edge of the Acute mixing zone, and mathematically 100 / 100 = 1.0 (i.e. a failing result), non-toxic Acute test results are indicated as < 0.3.

[3]Toxic Unit Acute Action Level/Limit: is calculated as [Acute Dilution Factor x 0.3 TUa] representing the maximum allowable effluent TUa at the edge of the Acute mixing zone ensuring Acute protection of the receiving water. When the Acute Dilution Factor is < 3.3, the default Acute Action Level of 0.3 TUa is used representing the maximum allowable effluent TUa at the end of pipe.

[4]Most Sensitive Species Survival in 100% Effluent: is the lowest percentage of surviving organisms in 100% effluent, providing additional evidence of unacceptable Acute toxicity when the necessary 50% or greater mortality required to generate an LC50 has not been attained. *Denotes statistically significant mortality in 100% effluent as compared to the control.

[5]Acute Test Result: MSS TUa ≤ TUa Action Level/Limit for passing effluent test result and MSS TUa > TUa Action Level//Limit for a failing effluent test result. If unacceptable mortality (i.e. statistically significant as compared to the control) is noted in 100% effluent, this may also be considered a failing test result.

[6]Most Sensitive Species Reasonable Potential Determination Toxic Units Acute: is calculated as (MSS TUa x 1.1), the Reasonable Potential Multiplier when twelve monthly tests have been completed and the Coefficient of Variation (CV) directly calculated. This takes into account the statistical potential for effluent variability to occur causing an exceedance of the toxicity-based Action Level.

[7]Acute Whole Effluent Toxicity Limit Required: MSS RPD TUa ≤ TUa Action Level, then no toxicity-based Limit is required, and the Action Level remains in place. If MSS RPD TUa > TUa Action Level, then a toxicity-based Limit is required, and the Action Level becomes the Limit. **In low dilution situations, the application of the RPD to the Acute results often mathematically suggests the need for Acute WET Limits even when there is no toxicity evident in 100% effluent (i.e. a non-detect). Therefore, this data cannot be used to implement a WET Limit.

[8]Most Sensitive Species 7-day No Observed Effect Concentration or 25% Inhibition Concentration: is the highest concentration or percentage of effluent tested that causes no statistically significant effect to the exposed test organisms as compared to the control over a 7-day period, or the concentration or percentage of effluent that causes a 25% reduction in survival, growth, or reproduction for the test population.

[9]Most Sensitive Species Toxic Units Chronic: is calculated as (100 / MSS 7D NOEC) or (100 / MSS 7D IC25).

[10]Toxic Unit Chronic Action Level/Limit: is calculated as [Chronic Dilution Factor x 1.0 TUc] representing the maximum allowable effluent TUc at the edge of the Chronic mixing zone ensuring Chronic protection of the receiving water.

[11]Chronic Test Result: MSS NOEC/IC25 TUc ≤ TUc Action Level/Limit for passing effluent test result and MSS NOEC/IC25 TUc > TUc Action Level/Limit for a failing effluent test result.

[12]Most Sensitive Species Reasonable Potential Determination Toxic Units Chronic: is calculated as (MSS IC25 TUc x 1.3), the Reasonable Potential Multiplier when twelve monthly tests have been completed and the Coefficient of Variation (CV) directly calculated. This takes into account the statistical potential for effluent variability to occur causing an exceedance of the toxicity-based Action Level.

[13]Chronic Whole Effluent Toxicity Limit Required: MSS RPD IC25 TUc ≤ TUc Action Level, then no toxicity-based Limit is required, and the Action Level remains in place. If MSS RPD IC25 TUc > TUc Action Level, then a toxicity-based Limit is required, and the Action Level becomes the Limit. ***In low dilution situations, the application of the RPD to the Chronic results often mathematically suggests the need for Chronic WET Limits even when there is no toxicity evident in 100% effluent (i.e. a non-detect). Therefore, this data cannot be used to implement a WET Limit.

Anti-backsliding

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

Appendix Link

Antidegradation

The permit contains effluent limitations which ensure that the best usages of the receiving waters will be maintained. The Notice of Complete Application published in the Environmental Notice

Bulletin contains information on the State Environmental Quality Review (SEQR)[3] determination. Appendix Link

Discharge Notification Act Requirements

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

Requirements for Combined Sewer Overflows (CSOs)

Appendix Link

Best Management Practices (BMPs) for Combined Sewer Overflows (CSOs)

The BMPs for CSOs require the permittee to implement operation and maintenance procedures[4]; use the existing treatment plant and collection system to the maximum extent practicable; effect sewer design replacement and drainage planning; maximize pollutant capture; and minimize water quality impacts from combined sewer overflows. The submittal requirements are summarized in the Schedule of Additional Submittals. This requirement has been continued from the previous permit.

Long-Term Control Plan (LTCP)

CSO discharges from the permittee are being addressed under the LTCP approved by the DEC in 2005. LTCP requirements were required under Order No. R7-0382-89-05.

Post-Construction Compliance Monitoring (PCCM)

PCCM is required by all CSO permittees to verify compliance with the EPA National CSO Control policy and evaluate attainment of NYS water quality standards. At the time of this review, a PCCM plan has not yet been submitted to the Department for approval. Development of a PCCMP will be required in this permit term. Upon approval of the PCCMP, monitoring will be required in years ending in 3 and 8 in accordance with the SPDES Permit and the permittee shall submit a PCCM report the following year.

Sensitive Area Reassessment

The permit requires the reassessment of the feasibility of eliminating or relocating CSO outfalls discharging to sensitive areas. The reassessment is required once per permit term, or every five years.

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 6/27/2024, 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.

[3] As prescribed by 6 NYCRR Part 617
[4] See 6 NYCRR 750-2.8(a)(2)

Mercury[5]

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

The facility is located in the Great Lake Basin as a Class 05 EPA Major Municipal Facility and the permit includes requirements for the implementation of MMP Type I.

The permit includes a daily max total mercury effluent limitation of 50 ng/L, sampled quarterly. The facility has ≥ 10 effluent mercury data points and the existing effluent quality (EEQ) of 6.5 ng/L was calculated from the lognormal 95th percentile of 10 mercury effluent samples collected from January 2019 to June 2024. A mercury minimization program consisting of the following is also required:

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

Since the facility is located within the Great Lakes Basin, the permit also includes a 12-month rolling average total mercury effluent limitation equal to the EEQ.

> As the EEQ is ≤12 ng/L (i.e., the concentration attributed to natural atmospheric deposition), the sampling frequency in the permit remains as quarterly. The permit language reflects additional reductions in the MMP requirements.

Biennial Pollutant Scan

Three effluent samples for applicable parameters must be submitted with an NY-2A Application[6]. The permit includes a requirement to perform biennial sampling (once every two years) of the STP 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 retreatment 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.

Emerging Contaminant Monitoring

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

Given the emerging nature of these contaminants; the USEPA's addition of PFOA and PFOS to the hazardous substance list under CERCLA; the USEPA's addition of PFOA and PFOS to the

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

recommended contaminant monitoring list for state fish advisory programs; and pursuant to 6 NYCRR 750-1.14(f), the Department is imposing Action Levels, and minimization programs when there is confirmation those Action Levels are exceeded. This requirement is being imposed for the protection of the downstream receiving waterbody and to gather additional data needed to support establishment of TBELs.

Based on the available data and detections of PFOS, an Action Level set at the Maximum Contaminant Level (MCL) of 10 ng/L is specified with monitoring required for the remaining 39 PFAS compounds pursuant to 6 NYCRR Part 750-1.13(b). Monitoring requirements are also consistent with guidance released in EPA memos dated April 28, 2022, and December 5, 2022. Please see the Pollutant Summary Table below for more information.

Schedule of Compliance

A Schedule of Compliance is being included[7] for the following items (Appendix Link):

1. ORF replacement construction completion date.
    - Submittal of Certificate of Completion

Schedule of Additional Submittals

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

- Emerging Contaminant Monitoring Program
- Water Treatment Chemical (WTC) Annual Report
- Annual Flow Certification Form
- Biennial Pollutant Scan
- WET Testing Results Report
- Revised Wet Weather Operating Plan
- CSO Best Management Practices (BMP) Annual Report.
- Post-Construction Compliance Monitoring (PCCM) Plan
- PCCM Report
- Sensitive Area Reassessment Report
- Stormwater No Exposure Certification
- Mercury Minimization Program Annual Status Report (MMP) (maintained on-site)
- Industrial Pretreatment Program Annual Report (IPP)

Special Conditions

The permit continues to require special conditions for the operation of the Overflow Retenetion Facility (ORF) located at the treatment plant. These conditions are intended to maximize capture of combined sewage and provide minimum treatment (screening, primary settling, and disinfection) in accordance with the CSO Control Policy. These conditions include requirements for how and when to divert flow to and from the ORF.

[7] Pursuant to 6 NYCRR 750-1.14

Permittee: City of Auburn
Facility: Auburn Sewage Treatment Plant
SPDES Number: NY0021903
USEPA Major/Class 05 Municipal

Date: June 5, 2025 v.1.25
Permit Writer: Dana Peters
Water Quality Reviewer: Dana Peters
Full Technical Review

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
001	42° 56' 37" N	-76° 35' 47" W	Owasco Lake Outlet	C	Ont. 66-12-43 PWL: 0706-0009	07 / 06	168[8]	6.14	12.28	14.74	12	2.6:1[9]	2.6:1[8]	2.6:1[8]
												4.2:1[10]	4.2:1[9]	4.2:1[9]
01A	42° 56' 33" N	-76° 35' 46" W									-	-	-	-

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall # 001	001	**Description of Wastewater:** Treated Sanitary Sewage
		Type of Treatment: Screening, Grit Removal, Primary Settling, Final Settling, Post-Aeration, UV 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 1/1/2019 to 12/31/2023 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	MGD	Monthly Avg	12	7.6 Actual Average	60 / 0	**12**	Design Flow	No alterations that will impair the waters for their best usages.					703.2	-	Design Flow
	Consistent with TOGS 1.3.3 for POTWs, The flow limit is set at the design flow of the wastewater treatment facility.														
Flow Rate, Owasco Outlet	CFS	Daily Min	30	19 Actual Min	55 / 0	**30**	-	-						-	WQBEL
			60	44 Acutal Min	5 / 0	**60**									
	The averages reported are actual averages. 30 CFS reflects the seasonal minimum limit from July 01 to May 31, whereas 60 CFS reflects the minimum limit for June.														
pH	SU	Minimum	6.0	6.6 Actual Min	60 / 0	**6.0**	TOGS 1.3.3		-	6.5 – 8.5	Range	6.5 - 8.5	703.3	-	TBEL

[8] Ambient hardness was calculated from RIBS station 07-OWAS-4.0, located ~6.5 miles from the facility, using 1 sample collected on July 27, 2021.
[9] The dilution values are based on the minimum river flow of 30 CFS.
[10] The dilution values are based on the minimum river flow of 60 CFS. These dilution ratios will not be included in the permit.
[11] Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # 001	001	**Description of Wastewater:** Treated Sanitary Sewage
		Type of Treatment: Screening, Grit Removal, Primary Settling, Final Settling, Post-Aeration, UV 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.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
		Maximum	9.0	8.3 Actual Max	60 / 0	**9.0**		7.9[12]							
	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 protective of the WQS.														
Temperature	°F	Daily Max	Monitor	76 Actual Max	60 / 0	**Monitor**	750-1.13 Monitor	73	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				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 is continued from the previous permit.														
Dissolved Oxygen (DO)	mg/L	Daily Min	7.0	7.9 Actual Average	60 / 0	**7.0**	Antibacksliding	6.8	5.2 mg/L Critical Point	(Non-Trout) 4.0 mg/L	Narrative	No Reasonable Potential	703.3	-	TBEL
	For July-October, the downstream DO concentration was modeled using the Streeter-Phelps equations and the following assumptions: Effluent DO = 7.0 mg/l (previous permit limit), Effluent UOD = 31.15 mg/L (calculated based on CBOD5 and NOD), Effluent $CBOD_5$ = 4.0 mg/L (maximum value from existing 7-day average CBOD5 data), Effluent NOD = 25.3 mg/L (previous permit limit Ammonia (as NH3) converted to NOD). For the month of June, the downstream DO concentration was modeled using the Streeter-Phelps equations and the following assumptions: Effluent DO = 7.0 mg/l (previous permit limit), Effluent UOD = 43.2 mg/L (calculated based on CBOD5 and NOD), Effluent NOD = 27.1 mg/L (previous permit limit Ammonia (as NH3) converted to NOD). For Nov-May, downstream DO concentration was modeled using the Streeter-Phelps equations and the following assumptions: Effluent DO = 7.0 mg/l (previous permit limit), Effluent $CBOD_5$ = 40 mg/L (set equal to secondary treatment standards), Effluent NOD = 27.1 mg/L (previous permit limit Ammonia (as NH3) converted to NOD). Reach Description: The model only included the City of Auburn's Sewage Treatment Plant located ~3.88 miles downstream of the Owasco Lake Outlet. There were no other nearby facilities that would significantly contribute to the evaluation of the DO Model. The model did not have to account for any changes in waterbody classification. The model showed that downstream DO is satisfied for all cases under typical conditions. Due to antibacksliding, a WQBEL of 7.0 mg/L is retained year-round to maintain downstream water quality.														
5-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) – NOV-MAY	mg/L	Monthly Avg	25	2.1	35 / 0	**25**	40 CFR 133.102	-	See Dissolved Oxygen			X	-	-	TBEL
		7 Day Avg	40	4.3	34 / 1	**40**	40 CFR 133.102					X			
	lbs/d	Monthly Avg	2505	40	35 / 0	**2500**	-					X			
		7 Day Avg	4005	490	35 / 0	**4000**	-					X			
	% Rem	Minimum	85	99	60 / 0	**85**	40 CFR 133.102					-			

[12] Ambient pH calculated from Stream Monitoring Site 07-OWAS-12.4, located ~0.75 miles due south of the facility, using 1 sample collected in July 2002.

Outfall # 001	001	**Description of Wastewater:** Treated Sanitary Sewage
		Type of Treatment: Screening, Grit Removal, Primary Settling, Final Settling, Post-Aeration, UV 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.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
	Consistent with 40 CFR Part 133.102 and TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. See justification for Dissolved Oxygen. Consistent with 750-2.5(e)(2), effluent limitations have been rounded to two significant digits.														
5-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) – JUN-OCT	mg/L	Monthly Avg	Monitor	2.1	35 / 0	**Monitor**		-	See Dissolved Oxygen			X	-	-	TBEL
		7 Day Avg	Monitor	4.3	34 / 1	**Monitor**						X			
	lbs/d	Monthly Avg	Monitor	140	35 / 0	**Monitor**	-					X			
		7 Day Avg	Monitor	490	35 / 0	**Monitor**	-					X			
	% Rem	Minimum	85	99	60 / 0	**85**	40 CFR 133.102					-			
	Consistent with 40 CFR Part 133.102 and TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. See justification for UOD. Monitoring is required from June 01 to Oct 31.														
UOD (June 1st-30th)	mg/L	Daily Max	43	38	5 / 0	**43**	TOGS 1.3.3	-	See Dissolved Oxygen			X	-	-	WQBEL
	lbs/d	Daily Max	4300	3800	5 / 0	**4300**	TOGS 1.3.3	-				X		-	WQBEL
UOD (Jul-Oct)	mg/L	7 Day Avg	30	43	20 / 0	**30**	TOGS 1.3.3	-				X		-	WQBEL
	lbs/d	7 Day Avg	2950	3400	20 / 0	**2900**	TOGS 1.3.3	-				X		-	WQBEL
	UOD limits are retained from the previous permit consistent with recommendations from the 1994 Water Assimilation Capacity (WAC) review for the Owasco Lake Outlet. Limits apply during summer months June-Oct. Consistent with 750-2.5(e)(2), effluent limitations have been rounded to two significant digits. See Dissolved Oxygen.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	30	3.1	56 / 4	**30**	40 CFR 133.102	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL
		7 Day Avg	45	3.7	57 / 3	**45**	40 CFR 133.102								
	lbs/d	Monthly Avg	3005	190	59 / 1	**3000**	-								
		7 Day Avg	4505	290	59 / 1	**4500**	-								
	% Rem	Minimum	85	9	60 / 0	**85**	40 CFR 133.102								

Outfall # 001	001	**Description of Wastewater:** Treated Sanitary Sewage **Type of Treatment:** Screening, Grit Removal, Primary Settling, Final Settling, Post-Aeration, UV 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
	Consistent with 40 CFR Part 133.102 and TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given the available dilution, an effluent limitation equal to the TBEL, and consistent with TOGS 1.3.3, is protective of water quality standards. Consistent with 750-2.5(e)(2), effluent limitations have been rounded to two significant digits.														
Settleable Solids	mL/L	Daily Max	0.3	0.1	60 / 0	**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				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 protective of WQS.														
Total Dissolved Solids	mg/L	Daily Max	Monitor	1083 Actual Max	60 / 0	**Monitor**	750-1.13 Monitor	-	410	500	Narrative	No Reasonable Potential	703.3	-	Monitor
	The projected instream concentration was calculated using a maximum effluent concentration of 1083 mg/L, a multiplier of 1.0, an assumed upstream concentration, and the chronic dilution ratio. A comparison of the projected instream concentration to the WQS indicates no easonable potential to cause or contribute to a water quality violation. Consistent with 6 NYCRR 750-1.13(a), monitoring will remain as a requirement and may be used to inform future permitting decisions. This requirement is continued from the previous permit.														
Nitrogen, Ammonia (as N) (July 1 – Oct 31)	mg/L	Monthly Avg	3.0 as NH3	1.1	20 / 0	**2.5**	TOGS 1.3.3	0.1	0.67	1.2	A(C)	No Reasonable Potential	703.5	-	TBEL
Nitrogen, Ammonia (as N) (Nov 1 – June 30)	mg/L	Monthly Avg	4.5 as NH3	2.0	40 / 0	**3.7**	TOGS 1.3.3	0.02	1.2	1.9	A(C)	No Reasonable Potential			

Outfall # 001	001	**Description of Wastewater:** Treated Sanitary Sewage **Type of Treatment:** Screening, Grit Removal, Primary Settling, Final Settling, Post-Aeration, UV 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
	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. The data was evaluated by summer (July-Oct) and winter (Nov-June) seasons. Note, the month of June is included in the winter portion of this evaluation. Summer season: The projected instream concentration was calculated using the EEQ effluent concentration of 1.1 mg/L as N, a multiplier of 1.6, and the human health/aesthetic/wildlife dilution ratio. The upstream ambient concentration was assumed to be 0.1 mg/L as specified by TOGS 1.3.1D. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Due to antibacksliding, the existing permit limit will remain. Winter season: The projected instream concentration was calculated using the EEQ effluent concentration of 1.0 mg/L as N, a multiplier of 1.5, the human health/aesthetic/wildlife dilution ratio, and an upstream ambient concentration of 0.024 mg/L averaged from RIBS data at site 07-OWAS-2.5. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Due to antibacksliding, the existing permit limit will remain.													
Total Nitrogen (TKN) June-Oct	mg/L	Monthly Avg	Monitor	11	25 / 8	**Monitor**	TOGS 1.3.3	-	No Reasonable Potential					-	Monitor
	According to TOGS 1.3.3, all POTWs with a design flow of 1.0 MGD or greater presently monitor for influent and effluent Ammonia and Total Kjeldahl Nitrogen (TKN). Although the facility complies with an Ammonia limit already, monitoring of TKN is still necessary for calculation of UOD.														
Total Phosphorus	mg/L	Monthly Avg	1.0	0.6	59 / 1	**1.0**	TOGS 1.3.6	-	None in amounts that will result in growths of algae, weeds and slimes that wil impair the waters for their best usuages.				703.2	-	TOGS 1.3.6
	Facility is subject to the phosphorus discharge requirements of the 1987 Great Lakes Water Quality Agreement (GLWQA). TOGS 1.3.3 requires that facilities subject to this agreement with an average flow above 1.0 MGD should be limited to 1.0 mg/L on a 30-day average basis.														
Total Mercury	ng/L	Daily Max	50	6.5	10 / 1	**50**	-	-	0.01 ug/L	0.7 ug/L	A(C)	50	GLCA	-	DOW 1.3.10
	ng/L	12 MRA	-	-	10 / 1	**6.5**	-	-	-	-	-	6.5	-	-	DOW 1.3.10
	The data set used to asses Mercury standards was extended from January 2019 through June 2024 to include 10 detects. With an EEQ equal to 6.5 ng/L, this will be the new 12 Month Roling Average. See Mercury section of this fact sheet.														
Coliform, Fecal	#/100 ml	30d Geo Mean	200	82	29 / 1	**200**	TOGS 1.3.3	-	The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.				703.4	-	TBEL
	#/100 ml	7d Geo Mean	400	750	29 / 1	**400**	TOGS 1.3.3	-							
	Consistent with TOGS 1.3.3, effluent disinfection is required seasonally from May 1st - October 31st, due to the class of the receiving waterbody. Fecal coliform limits equal to the TBEL are specified.														

Outfall # 001	001	**Description of Wastewater:** Treated Sanitary Sewage
		Type of Treatment: Screening, Grit Removal, Primary Settling, Final Settling, Post-Aeration, UV Disinfection

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs							
			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	ML	Basis for Permit Requirement
Total Residual Chlorine (TRC)	mg/L	Daily Max	0.1	-	0 / 0	0.1	TOGS 1.3.3	-	0.038	0.005	A(C)	0.013	703.5	**0.03**	ML
	The STP utilizes UV disinfection at Outfall 001 with monitoring required only when emergency chlorination is used when the UV system is inoperable. As such, a WQBEL is retained to protect water quality standards. Due to the low dilution, the calculated WQBEL is less than the TBEL and less than the minimum level of detection. Therefore, an effluent limitation equal to the minimum level of detection of 0.030 mg/L is appropriate.														
Total Iron	lb/d	Daily Max	72	7.1	24 / 1	**72**	Antibacksliding	-	41 ug/L	-	-	-	-	-	TBEL
	There were 24 detections reported within the DMR data set, concentration data is not reported under the 2017 permit. The projected instream concentration was calculated using a maximum estimated effluent concentration of 56.2 ug/L a multiplier of 1.3, and an assumed negligible upstream ambient concentration. Due to antibacksliding, the limit will remain unchanged from the previous permit. Reporting for effluent concentration has been added.														
Additional Pollutants Detected															
Total Copper, Dissolved	lb/d	Daily Max	Monitor	1.5	23 / 7	**-**	-	1.9 ug/L	0.16	1.4	A(C)	No Reasonable Potential	-	-	Discontinued
	Given an existing total copper limitation and no reasonable potential for dissolved copper WQS exceedances, dissolved copper monitoring can be discontinued.														
Total Copper	lb/d	Daily Max	3.8	1.4	24 / 6	**3.8**	Antibacksliding	1.9 ug/L	0.50	1.4	A(C)	No Reasonable Potential	-	-	TBEL
	Concentration data is not reported under the 2017 permit. The projected instream concentration was calculated using a maximum effluent concentration of 9.4 ug/L, a multiplier of 1.1, and an ambient upstream concentration of 1.9 ug/L. A metals translator of 1.042 was used to convert between total and dissolved form in accordance with the EPA Document 823-B-96-007. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Due to antibacksliding, the current limit will remain unchanged. Reporting for effluent concentration has been added.														
Total Lead	lb/d	Daily Max	0.5 - AL	0.16	14 / 6	**0.5 - AL**	TOGS 1.2.1	-	0.04	0.66	A(C)	No Reasonable Potential	-	-	Action Level
	Concentration data is not reported under the 2017 permit. The projected instream concentration was calculated using a maximum estimated effluent concentration of 1.1 ug/L a multiplier of 1.4, and an assumed negligible upstream ambient concentration. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. However, with the number of detects reported, the Action Level will continue from the previous permit. Reporting of concentration data has been added.														
Methylene Chloride	lb/d	Daily Max	0.8 – AL	0.67	10 / 10	**0.8 - AL**	TOGS 1.2.1	-	0.22	20	H(FC)	No Reasonable Potential	-	-	Action Level

Outfall # 001	001	**Description of Wastewater:** Treated Sanitary Sewage
		Type of Treatment: Screening, Grit Removal, Primary Settling, Final Settling, Post-Aeration, UV 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		
	There were 10 detections reported within the DMR data set, concentration data is not reported under the 2017 permit. The projected instream concentration was calculated using a maximum estimated effluent concentration of 5.3 ug/L a multiplier of 1.1, a coefficient variation of 0.14, and an assumed negligible upstream ambient concentration. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. However, with the number of detects reported, the Action Level will continue from the previous permit. Reporting of concentration data has been added.														
Toluene	lb/d	Daily Max	3.1 – AL	0.27 ug/L	9 / 11	**3.1 - AL**	TOGS 1.2.1	-	0.17	600	H(FC)	No Reasonable Potential	-	-	Action Level
	There were 9 detections reported within the DMR data set, concentration data is not reported under the 2017 permit. The projected instream concentration was calculated using a maximum estimated effluent concentration of 2.6 ug/L a multiplier of 1.8, and an assumed negligible upstream ambient concentration. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. However, with the number of detects reported, the Action Level will continue from the previous permit. Reporting of concentration data has been added.														
Total Zinc	lb/d	Daily Max	10 - AL	-	19 / 1	**10 - AL**	TOGS 1.2.1	3.5 ug/L	2.7	13	A(C)	No Reasonable Potential	-	-	Action Level
	There were 19 detections reported within the DMR data set, concentration data is not reported under the 2017 permit. The projected instream concentration was calculated using a maximum estimated effluent concentration of 39 ug/L a multiplier of 1.7, a coefficient variation of 1.18, and an upstream ambient concentration of 3.50 ug/L. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. However, with the number of detects reported, the Action Level will continue from the previous permit. Reporting of concentration data has been added.														
2-chloroethylvinyl ether	µg/L	-	-	50	2 / 0	-	-	-	-	*No Class C Water Quality Standard*		-	-	-	No Limitation
	This parameter was detected in the NY-2A application sampling. The detected maximum discharge was reported as 50 ug/L. A numeric water quality standard does not exist for this parameter for Class C waterbodies. Therefore, no limitation or additional routine sampling is required.														

Emerging Contaminants – Outfall 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[13]	# 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		
Notes: See Emerging Contaminant Monitoring section above. Effluent samples were analyzed for the 40 PFAS compounds and 1,4-Dioxane.															

[13] Existing Effluent Quality: All based on Actual Max value.

Emerging Contaminants – Outfall 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[13]	# 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		
Perfluoro-butanoic Acid (PFBA)	ng/L	Daily Max	-	6.6	1/0	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-pentanoic Acid (PFPeA)	ng/L	Daily Max	-	15	1/0	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-hexanoic Acid (PFHxA)	ng/L	Daily Max	-	11	1/0	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-heptanoic Acid (PFHpA)	ng/L	Daily Max	-	1.5	1/0	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-octanoic Acid (PFOA)	ng/L	Daily Max	-	4.7	1/0	-	-	-	-	*No Class C Water Quality Standard*		-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-nonanoic Acid (PFNA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-decanoic Acid (PFDA)	ng/L	Daily Max	-	1.4	1/0	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-undecanoic Acid (PFUnA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-dodecanoic Acid (PFDoA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-tridecanoic Acid (PFTriA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														

Emerging Contaminants – Outfall 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[13]	# 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		
Perfluoro-tetradecanoic Acid (PFTeA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-butanesulfonic Acid (PFBS)	ng/L	Daily Max	-	5	1/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-pentanesulfonic Acid (PFPeS)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-hexanesulfonic Acid (PFHxS)	ng/L	Daily Max	-	1.8	1/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-heptanesulfonic Acid (PFHpS)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-octanesulfonic Acid (PFOS)	ng/L	Daily Max	-	3 Actual Max	1/1	**10 - AL**	BPJ MCL	-	7.1	160,000 GV	A(C)	No Reasonable Potential		-	**Action Level**
	The projected instream concentration was calculated using a maximum effluent concentration of 3 ng/L, a multiplier of 6.2, the chronic dilution ratio, and an assumed negligible ambient upstream concentration. The comparison of the projected instream concentration to the guidance values indicates no reasonable potential to cause or contribute to a water quality violation. However, due to the presence of PFOS and the need to protect downstream waters, an action level has been established at the NYSDOH Maximum Contaminant Level (MCL) of 10 ng/L. Discharges above the MCL would indicate the potential presence of a controllable source and the need to implement track down measures. See the Emerging Contaminant section for more information.														
Perfluoro-nonanesulfonic Acid (PFNS)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-decanesulfonic Acid (PFDS)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-dodecane-sulfonic Acid (PFDoS)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13

Emerging Contaminants – Outfall 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[13]	# 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		
Perfluoro-octane-sulfonamide (FOSA)	Monitoring has been added to support establishment of future standards or TBELs.														
N-methyl Perfluoro-octanesulfon-amidoacetic Acid (NMeFOSAA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
N-ethyl Perfluoro-octanesulfon-amidoacetic Acid (NEtFOSAA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (4:2 FTS)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (6:2 FTS)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (8:2 FTS)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
N-ethyl Perfluoro-octanesulfon-amide (NEtFOSA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
N-methyl Perfluoro-octanesulfon-amide (NMeFOSA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
N-methyl Perfluoro-octanesulfon-amidoethanol (NMeFOSE)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														

Emerging Contaminants – Outfall 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[13]	# 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		
N-ethyl Perfluoro-octanesulfon-amidoethanol (NEtFOSE)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
9-Chlorohexadeca-fluoro-3-oxanonane-1-sulfonic Acid (9Cl-PF3ONS)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Hexafluoro-propylene Oxide Dimer Acid (HFPO-DA or GenX)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
11-Chloroeicosafluor o-3-oxaundecane-1-sulfonic Acid (11Cl-PF3OUdS)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
4,8-Dioxa-3H-perfluorononanoi c Acid (ADONA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
3-Perfluoropropyl Propanoic Acid (3:3 FTCA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
2H,2H,3H,3H-Perfluoro-octanoic Acid (5:3 FTCA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
3-Perfluoroheptyl Propanoic Acid (7:3 FTCA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13

Emerging Contaminants – Outfall 001

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[13]	# 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		
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA)	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-4-methoxy-butanoic Acid (PFMBA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-3-methoxy-propanoic Acid (PFMPA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro(2-ethoxyethane)sulfonic Acid (PFEESA)	ng/L	Daily Max	-	No Detects	0/1	-	-	-	-	-	-	-	-	-	**Monitor** 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
1,4-Dioxane	µg/L	Daily Max	-	No Detects	0/1	-	-	-	0.00	180,000,000 GV	A(C)	No Reasonable Potential		-	**No Limitation**
	This parameter was not detected in the NY-2A sampling. The projected instream concentration was calculated using a maximum effluent concentration of 0.0 ug/L, a multiplier of 6.2, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. Comparison of the projected instream concentration to the guidance value indicates no reasonable potential to cause or contribute to a water quality violation. As such, no limitation or continued monitoring is required.														

OUTFALL 01A

Outfall # 01A	01A	**Description of Wastewater:** Partially-Treated Sanitary Sewage for On-site Combined Sewer Overflow Retention Facility **Type of Treatment:** Screening, Settling, Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[14]	# 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 1/1/2019 to 12/31/2023 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate[11]	MG/ mon	Individual Event / Monthly Total	Monitor	15 Actual Average	30 / 0	**Monitor**	TOGS 1.3.3	No alterations that will impair the waters for their best usages.					703.2	-	Monitor
	Flow shall be continuously recorded and totalized. The flow reported on the monthly operating report shall be the total flow discharged for the calendar month's reporting period, as well as the Individual Event Totals during the month. Monitoring is required for informational purposes.														
Flow (Overflow Volume)	MG	Total per Event	Report	2.4 Actual Average	30 / 0	**Monitor**	-	No alterations that will impair the waters for their best usages.					703.2	-	Monitor
	ORF Overflow volume shall be calculated using a hydrauic model of the sewer system or other method that has been approved by the Department. Monitoring is required for informational purposes.														
Flow (Pumped Back Volume)	MG	Total per Event	Report	3.1 Actual Average	30 / 0	**Monitor**	-	No alterations that will impair the waters for their best usages.					703.2	-	Monitor
	Flow shall represent the volume pumped back to the headworks per event. Monitoring is required for informational purposes.														
Flow (Retained Volume)	MG	Total per Event	Report	0.49 Actual Average	30 / 0	**Monitor**	-	No alterations that will impair the waters for their best usages.					703.2	-	Monitor
	Flow shall represent the volume of wet-weather flow captured by the ORF and returned to the STP. Monitoring is required for informational purposes.														
BOD_5	lbs/mon	Monthly Total	Monitor	6700 Actual Average	29 / 0	**Monitor**	TOGS 1.3.3	*No BOD5 Water Quality Standard*					-	-	Monitor
	Monitoring is required for informational purposes.														
Total Suspended Solids	lbs/mon	Monthly Total	Monitor	11000 Actual Average	29 / 0	**Monitor**	TOGS 1.3.3	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.					703.2	-	Monitor
	Monitoring is required for informational purposes.														

[14] Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall # 01A	01A	**Description of Wastewater:** Partially-Treated Sanitary Sewage for On-site Combined Sewer Overflow Retention Facility **Type of Treatment:** Screening, Settling, Disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[14]	# 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		
Settleable Solids	ml/l	Daily Max	0.8	0.37 Actual Average	27 / 2	**0.8**	TOGS 1.3.3	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.					703.2	-	TBEL
	Consistent with TOGS 1.3.3 Appendix J, the effluent limitation is equal to the TBEL of 0.8 mL/L for ORF discharges.														
Oil & Grease	mg/l	Daily Max	15	9.2 Actual Average	20 / 9	**15**	TOGS 1.3.3	No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.					703.2	-	TBEL
	Consistent with TOGS 1.3.3, the effluent limitation is equal to the TBEL of 15 mg/L for ORF discharges.														
Floatable Materials	Visual Obs.	Daily Max	None	*	10 / 19	**Monitor**	TOGS 1.3.3	No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.					703.2	-	Monitor
	10 months were reported with detections. Data is reported as “Yes” / “No” answer to visually observing floating material in effluent. Reporting is required for informational purposes.														
Precipitation	Inches	Total per Event	Monitor	2.7 Actual Average	29 / 0	**Monitor**	TOGS 1.3.3	*No Precipitation Water Quality Standard*					-	-	Monitor
	Monitoring is required for informational purposes.														
Number of Discharge Events	Number	Monthly Total	Monitor	5.1 Actual Average	29 / 0	**Monitor**	750-1.13	*No Numeric Water Quaity Standard*					-	-	Monitor
	Monitoring is required for informational purposes.														
Fecal Coliform	Number / 100 ml	Daily Max	400	670 Actual Average	15 / 0	**400**	TOGS 1.3.3	The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.					703.4	-	TBEL
	An effluent limitation is required to ensure effective disinfection.														
Total Residual Chlorine	mg/l	Daily Max	0.1	0.08 Actual Average	16 / 0	**0.1**	TOGS 1.3.3	-						-	TBEL
	An effluent limitation is required to ensure effective disinfection and protection of water quality.														

Appendix: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

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

Outfall and Receiving Water Information

Impaired Waters

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

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

Interstate Water Pollution Control Agencies

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

Existing Effluent Quality

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

Permit Requirements

Basis for Effluent Limitations

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

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

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law[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. Additionally, 6 NYCRR Part 701.1 prohibits the discharge of pollutants that will cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge. Water quality standards can be found under 6 NYCRR Parts 700-704. The limitations must be stringent enough to ensure that water quality standards are met at the point of discharge and in downstream waters and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1, 1.3.2, 1.3.5 and 1.3.6. The DEC considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

Mixing Zone Analyses

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

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

Critical Flows

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

Reasonable Potential Analysis (RPA)

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

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

2) identify water quality criteria applicable to these pollutants;

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

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

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

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

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

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

Whole Effluent Toxicity (WET) Testing:

WET tests use small vertebrate and invertebrate species to measure the aggregate toxicity of an effluent. There are two different durations of toxicity tests: acute and chronic. Acute toxicity tests measure survival over a 96-hour test exposure period. Chronic toxicity tests measure reductions in survival, growth, and reproduction over a 7-day exposure. TOGS 1.3.1 includes guidance for determining when aquatic toxicity testing should be included in SPDES permits. The authority to require toxicity testing is in 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 DEC 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.