NEW YORK STATE | Department of Environmental Conservation

KATHY HOCHUL
Governor

AMANDA LEFTON
Commissioner

April 10, 2026

Onondaga County
650 Hiawatha Blvd West
Syracuse, NY 13204
odeandyer@ongov.net

RE: Oak Orchard Wastewater Treatment Plant
SPDES Permit Renewal & Modification
DEC Permit #: 7-3124-00018/00001, SPDES #: NY0030317
Town of Clay, Onondaga County

Dear Commissioner Dyer:

Enclosed is your State Pollutant Discharge Elimination System (SPDES) permit renewal and modification. It is effective beginning **May 1, 2026,** and expires on **April 30, 2031.**

Please read all permit conditions carefully. All permit documents must be available upon request by the Department staff and must be distributed to and understood by personnel responsible for the proper operation of the facility and compliance with the discharge limits. Any violation of these permit conditions constitutes a violation of the Environmental Conservation Law.

Be advised, the Uniform Procedures Regulations (6 NYCRR Part 621) provide that an applicant may request an adjudicatory proceeding if a permit is denied or contains conditions which are unacceptable to them. Any such request must be made in writing within thirty [30] calendar days of the date of permit issuance and must be addressed to the Regional Permit Administrator at the letterhead address. A copy of the request must also be sent to the Chief Administrative Law Judge, addressed to Chief Administrative Law Judge, NYSDEC, Office of Hearings and Mediation Services, 625 Broadway, Albany, NY 12233-1550.

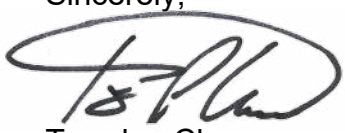
For SPDES permits that are subject to 6 NYCRR 750-1.26, requests for adjudicatory proceedings must also conform to 6 NYCRR 750-1.26(c) and must simultaneously be sent to the Director for the Division of Water at NYSDEC, 625 Broadway, Albany NY 12233-3500. The Director for the Division of Water may deny a request to stay contested or inseverable conditions of a new SPDES permit if there are deficiencies in the information required by 750-1.26(c).

If you have any other questions regarding this permit, you may contact the Division of Environmental Permits at the address below. Please refer to the above referenced numbers when you are corresponding with this office or when you are applying to renew or modify this permit.
Any questions regarding the annual pollutant discharge elimination fee should be addressed directed to the Regulatory Fee Determination Unit at 1-800-225-2566.

RE: Oak Orchard Wastewater Treatment Plant
SPDES Permit Renewal & Modification
DEC Permit #: 7-3124-00018/00001, SPDES #: NY0030317
Town of Clay, Onondaga County

Date: 4/10/2026

Sincerely,



Trendon Choe
Deputy Regional Permit Administrator
Division of Environmental Permits, Region 7
Telephone No. (315) 426-7445

Encl: 7-3124-00018 Oak Orchard Wastewater Treatment Plan SPDES Permit and Factsheet

cc: CO BWP - Permit Coordinator
CO BWC - SCIS
EPA Region II
NYSEFC
Onondaga County Health Dept.
Michelle Marchello, Executive Deputy Commissioner
Patrick Foster, Deputy Commissioner
Kevin Balduzzi, R7 DEP RPA
Thomas Vigneault, R7 Engineer
Monica Moss / Meredith Streeter / Evan Walters, CO DOW
Valarie Ellis / Dan Fuller, R7 DOW
NYS ESD/Go-Semi
Barclay Damon LLP
Carollo
Brown & Caldwell
EDR
CEO, Town of Clay

State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**4952**	NAICS Code:	**221320**	SPDES Number:	**NY0030317**
Discharge Class (CL):	**05**			DEC Number:	**7-3124-00018/00001**
Toxic Class (TX):	**T**			Effective Date (EDP):	**05/01/2026**
Major-Sub Drainage Basin:	**07 - 03**			Expiration Date (ExDP):	**04/30/2031**
Water Index Number:	**Ont. 66-11**	Item No.:	**899 – 1**	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:	**Onondaga County**	Attention:	**Commissioner, OCDWEP**		
Street:	**650 Hiawatha Blvd. West**				
City:	**Syracuse**	State:	**NY**	Zip Code:	**13204**
Email:	**odeandyer@ongov.net**	Phone:	**(315) 435-2260**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL														
Name:	**Oak Orchard Wastewater Treatment Plant**													
Address / Location:	**4300 Oak Orchard Road**										County:	**Onondaga**		
City:	**Clay**						State:	**NY**			Zip Code:	**13212**		
Facility Location:		Latitude:	**43**	°	**11**	’	**57**	” N	& Longitude:	**76**	°	**12**	’	**32** ” W
Primary Outfall No.:	**001**	Latitude:	**43**	°	**12**	’	**20**	” N	& Longitude:	**76**	°	**12**	’	**52** ” W
Outfall Description:	**Treated Sanitary and Process Wastewater**		Receiving Water:		**Oneida River**				Class:	**B**		Standard:		**B**

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.

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

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

Permit Administrator:	Trendon P. Choe
Address:	Division of Environmental Permits 5786 Widewaters Parkway Syracuse, NY 13214-1867
Digitally signed by Trendon Choe Date: 2026.04.10 14:52:44 -04'00'	04/30/2026
Signature	Date

Contents

SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
01A	Municipal Treatment Train (Treated Sanitary and Process Wastewater)	**43** ° **12** ' **01** " N	**76** ° **12** ' **40** " W
Receiving Water:	**Internal to Outfall 001**		Class:
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
01B	Industrial Treatment Train (Treated Process Wastewater)	**43** ° **12** ' **17** " N	**76** ° **12** ' **35** " W
Receiving Water:	**Internal to Outfall 001**		Class:
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
006	Municipal Treatment Train Effluent Reuse	**43** ° **12** ' **01** " N	**76** ° **12** ' **40** " W
Receiving Water:	**To Micron**		Class:
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
007	Industrial Treatment Train Effluent Reuse	**43** ° **12** ' **16** " N	**76** ° **12** ' **36** " W
Receiving Water:	**To Micron**		Class:

Note: Lat/Long coordinates provided for internal Outfalls 01A and 01B and reuse Outfalls 006 and 007 are estimates based on the design at the time of permit issuance.

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.

PHASE 1: MAINTENANCE OF PLANT OPERATIONS

PERMIT LIMITS, LEVELS AND MONITORING

Outfall 001

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All year unless otherwise specified	Oneida River	05/01/2026	Commencement of Phase 2[1]

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly Average	13.3	MGD	-	-	Continuous	Recorder		X	
pH	Daily Minimum	6.0	SU	-	-	3/day	Grab	X	X	
	Daily Maximum	9.0	SU	-	-					
Temperature	Daily Maximum	Monitor	ºC	-	-	3/day	Grab	X	X	
Dissolved Oxygen	Daily Minimum	2.0	mg/L	-	-	2/week	Grab		X	
Biochemical Oxygen Demand (BOD_5)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/month	24-hr. Comp.	X		
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	Monthly Average	25	mg/L	2,800	lbs/d	2/week	24-hr. Comp.	X	X	1
	7-Day Average	40	mg/L	4,400	lbs/d	2/week	24-hr. Comp.	X	X	
Ultimate Oxygen Demand (UOD) June 1st to October 31st	Daily Maximum	Monitor	mg/L	4,289	lbs/d	2/week	24-hr. Comp.	X	X	2
Ultimate Oxygen Demand (UOD) November 1st to May 31st	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	2/week	24-hr. Comp.	X	X	2
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	3,300	lbs/d	2/week	24-hr. Comp.	X	X	1
	7-Day Average	45	mg/L	5,000	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 (TDS)	Daily Maximum	Monitor	mg/L	-	-	2/week	24-hr. Comp.		X	
Ammonia (as N) June 1st – October 31st	Monthly Average	3.9	mg/L	252	lbs/d	2/week	24-hr. Comp.		X	
Ammonia (as N) November 1st – May 31st	Monthly Average	20	mg/L	1,666	lbs/d	2/week	24-hr. Comp.		X	
Total Kjeldahl Nitrogen (as N)	Daily Maximum	Monitor	mg/L	-	-	2/week	24-hr. Comp.		X	
Total Nitrogen	Monthly Average	Monitor	mg/L		-	1/month	24 hr. Comp		X	
Oil and Grease	Daily Maximum	15	mg/L	-	-	2/week	Grab		X	

Table continued on and footnotes begin on next page.

[1] Phase 1 ends and Phase 2 begins upon DEC acceptance of construction completion of the 1st portion of the industrial treatment train. See Schedule of Compliance.

PHASE 1: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 001 (continued)

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Total Phosphorus (as P)	Monthly Average	1.0	mg/L	-	-	2/week	24-hr. Comp.		X	
Fluoride	Daily Maximum	Monitor	mg/L	-	-	2/week	24-hr. Comp.		X	
Sulfite	Daily Maximum	Monitor	µg/L	-	-	2/week	24-hr. Comp.		X	
Aluminum, Total	Daily Maximum	Monitor	mg/L	-	-	2/week	24-hr. Comp.		X	
Boron, Total	Daily Maximum	Monitor	mg/L	-	-	2/week	24-hr. Comp.		X	
Mercury, Total	12- Month Rolling Average	1.4	ng/L	-	-	1/quarter	Calculated		X	4,5,6
	Daily Maximum	50	ng/L	-	-	1/quarter	24-hr. Comp		X	3,4,6
Total Phenols	Monthly Average	Monitor	µg/L	Monitor	lbs/d	1/quarter	24-hr. Comp		X	3,4, 7
	Daily Maximum	Monitor	µg/L	Monitor	lbs/d	1/quarter	24-hr. Comp		X	3,4, 7
Biennial Pollutant Scan	-	-	-	-	-	1/Two Years	-		X	8

EFFLUENT DISINFECTION Required Seasonal from May 1st - October 31st		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	0.045	mg/L	-	-	3/day	Grab		X	9

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote	-	-	1.5	TUa	1/quarter	See footnote		X	10
WET - Acute Vertebrate	See footnote	-	-	1.5	TUa	1/quarter	See footnote		X	10
WET - Chronic Invertebrate	See footnote	-	-	9.0	TUc	1/quarter	See footnote		X	10
WET - Chronic Vertebrate	See footnote	-	-	9.0	TUc	1/quarter	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. For total mercury and total phenols, 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.

Footnotes continued on next page.

PHASE 1: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 001 (continued)

FOOTNOTES (continued):

4. 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).

5. The 12-month rolling average for total mercury is defined as the sum of the current month's monthly average concentration or load added to the quarterly averages from the eleven previous months, divided by the number of months for which samples were collected in the 12-month period.

6. This is a Compliance Level for total mercury. The calculated WQBEL is 0.7 ng/L.

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

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

9. 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.

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 5:1 for acute, and 9:1 for chronic.

    Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 1 and 6.

    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.

PHASE 1: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 001 (continued)

FOOTNOTES (continued):

11. **Whole Effluent Toxicity (WET) Testing (continued**):
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.

PHASE 2: INDUSTRIAL TREATMENT TRAIN (1st PORTION)
PERMIT LIMITS, LEVELS AND MONITORING
Outfall 001

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All year unless otherwise specified	Oneida River	Commencement of Phase 2[2]	Commencement of Phase 3[2]

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly Average	Monitor	MGD	-	-	Continuous	Recorder		X	
Temperature	Daily Maximum	Monitor	ºC	-	-	6/day	Grab		X	
Dissolved Oxygen	Daily Minimum	2.0	mg/L	-	-	1/day	Grab		X	
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/day	24 hr. Comp		X	
Ultimate Oxygen Demand (UOD) June 1st to October 31st	Daily Maximum	Monitor	mg/L	4,289	lbs/d	1/day	24 hr. Comp		X	1
Ultimate Oxygen Demand (UOD) November 1st to May 31st	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/day	24 hr. Comp		X	1
Total Dissolved Solids	Daily Maximum	760	mg/L	-	-	1/day	24 hr. Comp		X	
Ammonia (as N) June 1st – October 31st	Monthly Average	0.80	mg/L	144	lbs/d	1/day	24 hr. Comp		X	
Ammonia (as N) November 1st – May 31st	Monthly Average	1.2	mg/L	216	lbs/d	1/day	24 hr. Comp		X	
Total Kjeldahl Nitrogen (as N)	Daily Maximum	Monitor	mg/L	-	-	1/day	24 hr. Comp		X	
Total Nitrogen	Monthly Average	Monitor	mg/L	-	-	1/month	24 hr. Comp		X	
Total Phosphorus (as P)	Monthly Average	1.0	mg/L	-	-	1/day	24 hr. Comp		X	
Total Residual Chlorine (TRC)	Daily Maximum	0.03	mg/L	-	-	6/day	Grab		X	2,3
Fluoride	Daily Maximum	6.0	mg/L	-	-	1/day	24 hr. Comp		X	
Sulfite	Daily Maximum	Monitor	µg/L	-	-	2/week	24-hr. Comp.		X	
Boron, Total	Daily Maximum	20 Action Level	mg/L	-	-	1/day	24 hr. Comp		X	4
Mercury, Total	12- Month Rolling Average	1.4	ng/L	-	-	1/quarter	Calculated		X	5,6,7
	Daily Maximum	50	ng/L	-	-	1/quarter	24 hr. Comp		X	5,7,8

Table continued and footnotes begin on next page.

[2] Phase 2 ends and Phase 3 begins upon DEC acceptance of construction completion of the upgraded municipal treatment train (MTT). See Schedule of Compliance.

PHASE 2: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 001 (continued)

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Phenols, Total	Monthly Average	10	µg/L	1.8	lbs/d	1/quarter	24 hr. Comp		X	8,9
Biennial Pollutant Scan	-	-	-	-	-	1/Two Years	-		X	10

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	1/quarter	See footnote		X	11
WET - Acute Vertebrate	See footnote	-	-	0.3	TUa	1/quarter	See footnote		X	11
WET - Chronic Invertebrate	See footnote	-	-	2.0	TUc	1/quarter	See footnote		X	11
WET - Chronic Vertebrate	See footnote	-	-	2.0	TUc	1/quarter	See footnote		X	11

FOOTNOTES:

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

2. This is a Compliance Level for total residual chlorine. The calculated WQBEL is 0.01 mg/L.

3. 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.

4. If the action level is exceeded, the additional monitoring requirement is triggered, and the permittee shall undertake a short-term, high-intensity, monitoring program for total boron. 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 actions to reduce concentrations present in the discharge. The permit may 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.

5. 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).

6. The 12-month rolling average for total mercury is defined as the sum of the current month's monthly average concentration or load added to the quarterly averages from the eleven previous months, divided by the number of months for which samples were collected in the 12-month period.

7. This is a Compliance Level for total mercury. The calculated WQBEL is 0.7 ng/L.

8. For total mercury and total phenols, 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.

Footnotes continued on next page.

PHASE 2: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 001 (continued)

FOOTNOTES (continued):

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

10. 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.

11. **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 2:1 for acute, and 2:1 for chronic.

    Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 1 and 6. WET testing shall also be performed quarterly (calendar quarters) during the first four quarters following startup of the industrial treatment train. Should any of the required routine WET testing quarters coincide with the period following startup of the industrial treatment train, the routine WET testing results may be reported for both requirements.

    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.

PHASE 2: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 01A

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
01A	All year unless otherwise specified	Internal to Outfall 001	Commencement of Phase 2	Commencement of Phase 3

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	13.3	MGD	-	-	Continuous	Recorder		X	
pH	Daily Minimum	6.0	SU	-	-	3/day	Grab	X	X	
	Daily Maximum	9.0	SU	-	-					
Biochemical Oxygen Demand (BOD_5)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/month	24-hr. Comp.	X		
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	Monthly Average	25	mg/L	2,800	lbs/d	2/week	24 hr. Comp	X	X	1
	7-Day Average	40	mg/L	4,400	lbs/d	2/week	24 hr. Comp	X	X	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	3,300	lbs/d	2/week	24 hr. Comp	X	X	1
	7-Day Average	45	mg/L	5,000	lbs/d	2/week	24 hr. Comp	X	X	
Settleable Solids	Daily Maximum	0.3	mL/L	-	-	3/day	Grab	X	X	
Ammonia (as N)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	2/week	24 hr. Comp		X	
	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	2/week	24 hr. Comp		X	
Oil and Grease	Daily Maximum	15	mg/L	-	-	2/week	Grab		X	
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L	-	-	2/week	24 hr. Comp		X	
Aluminum, Total	Daily Maximum	Monitor	µg/L	-	-	2/week	24 hr. Comp		X	
Total Phenols	Monthly Average	Monitor	µg/L	-	-	1/quarter	24-hr. Comp		X	2,3
	Daily Maximum	Monitor	µg/L	-	-	1/quarter	24-hr. Comp		X	2,3

EFFLUENT DISINFECTION Required Seasonal from May 1st - October 31st		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	Monitor	mg/L	-	-	3/day	Grab		X	4

FOOTNOTES:

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

Footnotes continued on next page.

PHASE 2: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 01A (continued)

FOOTNOTES (continued):

2. For total phenols, 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.

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

4. 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.

PHASE 2: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 01B

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
01B	All year unless otherwise specified	Internal to Outfall 001	Commencement of Phase 2	Commencement of Phase 3

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	8.25	MGD	-	-	Continuous	Recorder		X	
pH	Daily Minimum	6.0	SU	-	-	3/day	Grab	X	X	
	Daily Maximum	9.0	SU	-	-					
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	Monthly Average	25	mg/L	1,700	lbs/d	2/week	24 hr. Comp	X	X	1
	7-Day Average	40	mg/L	2,800	lbs/d	2/week	24 hr. Comp	X	X	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	2,100	lbs/d	2/week	24 hr. Comp	X	X	1
	7-Day Average	45	mg/L	3,100	lbs/d	2/week	24 hr. Comp	X	X	
Settleable Solids	Daily Maximum	0.1	mL/L	-	-	3/day	Grab	X	X	
Total Dissolved Solids (TDS)	Daily Maximum	Monitor	mg/L	-	-	2/week	24 hr. Comp		X	
Ammonia (as N)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	2/week	24 hr. Comp		X	
	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	2/week	24 hr. Comp		X	
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L	-	-	2/week	24 hr. Comp		X	
Fluoride	Daily Maximum	Monitor	mg/L	-	-	2/week	24 hr. Comp		X	
Aluminum, Total	Daily Maximum	Monitor	µg/L	-	-	2/week	24 hr. Comp		X	
Industrial Pollutant Scan	-	-	-	-	-	See Footnote	-		X	2

EFFLUENT DISINFECTION Required Seasonal from May 1st - October 31st		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	Monitor	mg/L	-	-	3/day	Grab		X	3

FOOTNOTES:

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

Footnotes continued on next page.

PHASE 2: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 01B (continued)

FOOTNOTES (continued):

2. Industrial Pollutant Scan: Within the first 60 days after initial receipt of wastewater to the industrial treatment train, the permittee shall perform effluent sampling for all pollutants identified in the NY-2A Application, Tables A - D. The permittee shall also perform such effluent sampling again one year after initial receipt of wastewater to the industrial treatment train. Sampling data shall be collected according to the guidance in the NY-2A application and submitted to DEC in accordance with the Schedule of Additional Submittals. Monitoring results shall not be submitted on the DMR.

3. 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.

PHASE 3: INDUSTRIAL TREATMENT TRAIN (FULL)
PERMIT LIMITS, LEVELS AND MONITORING
Outfall 001

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All year unless otherwise specified	Oneida River	Commencement of Phase 3[3]	Commencement of Phase 4[3]

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly Average	Monitor	MGD	-	-	Continuous	Recorder		X	
Temperature	Daily Maximum	Monitor	ºC	-	-	6/day	Grab		X	
Dissolved Oxygen	Daily Minimum	2.0	mg/L	-	-	1/day	Grab		X	
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/day	24 hr. Comp		X	
Ultimate Oxygen Demand (UOD) June 1st to October 31st	Daily Maximum	Monitor	mg/L	4,289	lbs/d	1/day	24 hr. Comp		X	1
Ultimate Oxygen Demand (UOD) November 1st to May 31st	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/day	24 hr. Comp		X	1
Total Dissolved Solids	Daily Maximum	760	mg/L	-	-	1/day	24 hr. Comp		X	
Ammonia (as N) June 1st – October 31st	Monthly Average	0.80	mg/L	150	lbs/d	1/day	24 hr. Comp		X	
Ammonia (as N) November 1st – May 31st	Monthly Average	1.2	mg/L	225	lbs/d	1/day	24 hr. Comp		X	
Total Kjeldahl Nitrogen (as N)	Daily Maximum	Monitor	mg/L	-	-	1/day	24 hr. Comp		X	
Total Nitrogen	Monthly Average	Monitor	mg/L		-	1/month	24 hr. Comp		X	
Total Phosphorus (as P)	Monthly Average	1.0	mg/L	-	-	1/day	24 hr. Comp		X	
Total Residual Chlorine (TRC)	Daily Maximum	0.03	mg/L	-	-	6/day	Grab		X	2,
Fluoride	Daily Maximum	6.0	mg/L	-	-	1/day	24 hr. Comp		X	
Sulfite	Daily Maximum	Monitor	µg/L	-	-	2/week	24-hr. Comp.		X	
Boron, Total	Daily Maximum	20	mg/L	-	-	1/day	24 hr. Comp		X	4
Mercury, Total	12- Month Rolling Average	1.4	ng/L	-	-	1/quarter	Calculated		X	5,6,7
	Daily Maximum	50	ng/L	-	-	1/quarter	24-hr. Comp		X	5,7,8

Table continued and footnotes begin on next page.

[3] Phase 3 ends and Phase 4 begins upon DEC acceptance of construction completion of the second portion of the industrial treatment train (ITT). See Schedule of Compliance.

PHASE 3: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 001 (continued)

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Total Phenols	Daily Maximum	10	µg/L	1.9	lbs/d	1/quarter	24-hr. Comp		X	8,9
Biennial Pollutant Scan	-	-	-	-	-	1/Two Years	-		X	10

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	1/quarter	See footnote		X	11
WET - Acute Vertebrate	See footnote	-	-	0.3	TUa	1/quarter	See footnote		X	11
WET - Chronic Invertebrate	See footnote	-	-	2.0	TUc	1/quarter	See footnote		X	11
WET - Chronic Vertebrate	See footnote	-	-	2.0	TUc	1/quarter	See footnote		X	11

FOOTNOTES:

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

2. This is a Compliance Level for total residual chlorine. The calculated WQBEL is 0.01 mg/L.

3. 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.

4. If the action level is exceeded, the additional monitoring requirement is triggered, and the permittee shall undertake a short-term, high-intensity, monitoring program for total boron. 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 actions to reduce concentrations present in the discharge. The permit may 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.

5. 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).

6. The 12-month rolling average for Total Mercury is defined as the sum of the current month's monthly average concentration or load added to the quarterly averages from the eleven previous months, divided by the number of months for which samples were collected in the 12-month period.

7. This is a Compliance Level for total mercury. The calculated WQBEL is 0.7 ng/L.

8. For total mercury and total phenols, 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.

Footnotes continued on next page.

PHASE 3: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 001 (continued)

FOOTNOTES (continued):

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

10. 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.

11. **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 2:1 for acute, and 2:1 for chronic.

    Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 1 and 6.

    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.

PHASE 3: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 01A

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
01A	All year unless otherwise specified	Internal to Outfall 001	Commencement of Phase 3	Commencement of Phase 4

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	14.3	MGD	-	-	Continuous	Recorder		X	
pH	Daily Minimum	6.0	SU	-	-	3/day	Grab	X	X	
	Daily Maximum	9.0	SU	-	-					
Biochemical Oxygen Demand (BOD_5)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/month	24-hr. Comp.	X		
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	Monthly Average	25	mg/L	3,000	lbs/d	2/week	24 hr. Comp	X	X	1
	7-Day Average	40	mg/L	4,800	lbs/d	2/week	24 hr. Comp	X	X	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	3,600	lbs/d	2/week	24 hr. Comp	X	X	1
Total Suspended Solids (TSS)	7-Day Average	45	mg/L	5,400	lbs/d	2/week	24 hr. Comp	X	X	
Settleable Solids	Daily Maximum	0.1	mL/L	-	-	3/day	Grab	X	X	
Ammonia (as N)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	2/week	24 hr. Comp		X	
	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	2/week	24 hr. Comp		X	
Oil and Grease	Daily Maximum	15	mg/L	-	lbs/d	2/week	Grab		X	
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L	-	lbs/d	2/week	24 hr. Comp		X	
Aluminum, Total	Daily Maximum	Monitor	µg/L	-	-	2/week	24 hr. Comp		X	
Total Phenols	Monthly Average	Monitor	µg/L	-	-	1/quarter	24-hr. Comp		X	2,3
	Daily Maximum	Monitor	µg/L	-	-	1/quarter	24-hr. Comp		X	2,3

EFFLUENT DISINFECTION Required Seasonal from May 1st - October 31st		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	Monitor	mg/L	-	-	3/day	Grab		X	4

Footnotes begin on next page.

PHASE 3: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 01A (continued)

FOOTNOTES:

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

2. For total phenols, 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.

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

4. 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.

PHASE 3: PERMIT LIMITS, LEVELS AND MONITORING (cont.)

Outfall 01B

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
01B	All year unless otherwise specified	Internal to Outfall 001	Commencement of Phase 3	Commencement of Phase 4

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	8.25	MGD	-	-	Continuous	Recorder		X	
pH	Daily Minimum	6.0	SU	-	-	6/day	Grab	X	X	
	Daily Maximum	9.0	SU	-	-					
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	Monthly Average	25	mg/L	1,700	lbs/d	1/day	24 hr. Comp	X	X	1
	7-Day Average	40	mg/L	2,800	lbs/d	1/day	24 hr. Comp	X	X	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	2,100	lbs/d	1/day	24 hr. Comp	X	X	1
	7-Day Average	45	mg/L	3,100	lbs/d	1/day	24 hr. Comp	X	X	
Settleable Solids	Daily Maximum	0.1	mL/L	-	-	6/day	Grab	X	X	
Total Dissolved Solids	Daily Maximum	Monitor	mg/L	-	-		24 hr. Comp		X	
Ammonia (as N)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/day	24 hr. Comp		X	
	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/day	24 hr. Comp		X	
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L	-	-	1/day	24 hr. Comp		X	
Fluoride	Daily Maximum	Monitor	mg/L	-	-	1/day	24 hr. Comp		X	
Aluminum, Total	Daily Maximum	Monitor	µg/L	-	-	1/day	24 hr. Comp		X	

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

FOOTNOTES:

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

2. 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.

PHASE 4 PERMIT LIMITS, LEVELS AND MONITORING

Outfall 001

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All year unless otherwise specified	Oneida River	Completion of Phase 3[4]	04/30/2031

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly Average	Monitor	MGD	-	-	Continuous	Recorder		X	
Temperature	Daily Maximum	Monitor	ºC	-	-	6/day	Grab		X	
Dissolved Oxygen	Daily Minimum	2.0	mg/L	-	-	1/day	Grab		X	
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/day	24 hr. Comp		X	
Ultimate Oxygen Demand (UOD) June 1st to October 31st	Daily Maximum	Monitor	mg/L	4,289	lbs/d	1/day	24 hr. Comp		X	1
Ultimate Oxygen Demand (UOD) November 1st to May 31st	Daily Maximum	Monitor	mg/L	15,600	lbs/d	1/day	24 hr. Comp		X	1
Total Dissolved Solids	Daily Maximum	760	mg/L	-	-	1/day	24 hr. Comp		X	
Ammonia (as N) June 1st – October 31st	Monthly Average	0.80	mg/L	205	lbs/d	1/day	24 hr. Comp		X	
Ammonia (as N) November 1st – May 31st	Monthly Average	1.2	mg/L	308	lbs/d	1/day	24 hr. Comp		X	
Total Kjeldahl Nitrogen (as N)	Daily Maximum	Monitor	mg/L	-	-	1/day	24 hr. Comp		X	
Total Nitrogen	Monthly Average	Monitor	mg/L		-	1/month	24 hr. Comp		X	
Total Phosphorus (as P)	Monthly Average	1.0	mg/L	-	-	1/day	24 hr. Comp		X	
Total Residual Chlorine (TRC)	Daily Maximum	0.03	mg/L	-	-	6/day	Grab		X	2,3
Fluoride	Daily Maximum	6.0	mg/L	-	-	1/day	24 hr. Comp		X	
Sulfite	Daily Maximum	Monitor	µg/L	-	-	2/week	24-hr. Comp.		X	
Boron, Total	Daily Maximum	20	mg/L	-	-	1/day	24 hr. Comp		X	4
Mercury, Total	12- Month Rolling Average	1.4	ng/L	-	-	1/quarter	Calculated		X	5,6,7
	Daily Maximum	50	ng/L	-	-	1/quarter	24-hr. Comp		X	5,7,8
Total Phenols	Daily Maximum	10	µg/L	2.6	lbs/d	1/quarter	24-hr. Comp		X	8,9

Table continued and footnotes begin on next page.

[4] Phase 3 ends and Phase 4 begins upon DEC acceptance of construction completion of the upgraded municipal treatment train. See Schedule of Compliance.

PHASE 4 PERMIT LIMITS, LEVELS AND MONITORING (continued)

Outfall 001 (continued)

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Biennial Pollutant Scan	-	-	-	-	-	1/Two Years	-		X	10

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	1/quarter	See footnote		X	11
WET - Acute Vertebrate	See footnote	-	-	0.3	TUa	1/quarter	See footnote		X	11
WET - Chronic Invertebrate	See footnote	-	-	2.0	TUc	1/quarter	See footnote		X	11
WET - Chronic Vertebrate	See footnote	-	-	2.0	TUc	1/quarter	See footnote		X	11

FOOTNOTES:

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

2. This is a Compliance Level for total residual chlorine. The calculated WQBEL is 0.01 mg/L.

3. 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.

4. If the action level is exceeded, the additional monitoring requirement is triggered, and the permittee shall undertake a short-term, high-intensity, monitoring program for total boron. 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 actions to reduce concentrations present in the discharge. The permit may 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.

5. 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).

6. The 12-month rolling average for Total Mercury is defined as the sum of the current month's monthly average concentration or load added to the quarterly averages from the eleven previous months, divided by the number of months for which samples were collected in the 12-month period.

7. This is a Compliance Level for total mercury. The calculated WQBEL is 0.7 ng/L.

8. For total phenols, 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.

Footnotes continued on next page.

PHASE 4 PERMIT LIMITS, LEVELS AND MONITORING (continued)

Outfall 001 (continued)

FOOTNOTES (continued):

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

10. 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.

11. **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 2:1 for acute, and 2:1 for chronic.

    Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 1 and 6.

    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.

PHASE 4 PERMIT LIMITS, LEVELS AND MONITORING (continued)

Outfall 01A

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
01A	All year unless otherwise specified	Internal to Outfall 001	Completion of Phase 3	04/30/2031

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	14.3	MGD	-	-	Continuous	Recorder		X	
pH	Daily Minimum	6.0	SU	-	-	3/day	Grab	X	X	
	Daily Maximum	9.0	SU	-	-					
Biochemical Oxygen Demand (BOD_5)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/month	24-hr. Comp.	X		
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	Monthly Average	25	mg/L	3,000	lbs/d	2/week	24 hr. Comp	X	X	1
	7-Day Average	40	mg/L	4,800	lbs/d	2/week	24 hr. Comp	X	X	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	3,600	lbs/d	2/week	24 hr. Comp	X	X	
	7-Day Average	45	mg/L	5,400	lbs/d	2/week	24 hr. Comp	X	X	
Settleable Solids	Daily Maximum	0.1	mL/L	-	-	3/day	Grab	X	X	
Ammonia (as N)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	2/week	24 hr. Comp		X	
	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	2/week	24 hr. Comp		X	
Oil and Grease	Daily Maximum	15	mg/L	-	-	2/week	Grab		X	
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L	-	-	2/week	24 hr. Comp		X	
Aluminum, Total	Daily Maximum	Monitor	µg/L	-	-	2/week	24 hr. Comp		X	
Total Phenols	Monthly Average	Monitor	µg/L	-	-	1/quarter	24-hr. Comp		X	2,3
	Daily Maximum	Monitor	µg/L	-	-	1/quarter	24-hr. Comp		X	2,3

EFFLUENT DISINFECTION Required Seasonal from May 1st - October 31st		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	Monitor	mg/L	-	-	3/day	Grab		X	4

FOOTNOTES:

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

Footnotes continued on next page.

PHASE 4 PERMIT LIMITS, LEVELS AND MONITORING (continued)

Outfall 01A (continued)

FOOTNOTES (continued):

2. For total phenols, 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.

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

4. 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.

PHASE 4 PERMIT LIMITS, LEVELS AND MONITORING (continued)

Outfall 01B

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
01B	All year unless otherwise specified	Internal to Outfall 001	Completion of Phase 3	04/30/2031

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	16.5	MGD	-	-	Continuous	Recorder		X	
pH	Daily Minimum	6.0	SU	-	-	6/day	Grab	X	X	
	Daily Maximum	9.0	SU	-	-					
Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	Monthly Average	25	mg/L	3,400	lbs/d	1/day	24 hr. Comp	X	X	1
	7-Day Average	40	mg/L	5,500	lbs/d	1/day	24 hr. Comp	X	X	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	4,100	lbs/d	1/day	24 hr. Comp	X	X	1
	7-Day Average	45	mg/L	6,200	lbs/d	1/day	24 hr. Comp	X	X	
Settleable Solids	Daily Maximum	0.1	mL/L	-	-	6/day	Grab	X	X	
Total Dissolved Solids (TDS)	Daily Maximum	Monitor	mg/L	-	-	1/day	24 hr. Comp		X	
Ammonia (as N)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/day	24 hr. Comp		X	
	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/day	24 hr. Comp		X	
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L	-	-	1/day	24 hr. Comp		X	
Fluoride	Daily Maximum	Monitor	mg/L	-	-	1/day	24 hr. Comp		X	
Aluminum, Total	Daily Maximum	Monitor	µg/L	-	-	1/day	24 hr. Comp		X	

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

FOOTNOTES:

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

2. 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.

PERMIT LIMITS, LEVELS AND MONITORING – REUSE OUTFALLS

Outfall 006 – Municipal Treatment Train Effluent Reuse

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
006	All Year	To Micron	Upon DEC acceptance of construction completion of the MTT effluent reuse system[5]	04/30/2031

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	Monitor	MGD	-	-	Continuous	Meter		X	
	Daily Maximum	Monitor	MGD	-	-	Continuous	Meter		X	

Outfall 007 – Industrial Treatment Train Effluent Reuse

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
007	All Year	To Micron	Upon DEC acceptance of construction completion of the ITT effluent reuse system[5]	04/30/2031

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	Monitor	MGD	-	-	Continuous	Meter		X	
	Daily Maximum	Monitor	MGD	-	-	Continuous	Meter		X	

EMERGING CONTAMINANTS PERMIT LEVELS AND MONITORING

Outfall 001

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All year unless otherwise specified	Oneida River	05/01/2026	04/30/2031

EMERGING CONTAMINANTS OUTFALL 001		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Perfluorobutanoic Acid (PFBA) CAS No. 375-22-4 DMR Code: 51522	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2

Table continued on next page. Footnotes begin on page 31.

[5] Flow monitoring for the reuse systems becomes effective upon DEC acceptance of construction completion of the respective effluent reuse system. See Schedule of Compliance.

EMERGING CONTAMINANTS PERMIT LEVELS AND MONITORING (continued)

Outfall 001 (continued)

EMERGING CONTAMINANTS OUTFALL 001		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Perfluoropentanoic Acid (PFPeA) CAS No. 2706-90-3 DMR Code: 51623	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorohexanoic Acid (PFHxA) CAS No.307-24-4 DMR Code: 51624	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoroheptanoic Acid (PFHpA) CAS No. 375-85-9 DMR Code:51625	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorooctanoic Acid (PFOA) CAS No. 335-67-1 DMR Code:51521	Daily Maximum	-	-	10	ng/L	1/quarter	Grab		X	1,2, 3
Perfluoro-nonanoic Acid (PFNA) CAS No. 375-95-1 DMR Code:51626	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoro-decanoic Acid (PFDA) CAS No. 335-76-2 DMR Code:51627	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoroundecanoic Acid (PFUnA) CAS No. 2058-94-8 DMR Code:51628	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorododecanoic Acid (PFDoA) CAS No. 307-55-1 DMR Code:51629	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorotridecanoic Acid (PFTriA) CAS No. 72629-94-8 DMR Code:51630	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorotetradecanoic Acid (PFTeA) CAS No. 376-06-7 DMR Code:51631	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorobutanesulfonic Acid (PFBS) CAS No. 375-73-5 DMR Code:52602	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoropentanesulfonic Acid (PFPeS) CAS No. 2706-91-4 DMR Code:52610	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorohexanesulfonic Acid (PFHxS) CAS No. 355-46-4 DMR Code:52605	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoroheptanesulfonic Acid (PFHpS) CAS No. 375-92-8 DMR Code:52604	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorooctanesulfonic Acid (PFOS) CAS No. 1763-23-1 DMR Code:52606	Daily Maximum	-	-	10	ng/L	1/quarter	Grab		X	1,2, 3
Perfluorononanesulfonic Acid (PFNS) CAS No. 68259-12-1 DMR Code:52611	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorodecanesulfonic Acid (PFDS) CAS No. 335-77-3 DMR Code:52603	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2

Table continued on next page. Footnotes begin on page 31.

EMERGING CONTAMINANTS PERMIT LEVELS AND MONITORING (continued)

Outfall 001 (continued)

EMERGING CONTAMINANTS OUTFALL 001		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Perfluorododecanesulfonic Acid (PFDoS) CAS No. 79780-39-5 DMR Code:52632	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorooctanesulfonamide (FOSA) CAS No. 754-91-6 DMR Code:51525	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
N-Methyl Perfluorooctanesulfonamidoacetic Acid (NMeFOSAA) CAS No. 2355-31-9 DMR Code:51644	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
N-Ethyl Perfluorooctanesulfonamidoacetic Acid (NEtFOSAA) CAS No. 2991-50-6 DMR Code:51643	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (4:2 FTS) CAS No. 757124-72-4 DMR Code:52607	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
1H,1H,2H,2H- Fluorotelomer Sulfonic Acid (6:2 FTS) CAS No. 27619-97-2 DMR Code:52608	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
1H,1H,2H,2H- Fluorotelomer Sulfonic Acid (8:2 FTS) CAS No. 39108-34-4 DMR Code:52609	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
N-ethyl Perfluorooctanesulfonamide (NEtFOSA) CAS No. 4151-50-2 DMR Code:52642	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) CAS No. 31506-32-8 DMR Code:52641	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) CAS No. 24448-09-7 DMR Code:51642	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) CAS No. 1691-99-2 DMR Code:51641	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS) CAS No. 756426-58-1 DMR Code:PF003	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA or GenX) CAS No. 13252-13-6 DMR Code:52612	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2

Table continued and footnotes begin on next page.

EMERGING CONTAMINANTS PERMIT LEVELS AND MONITORING (continued)

Outfall 001 (continued)

EMERGING CONTAMINANTS OUTFALL 001		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS) CAS No. 763051-92-9 DMR Code:PF004	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA) CAS No. 919005-14-4 DMR Code:52636	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
3-Perfluoropropyl Propanoic Acid (3:3FTCA) CAS No. 356-02-5 DMR Code:PF001	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) CAS No. 914637-49-3 DMR Code:PF007	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
3-Perfluoroheptyl Propanoic Acid (7:3FTCA) CAS No. 812-70-4 DMR Code:PF005	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA) CAS No. 151772-58-6 DMR Code:52626	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoro-4-Methoxybutanoic Acid (PFMBA) CAS No. 863090-89-5 DMR Code:PF006	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoro-3-Methoxypropanoic Acid (PFMPA) CAS No. 377-73-1 DMR Code:PF002	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA) CAS No. 113507-82-7 DMR Code:52629	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2

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. 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.

3. Emerging Contaminants Action Levels: 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 at emergingcontaminantsdow@dec.ny.gov and copy the Regional Water Engineer (daniel.fuller@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 the Action Level is exceeded. If the reporting limit (RL) exceeds the Action Level, and the laboratory method shows no detection, the permittee must provide DEC with documentation from the laboratory supporting the RL, including the basis for any matrix interference or method limitations.

EMERGING CONTAMINANTS PERMIT LEVELS AND MONITORING (continued)

Outfall 01B

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
01B	All year unless otherwise specified	Oneida River	Commencement of Phase 2	04/30/2031

EMERGING CONTAMINANTS OUTFALL 01B		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Perfluorobutanoic Acid (PFBA) CAS No. 375-22-4 DMR Code:51522	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoropentanoic Acid (PFPeA) CAS No. 2706-90-3 DMR Code:51623	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorohexanoic Acid (PFHxA) CAS No.307-24-4 DMR Code:51624	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoroheptanoic Acid (PFHpA) CAS No. 375-85-9 DMR Code:51625	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorooctanoic Acid (PFOA) CAS No. 335-67-1 DMR Code:51521	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoro-nonanoic Acid (PFNA) CAS No. 375-95-1 DMR Code:51626	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoro-decanoic Acid (PFDA) CAS No. 335-76-2 DMR Code:51627	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoroundecanoic Acid (PFUnA) CAS No. 2058-94-8 DMR Code:51628	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorododecanoic Acid (PFDoA) CAS No. 307-55-1 DMR Code:51629	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorotridecanoic Acid (PFTriA) CAS No. 72629-94-8 DMR Code:51630	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorotetradecanoic Acid (PFTeA) CAS No. 376-06-7 DMR Code:51631	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorobutanesulfonic Acid (PFBS) CAS No. 375-73-5 DMR Code:62602	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2

Table continued on next page. Footnotes begin on page 35.

EMERGING CONTAMINANTS PERMIT LEVELS AND MONITORING (continued)

Outfall 01B (continued)

EMERGING CONTAMINANTS OUTFALL 01B		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Perfluoropentanesulfonic Acid (PFPeS) CAS No. 2706-91-4 DMR Code:52610	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorohexanesulfonic Acid (PFHxS) CAS No. 355-46-4 DMR Code:52605	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoroheptanesulfonic Acid (PFHpS) CAS No. 375-92-8 DMR Code:52604	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorooctanesulfonic Acid (PFOS) CAS No. 1763-23-1 DMR Code:52606	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorononanesulfonic Acid (PFNS) CAS No. 68259-12-1 DMR Code:52611	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorodecanesulfonic Acid (PFDS) CAS No. 335-77-3 DMR Code:52603	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorododecanesulfonic Acid (PFDoS) CAS No. 79780-39-5 DMR Code:52632	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluorooctanesulfonamide (FOSA) CAS No. 754-91-6 DMR Code:51525	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
N-Methyl Perfluorooctanesulfonamido-acetic Acid (NMeFOSAA) CAS No. 2355-31-9 DMR Code:51644	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
N-Ethyl Perfluorooctanesulfonamido-acetic Acid (NEtFOSAA) CAS No. 2991-50-6 DMR Code:51643	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (4:2 FTS) CAS No. 757124-72-4 DMR Code:52607	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
1H,1H,2H,2H- Fluorotelomer Sulfonic Acid (6:2 FTS) CAS No. 27619-97-2 DMR Code:52608	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
1H,1H,2H,2H- Fluorotelomer Sulfonic Acid (8:2 FTS) CAS No. 39108-34-4 DMR Code:52609	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2

Table continued on next page. Footnotes begin on page 35.

EMERGING CONTAMINANTS PERMIT LEVELS AND MONITORING (continued)

Outfall 01B (continued)

EMERGING CONTAMINANTS OUTFALL 01B		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
N-ethyl Perfluoro-octanesulfon-amide (NEtFOSA) CAS No. 4151-50-2 DMR Code:52642	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
N-Methyl Perfluorooctane Sulfonamide (NMeFOSA) CAS No. 31506-32-8 DMR Code:52641	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
N-Methyl Perfluorooctanesulfonamido Ethanol (NMeFOSE) CAS No. 24448-09-7 DMR Code:51642	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
N-Ethyl Perfluorooctanesulfonamido Ethanol (NEtFOSE) CAS No. 1691-99-2 DMR Code:51641	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
9-Chlorohexadecafluoro-3-Oxanone-1-Sulfonic Acid (9Cl-PF3ONS) CAS No. 756426-58-1 DMR Code:PF003	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Hexafluoropropylene Oxide Dimer Acid (HFPO-DA or GenX) CAS No. 13252-13-6 DMR Code:52612	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
11-Chloroeicosafluoro-3-Oxaundecane-1-Sulfonic Acid (11Cl-PF3OUdS) CAS No. 763051-92-9 DMR Code:PF004	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
4,8-Dioxa-3h-Perfluorononanoic Acid (ADONA) CAS No. 919005-14-4 DMR Code:52636	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
3-Perfluoropropyl Propanoic Acid (3:3FTCA) CAS No. 356-02-5 DMR Code:PF001	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
2H,2H,3H,3H-Perfluorooctanoic Acid (5:3FTCA) CAS No. 914637-49-3 DMR Code:PF007	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
3-Perfluoroheptyl Propanoic Acid (7:3FTCA) CAS No. 812-70-4 DMR Code:PF005	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2

Table continued and footnotes on next page.

EMERGING CONTAMINANTS PERMIT LEVELS AND MONITORING (continued)

Outfall 01B (continued)

EMERGING CONTAMINANTS OUTFALL 01B		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Perfluoro-4-Methoxybutanoic Acid (PFMBA) CAS No. 863090-89-5 DMR Code:PF006	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoro-3-Methoxypropanoic Acid (PFMPA) CAS No. 377-73-1 DMR Code:PF002	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2
Perfluoro(2-Ethoxyethane)Sulfonic Acid (PFEESA) CAS No. 113507-82-7 DMR Code:52629	Daily Maximum	Monitor	ng/L	-	-	1/quarter	Grab		X	1,2

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. 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.

SPECIAL CONDITIONS

Outfall Modification

The construction of any modification to the facility's outfall structure shall not start until the permittee receives written approval of the engineering report, plans, and specifications from DEC and an issued permit.

STORMWATER POLLUTION PREVENTION REQUIREMENTS

Stormwater discharges at this facility are required to obtain coverage under the current Multi-Sector General Permit (MSGP) Sector [T] (GP-0-23-001).

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[6]. 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.

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

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

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 permit includes reduced monitoring requirements and does not require key location sampling. See section 2.a.iv below.

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,[7] 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).

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 for Outfall 001 -
   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,[8] which informs users of their responsibilities, and collect the "Amalgam Waste Compliance Report for Dental Dischargers"[9] 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. **(MMP continued on next page.)**
         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.

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

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

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;
   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 on-site a file with all MMP documentation. The file must be available for review by DEC 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 June 11, 1984.

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

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

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

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

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

INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

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

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

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

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

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

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

INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

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

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

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

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

E. ADDITIONAL PRETREATMENT CONDITIONS:
1. Notification of Material Change:
   a) Facility shall provide adequate notice to the EPA within 30 days prior to the introduction of any new pollutants from an indirect discharger that is subject to categorical standards and prior to any substantial change in the volume or character of pollutants by existing sources (40 CFR 122.42 (b)(1&2)). Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the facility and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the facility (40 CFR 122.42 (b)(3)).

   b) Facility shall provide adequate notice to the DEC within 30 days prior to the addition or modification of any SIUs or CIUs which may materially change the nature of the discharge from the POTW or increase the discharge of one or more substances authorized in this permit or discharge a substance not currently authorized in this permit (6 NYCRR Part 750-2.9(a)(1)). Adequate notice shall include information on (i) the quality and quantity of effluent introduced into the facility and (ii) any anticipated impact of the change on the quantity or quality of effluent to be discharged from the facility (6 NYCRR 750-2.9 (a)(1)(ii)). The noticed act is prohibited until the DEC determines whether a permit modification is necessary pursuant to 750-2.9(a)(2).

SCHEDULE OF COMPLIANCE

a) The construction of any facility modification under the phases in this permit shall not start until the permittee receives written approval of the engineering report, plans, and specifications from DEC.

b) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date[10]
001, 01A, 01B, 006, 007	INTERIM PROGRESS REPORT[11] The permittee shall provide a status update for *Complete Construction.* Each interim progress report shall include an update on the status and schedule for all phases and the potential outfall project.	EDP + 6 Months, and every 6 months thereafter until acceptance of all construction items below
001, 01A, 01B, 006, 007	CLIMATE LEADERSHIP AND COMMUNITY PROTECTION ACT (CLCPA) MITIGATION PLAN The permittee shall develop and submit an approvable CLCPA Mitigation Plan for addressing greenhouse gas emissions. The plan must include a timeline and budget for each mitigation measure. At a minimum, the plan must include a measure to establish an ongoing emissions leak detection and repair program for the facility. The plan must also include additional mitigation measures beyond an ongoing emissions leak detection and repair program. The permittee will submit a request for a permittee-initiated modification to incorporate mitigation measures, and related schedules, into this SPDES permit.	With Design Submittal for Biosolids Upgrades Within 30 days after DEC approval of the CLCPA Mitigation Plan
001, 01B	COMPLETE CONSTRUCTION – INDUSTRIAL TREATMENT TRAIN 1st PORTION The permittee shall provide a Construction Completion Certification[12] to the DEC (send to the Regional Water Engineer and NetDMR@dec.ny.gov) that the first portion of the new industrial treatment train (ITT) has been fully completed in accordance with the approved design.	Upon construction completion of the 1st portion of the ITT
001, 01A, 01B	COMMENCE OPERATION – PHASE 2 Following receipt of DEC acceptance of the Construction Completion Certification for the first portion of the ITT, the permittee shall comply with the effluent limitations described in this permit for Phase 2.	Upon DEC acceptance of Complete Construction – Industrial Treatment Train 1st Portion
001, 01A	COMPLETE CONSTRUCTION – MUNICIPAL TREATMENT TRAIN UPGRADES The permittee shall provide a Construction Completion Certification to the DEC (send to the Regional Water Engineer and NetDMR@dec.ny.gov) that the upgraded municipal treatment train (MTT) has been fully completed in accordance with the approved design.	Upon construction completion of the upgraded MTT

Table continued on next page.

[10] 6 NYCRR 750-1.14 (a)
[11] 6 NYCRR 750-1.14 (b)
[12] 6 NYCRR 750-2.10 (c)

SCHEDULE OF COMPLIANCE (continued)

Outfall(s)	Compliance Action	Compliance Date[13]
001, 01A, 01B	COMMENCE OPERATION – PHASE 3 Following receipt of DEC acceptance of the Construction Completion Certification for the upgraded MTT, the permittee shall comply with the effluent limitations described in this permit for Phase 3.	Upon DEC acceptance of Complete Construction – Municipal Treatment Train Upgrades
001, 01B	COMPLETE CONSTRUCTION – INDUSTRIAL TREATMENT TRAIN – 2nd PORTION The permittee shall provide a Construction Completion Certification to the DEC (send to the Regional Water Engineer and NetDMR@dec.ny.gov) that the second portion of the new ITT has been fully completed in accordance with the approved design.	Upon construction completion of the 2nd portion of the ITT
001, 01A, 01B	COMMENCE OPERATION – PHASE 4 Following receipt of DEC acceptance of the Construction Completion Certification for the second portion of the new ITT, the permittee shall comply with the effluent limitations described in this permit for Phase 4.	Upon DEC acceptance of Complete Construction – Industrial Treatment Train 2nd Portion
006	COMPLETE CONSTRUCTION – MUNICIPAL EFFLUENT REUSE The permittee shall provide a Construction Completion Certification to the DEC (send to the Regional Water Engineer and NetDMR@dec.ny.gov) that the MTT effluent reuse system has been fully completed in accordance with the approved design.	Upon construction completion MTT effluent reuse system
006	COMMENCE OPERATION – MUNICIPAL EFFLUENT REUSE Following receipt of DEC acceptance of the Construction Completion Certification for the MTT effluent reuse system, the permittee shall with the effluent limitations described in this permit for Outfall 006.	Upon DEC acceptance of Complete Construction – Municipal Effluent Reuse
007	COMPLETE CONSTRUCTION – INDUSTRIAL EFFLUENT REUSE The permittee shall provide a Construction Completion Certification to the DEC (send to the Regional Water Engineer and NetDMR@dec.ny.gov) that the ITT effluent reuse system has been fully completed in accordance with the approved design.	Upon construction completion of the ITT effluent reuse system
007	COMMENCE OPERATION – INDUSTRIAL EFFLUENT REUSE Following receipt of DEC acceptance of the Construction Completion Certification for the MTT effluent reuse system, the permittee shall with the effluent limitations described in this permit for Outfall 007.	Upon DEC acceptance of Complete Construction – Industrial Effluent Reuse

Table continued on next page.

[13] 6 NYCRR 750-1.14 (a)

SCHEDULE OF COMPLIANCE (continued)

Outfall(s)	Compliance Action	Compliance Date[14]
N/A	COMPLETE CONSTRUCTION AND COMMENCE OPERATION – BIOSOLIDS PROCESSING SYSTEM The permittee shall provide a Construction Completion Certification to the DEC (send to the Regional Water Engineer and NetDMR@dec.ny.gov) that the biosolids processing system has been fully completed in accordance with the approved design. The permittee shall also provide a final certification that all identified CLCPA Mitigation Plan measures have been implemented.	Upon construction completion of the biosolids processing system
Unless noted otherwise, the above actions are one-time requirements.		
See Permit Limits, Levels and Monitoring for phased effluent limits.		

c) 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.

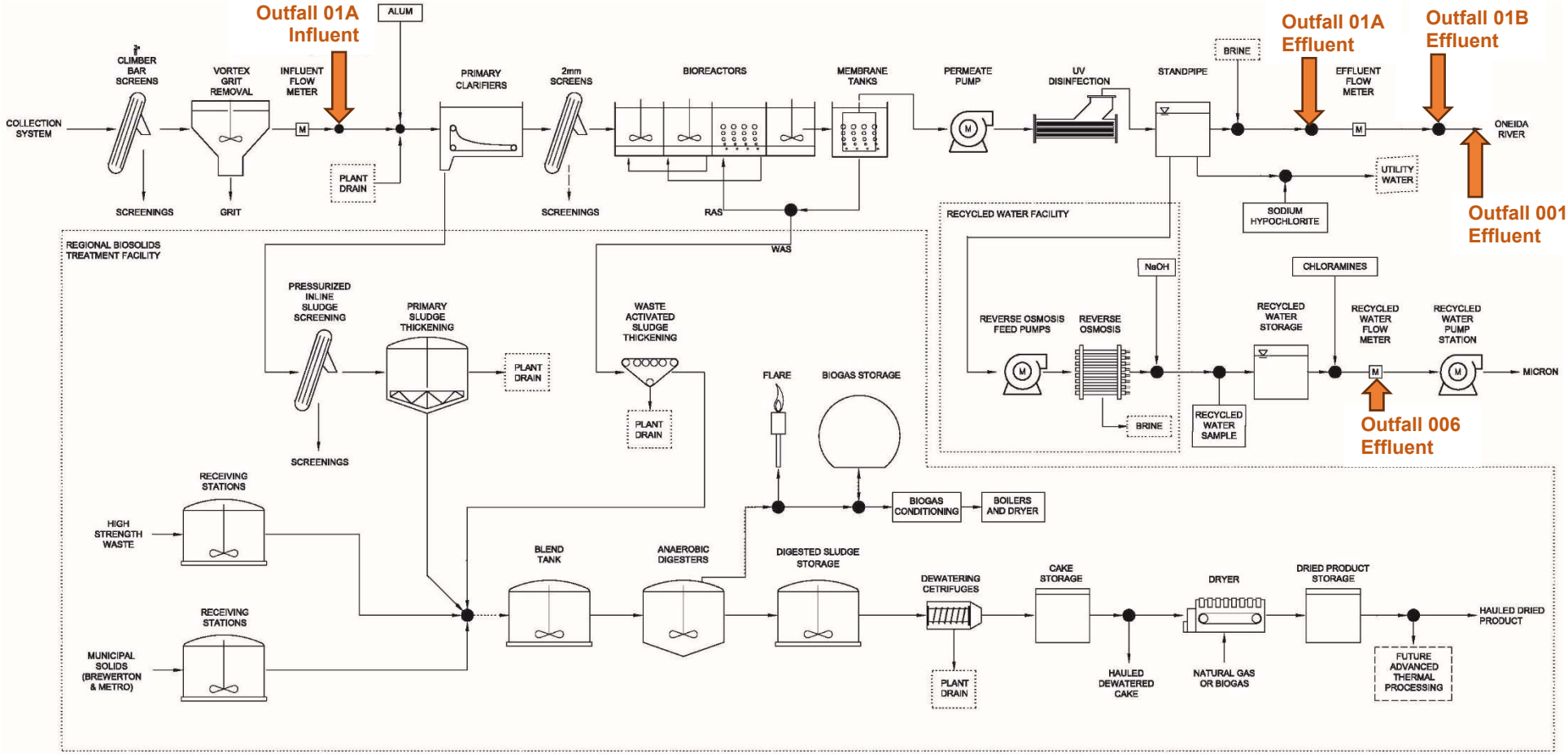
d) The permittee shall submit copies of any document required by the above schedule of compliance to the DEC Regional Water Engineer and to the Bureau of Water Permits.

[14] 6 NYCRR 750-1.14 (a)

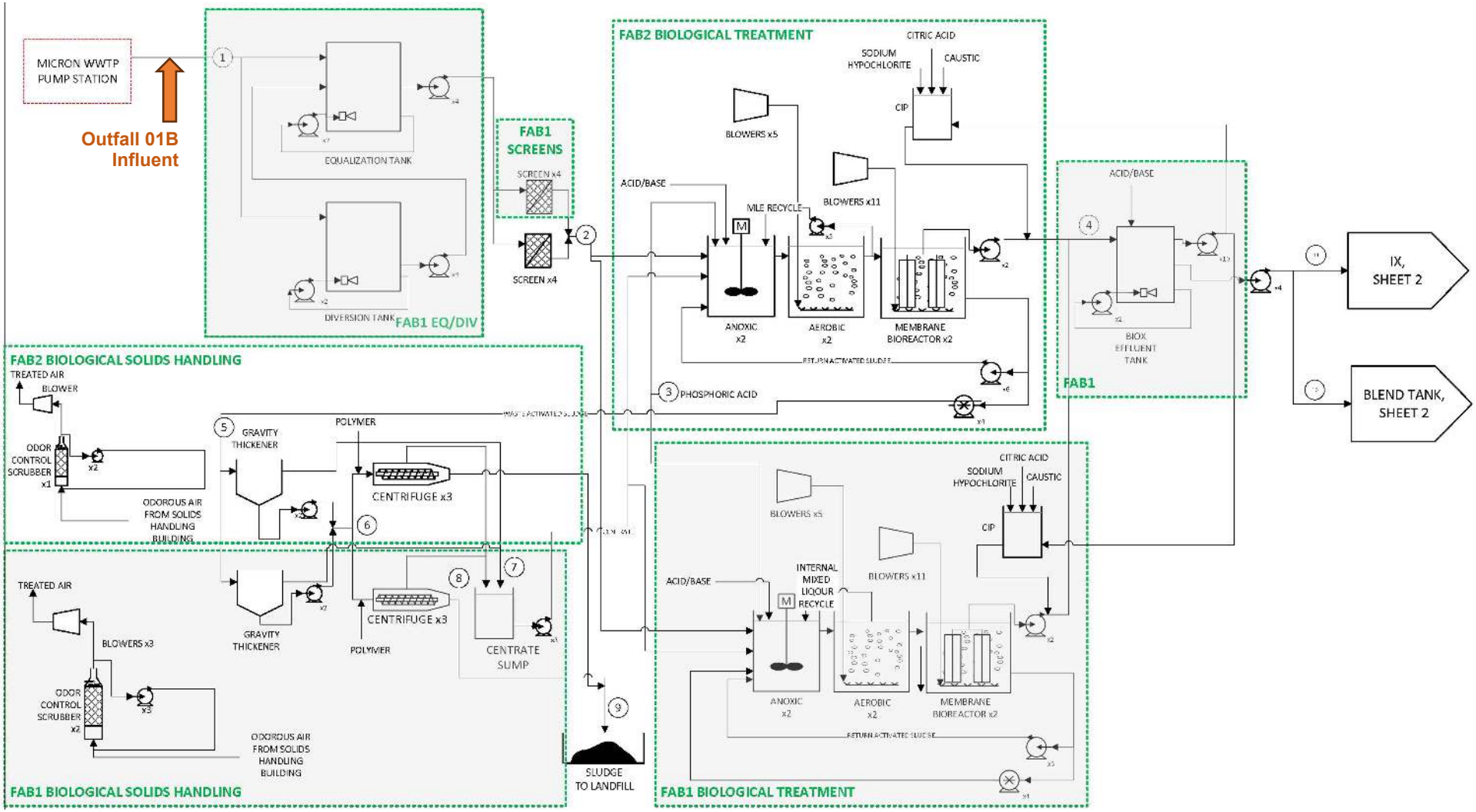
MONITORING LOCATIONS

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

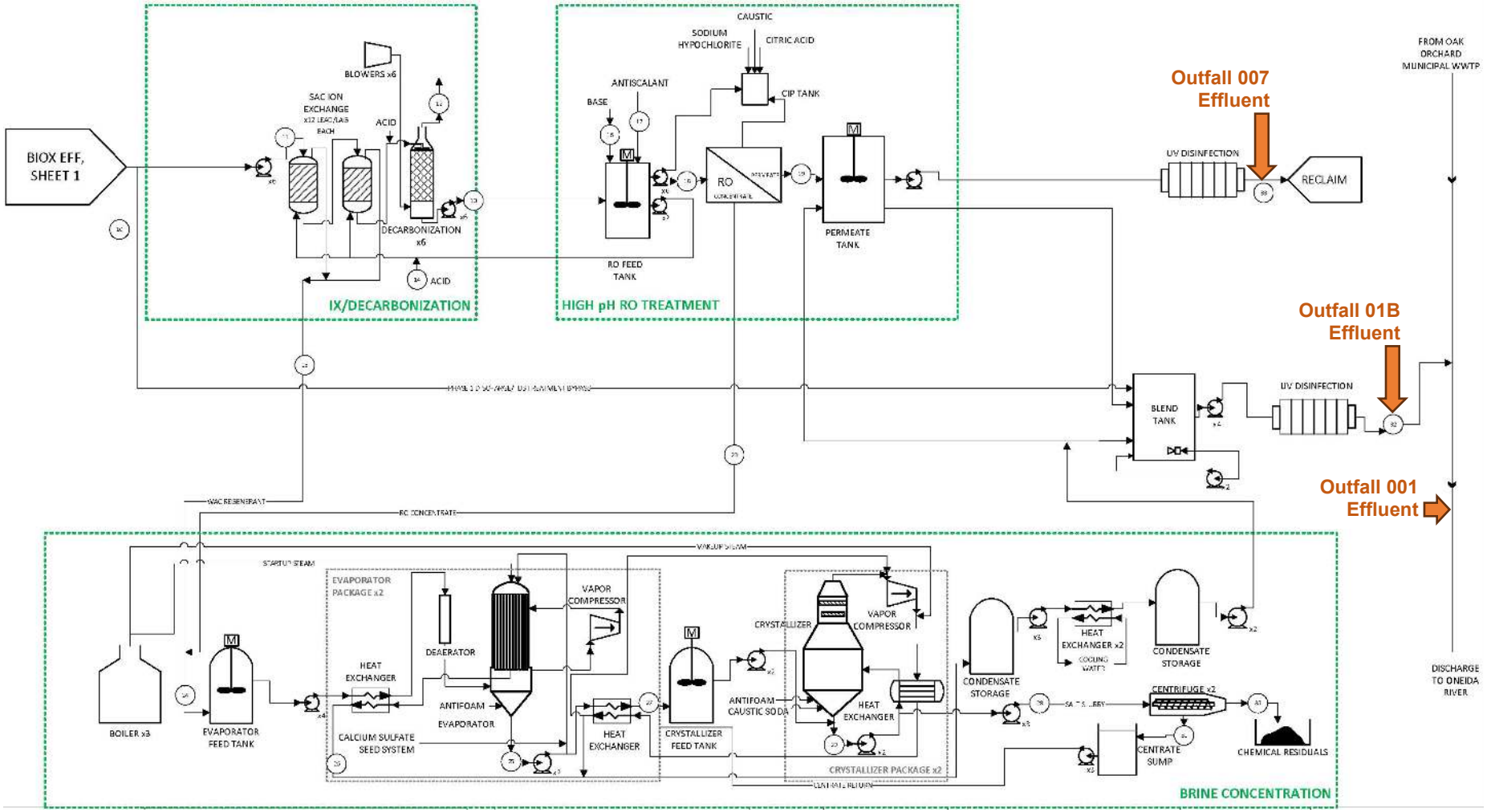
MUNICIPAL TREATMENT TRAIN



INDUSTRIAL TREATMENT TRAIN



INDUSTRIAL TREATMENT TRAIN (continued)



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

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

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

GENERAL REQUIREMENTS (continued)

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

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

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

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

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

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

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

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

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

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

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

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

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

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

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

E. Schedule of Additional Submittals:

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

SCHEDULE OF ADDITIONAL SUBMITTALS

Outfall(s)	Required Action	Due Date
001	BIENNIAL POLLUTANT SCAN The permittee shall implement an ongoing monitoring program and perform effluent sampling every two years as specified in footnote of the permit limits table.	Retain and submit with next NY-2A Application
001	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

Table continued on next page.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS (continued)

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	**Required Action**	**Due Date**
01B	INDUSTRIAL POLLUTANT SCAN – INITIAL SAMPLE The permittee shall perform effluent sampling as specified in the footnote of the Phase 2 permit limits table and submit the results to DEC.	Within 60 days following initial receipt of process wastewater
01B	INDUSTRIAL POLLUTANT SCAN – ONE-YEAR SAMPLE The permittee shall perform effluent sampling as specified in the footnote of the Phase 2 permit limits table and submit the results to DEC.	Within 60 days following one year of receipt of process wastewater
001	EMERGING CONTAMINANT (EC) MINIMIZATION PROGRAM The permittee shall initiate track down of potential sources by utilizing the "Emerging Contaminants Investigation Checklist for POTWs" available at Emerging Contaminants In NY's Waters - NYSDEC https://dec.ny.gov/environmental-protection/water/emerging-contaminants. The permittee shall continue track down of potential sources and submit reports summarizing: a. All EC monitoring results taken to date; b. A list of likely EC sources; c. All actions taken to reduce EC contaminants; and d. 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 after initiating track down and every 6 months thereafter until effluent falls below action levels for at least 12 months or until further notified by DEC
001	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite a mercury minimization plan and subsequent annual mercury minimization status reports in accordance with the requirements of this permit.	***Maintained Onsite*** annually by February 28
001	INDUSTRIAL PRETREATMENT PROGRAM Submit a report that briefly describes the permittee's program activities over the reporting period (January 1 – December 31). The report shall follow the guidelines contained in this permit and be electronically submitted to the USEPA Region II office as well as to the Regional Water Engineer and the Bureau of Water Permits.	Annually by March 1 (Within 60 days after the end of the reporting period)
001	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT 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 (January 28th)

Table continued on next page.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS (continued)

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	**Required Action**	**Due Date**
001	ANNUAL FLOW CERTIFICATION The permittee shall submit an Annual Flow Certification form each year in accordance with 750-2.9(c)(4). The form shall be attached to the February DMR or submitted through nForm.	February DMR (March 28th)
001	SHORT-TERM HIGH-INTENSITY MONITORING PROGRAM The permittee shall collect 8 weekly samples representative of normal discharge conditions and treatment operations during the first 8 weeks following the effective date of the permit (EDP). The permittee shall use approved EPA analytical method with the lowest possible detection limit as promulgated under 40 CFR Part 136 for the determination of the concentrations of heptachlor. The permittee shall submit a summary of the heptachlor monitoring results.	EDP + 4 months

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

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

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

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

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

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

SPDES Permit Fact Sheet
Onondaga County
Oak Orchard Wastewater Treatment Plant
NY0030317

Contents

Summary of Permit Changes

Based on a permittee-initiated modification request, and after completion of a full technical review, a State Pollutant Discharge Elimination System (SPDES) permit has been finalized for the Oak Orchard Wastewater Treatment Plant (WWTP). While the permit includes separate limitations for Phases 1 – 4, the changes summarized below reflect the differences between the 2014 permit and the Phase 4 effluent limitations in this permit:

General Updates

- Updated permit format, definitions, and general conditions
- Changed Toxic Class from nontoxic ('N') to toxic ('T')
- Removed stormwater outfalls (covered under the Multi-Sector General Permit)
- Updated the Mercury Minimization Program (MMP) Type I
- Updated Industrial Pretreatment Program Implementation Requirements (Notification of Material Change)
- Updated the Monitoring Locations diagrams to reflect the final design of all proposed upgrades, showing outfall sampling locations

Outfall 001

- Corrected lat/long coordinates
- Updated footnotes for Permit Limits, Levels and Monitoring tables
- Transferred the following requirements for the municipal treatment train (MTT) from Outfall 001 to new Outfall 01A:
    - Monthly average flow limit (except continued flow monitoring at Outfall 001)
    - Monthly average influent biochemical oxygen demand (BOD_5) monitoring
    - 5-day carbonaceous biochemical oxygen demand ($CBOD_5$) technology-based effluent limits (TBELs) (except continued daily maximum monitoring at Outfall 001)
    - Total suspended solids (TSS) TBELs
    - Settleable solids TBEL
    - pH TBELs
    - Fecal coliform limits
- Added the following requirements
    - Winter ultimate oxygen demand (UOD) load limit of 15,600 lbs/day and concentration monitoring
    - Daily maximum total dissolved solids (TDS) limit of 760 mg/L
    - Monthly average summer ammonia concentration limit of 0.8 mg/L
    - Monthly average winter ammonia concentration limit of 1.2 mg/L
    - Monthly total nitrogen monitoring
    - 12-month rolling average limit for total mercury of 1.4 ng/L
    - Daily maximum total phenols concentration limit of 10 µg/L and load limit of 2.6 lbs/day
    - Daily maximum fluoride limit of 6.0 mg/L
    - Daily maximum total boron action level of 20 mg/L
    - Biennial pollutant scan requirement
    - Emerging contaminants monitoring and daily maximum action levels of 10 ng/L for each PFOA and PFOS
- Reduced the following requirements
    - Monthly average summer ammonia load limit from 307 lbs/day (as NH_3) to 205 lbs/day (as N)
    - Monthly average winter ammonia load limits from 2,026 lbs/day (as NH_3) to 308 lbs/day (as N)

  - Daily maximum total residual chlorine (TRC) limit from 0.045 mg/L to 0.03 mg/L
  - Acute and chronic whole effluent toxicity (WET) action levels from 1.5 TUa and 9.0 TUc to 0.3 TUa and 2.0 TUc, respectively

- Removed the following requirements
  - Fecal coliform monitoring
  - pH monitoring
  - Settleable solids monitoring
  - TSS monitoring
  - BOD_5 influent monitoring
  - Action levels and monitoring for total recoverable iron, chloroform, total recoverable cadmium, total recoverable chromium, total recoverable copper, total recoverable nickel, total recoverable zinc, total recoverable arsenic, and total phenols

New internal Outfall 01A for the MTT

- Requirements transferred from Outfall 001:
  - Added monthly average influent BOD_5 monitoring
  - Increased monthly average flow limit for the MTT from 10 MGD to 14.3 MGD
  - Increased monthly average $CBOD_5$ load limit from 2,085 to 3,000 lbs/day and 7-day average $CBOD_5$ load limit from 3,336 to 4,800 lbs/day
  - Increased monthly average TSS load limit from 2,500 to 3,600 lbs/day and 7-day average TSS load limit from 3,750 to 5,400 lbs/day
  - Decreased daily maximum settleable solids limit from 0.3 to 0.1 mL/L
  - Added pH TBELs of 6.0-9.0 S.U. (range)
  - Added 30-day geometric mean fecal coliform limit of 200 No./100 mL and 7-day geometric mean fecal coliform limit of 400 No./100 mL
- Added the following requirements:
  - Temperature monitoring
  - Daily maximum and monthly average ammonia monitoring (concentration and load)
  - Daily maximum oil & grease TBEL of 15 mg/L
  - Monthly average total phosphorus monitoring
  - Daily maximum total aluminum monitoring
  - Daily maximum and monthly average total phenols concentration monitoring
  - Daily maximum total residual chlorine monitoring

New internal Outfall 01B for the industrial treatment train (ITT)

- Added the following requirements:
  - Industrial pollutant scan upon initial receipt of wastewater influent to the ITT
  - Monthly average flow limit of 16.5 MGD
  - pH TBELs of 6.0-9.0 S.U. (range)
  - Daily maximum temperature monitoring
  - Monthly average $CBOD_5$ TBELs of 25 mg/L and 3,400 lbs/day and 7-day average $CBOD_5$ TBELs of 40 mg/L and 5,500 lbs/day
  - Monthly average TSS TBELs of 30 mg/L and 4,100 lbs/day and 7-day average TSS TBELs of 45 mg/L and 6,200 lbs/day
  - Daily maximum settleable solids TBEL of 0.1 mL/L
  - Daily maximum total dissolved solids (TDS) monitoring

- Daily maximum and monthly average ammonia monitoring (concentration and load)
- Monthly average total phosphorus monitoring
- Daily maximum fluoride monitoring
- Daily maximum total aluminum monitoring
- 30-day geometric mean fecal coliform limit of 200 No./100 mL and 7-day geometric mean fecal coliform limit of 400 No./100 mL
- Daily maximum TRC concentration monitoring
- Emerging contaminant monitoring

New Outfall 006 and Outfall 007 for effluent reuse from the MTT and ITT, respectively

- Flow monitoring

Special Conditions

- Added a special condition stating the need for written approval from DEC prior to construction of outfall modifications
- Added Climate Leadership and Community Protection Act (CLCPA) Mitigation Plan requirements

Schedule of Compliance

- Added a Schedule of Compliance for phased effluent limitations for construction of upgrades to the MTT and construction of the new ITT, as well as construction of the respective effluent reuse systems (see Upgrade Project Description for phase descriptions)
  - Phase 1: maintenance of plant operations (existing facility)
  - Phase 2: 1st portion of industrial treatment train operational
  - Phase 3: full industrial treatment train operational
  - Phase 4: upgraded municipal treatment train operational

Schedule of Additional Submittals

- Added a Schedule of Additional Submittals for Short-Term High Intensity Monitoring (STHIM) for heptachlor

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

7/1/2014 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 6/30/2019. The 2014 permit has formed the basis of this permit.

9/5/2018 The Onondaga County submitted a timely and sufficient renewal application.

6/30/2019 The 2014 permit was allowed to stay in effect pursuant to SAPA[1].

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

6/18/2025 The Onondaga County submitted an NY-2A application and request to modify the permit to expand and upgrade the municipal wastewater treatment train and add a new industrial wastewater treatment train and water reclamation facility.

7/30/2025 DEC issued a Notice of Incomplete Application (NOIA) specifying the items required to complete the application and modification request.

8/28/2025 The Onondaga County submitted complete NY-2A application and request to modify the permit in response to the NOIA.

10/29/2025 The Onondaga County submitted a Climate Leadership and Community Protection Act (CLCPA) Section 7(2) Analysis.

11/3/2025 DEC sent comments on the CLCPA Section 7(2) Analysis and a request for additional information.

11/7/2025 In response to The Onondaga County submitted a revised Climate Leadership and Community Protection Act (CLCPA) Section 7(2) Analysis.

11/12/2025 DEC published a notice of complete application in the Environmental Notice Bulletin (ENB).

11/16/2025 The Onondaga County provided notice in the Post-Standard. The publications contain information on the public notice process. The public comment period commenced on 11/16/2025.

12/16/2025 A public comment hearing was held. A second public comment hearing was held on 12/17/2025.

12/23/2025 Comment period closed. All substantive comments have been addressed in the responsiveness summary developed as part of the permit finalization.

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 sanitary and process wastewater, and stormwater from on-site areas at the Oak Orchard facility. The collection system consists of separate sewers. The facility accepts flow from both categorical industrial users and significant industrial users (SIUs).

The current 10.0 MGD facility consists of:

- Two parallel aerated grit removal chambers
- Two mechanically cleaned bar screens with a manually cleaned backup
- Four primary clarifiers (chemically enhanced primary treatment)
- Two high purity oxygen aeration tanks
- Six secondary clarifiers
- Two aerated lagoons in series
- Two parallel chlorine contact tanks (liquid sodium hypochlorite disinfection)
- Sodium bisulfite dechlorination

Sludge is thickened by gravity thickeners and then hauled to Metro Syracuse Wastewater Treatment Plant (SPDES ID # NY0027081) for solids handling.

The primary outfall (Outfall 001) is located in the Oneida River near the intersection of Oak Orchard Road and the entrance road to Oak Orchard WWTP, approximately 175 feet upstream of the mouth of Mud Creek. The outfall pipe is a 72-inch diameter reinforced concrete pipe and extends approximately 132 feet from the shore. Additionally, the concrete encasement surrounding the pipe is approximately 13 feet wide. Originally, sixteen (16) 18-inch diameter vertical riser pipes were located along the top of the outfall pipe over a span of 96 feet; however, a survey performed by Anchor QEA in April 2025 identified that all riser pipes have broken off or were removed at some time in the past.

The facility accepts wastewater from the following municipalities:

Municipality	POSS # or SPDES #	Collection System
Town of Cicero	NYS700086	Separate
Town of Clay	NYS700023	Separate
Village of North Syracuse	NYS700024	Separate

The facility accepts, or anticipates accepting, wastewater from the following significant industrial users (SIUs):

Significant Industrial User (SIU)	SIC Code	NAICS Code	Categorical Reference (if applicable to 40 CFR)
Clinton's Ditch Cooperative Company, Inc., Cicero, NY	2089	312111	NA
ICM Controls Corporation, North Syracuse, NY	3625	335314	40 CFR 433
G. A. Braun, Inc., North Syracuse, NY	3582	333312	40 CFR 433
G&L Davis Meat Co, North Syracuse, NY	2013	311612	NA
Micron, Clay, NY *(anticipated)*	3674	334413	40 CFR 469

Upgrade Project Description

The facility is planning the following upgrades and improvements:

- Upgrades to the existing municipal treatment train (MTT) (new internal Outfall 01A), which includes:
    - Replacement of the existing headworks with new automated screening and grit removal
    - Addition of two primary clarifiers to bring the total to six
    - Addition of a new fine screening following the primary clarifiers
    - Replacement of the high purity oxygen system with a membrane bioreactors (MBR) system
    - Replacement of the chlorine disinfection system with a closed-vessel UV disinfection system
    - Addition of a new biosolids handling facility including:
        - Primary sludge screening and gravity thickening
        - Gravity belt thickeners for waste activated sludge
        - A high strength waste receiving station
        - A municipal solids receiving station
        - Blend tanks
        - Anaerobic digesters with biogas handling, conditioning, storage, and utilization
        - Centrifugal dewatering for digested sludge
        - Cake storage and handling
        - Chemical feed systems

        - Sludge drying
    - Addition of a new effluent reuse facility including reverse osmosis (RO) treatment (new Outfall 006)
- Construction of a new industrial treatment train (ITT) (new internal Outfall 01B), which includes:
    - Equalization and diversion tanks
    - Influent screening
    - Biological treatment in mixed anoxic tanks followed by aeration tanks
    - Membrane bioreactors
    - UV disinfection
    - Centrifugal solids dewatering
    - Effluent reuse with ion exchange resin (IX) and RO treatment (new Outfall 007)
- New substation and redundant power feed

Project Phases

The overall project will be completed in phases for construction and operation of the treatment trains.

PHASE 1: At the beginning of Phase 1, also referred to as the "maintenance of plant operations" (MOPO) phase, no upgrades to the MTT and no portion of the new ITT will be completed. During Phase 1, additional equipment will be installed, including moving bed bioreactor (MBBR) tanks. MBBR tanks augment the existing MTT and accommodate receipt of pre-production wastewaters from industrial users prior to start-up of the new ITT.[2] The facility will receive influent wastewater at flow rates up to 13.3 MGD, exceeding the design flow rate of the existing MTT (10 MGD). These tanks will later be repurposed as recycled water storage for effluent reuse.

PHASE 2: Phase 2 will begin when the first portion of the new ITT becomes operational. The design flow of the ITT at that time will be 8.25 MGD. The design flow of the MTT will remain at 13.3 MGD during Phase 2. The combined effluent flow rate for Phase 2 is thus 21.6 MGD. Beginning in Phase 2, all SPDES permit requirements, related to the new internal Outfalls 01A for the MTT and 01B for the ITT, become effective.

PHASE 3: Phase 3 will begin when the upgrades to the MTT are completed. The design flow rate for the MTT at that time will be 14.3 MGD. The design flow rate of the completed first portion of the ITT will still be 8.25 MGD at that time. The combined effluent flow rate for Phase 3 is thus 22.5 MGD.

PHASE 4: Phase 4 will begin when the second portion of the new ITT becomes operational. The total design flow of the ITT at that time will be 16.5 MGD. The design flow of the upgraded MTT will still be 14.3 MGD at that time. The combined effluent flow rate for Phase 4 is thus 30.8 MGD. The flow diagram on the next page represents the total flow balance for the fully upgraded Oak Orchard WWTP.

EFFLUENT REUSE: The construction of the effluent reuse systems for the MTT and the ITT will be completed after start-up of the respective treatment trains. The schedule of construction of the new reuse outfalls (Outfall 006 for the MTT effluent reuse system, and Outfall 007 for the ITT effluent reuse system) is independent from the phases described above.

[2] Wastewater to be generated and discharged by Micron during Phase 1 (MOPO) is expected to consist of sanitary wastewater. If Micron or its construction contractors request authorization to discharge to Oak Orchard WWTP construction-related wastewater generated by Micron (e.g. system flushing, hydrostatic testing, blowdowns, or similar activities), such requests will be evaluated on a case-by-case basis including an assessment of potential parameters of concern prior to approval of any discharge.

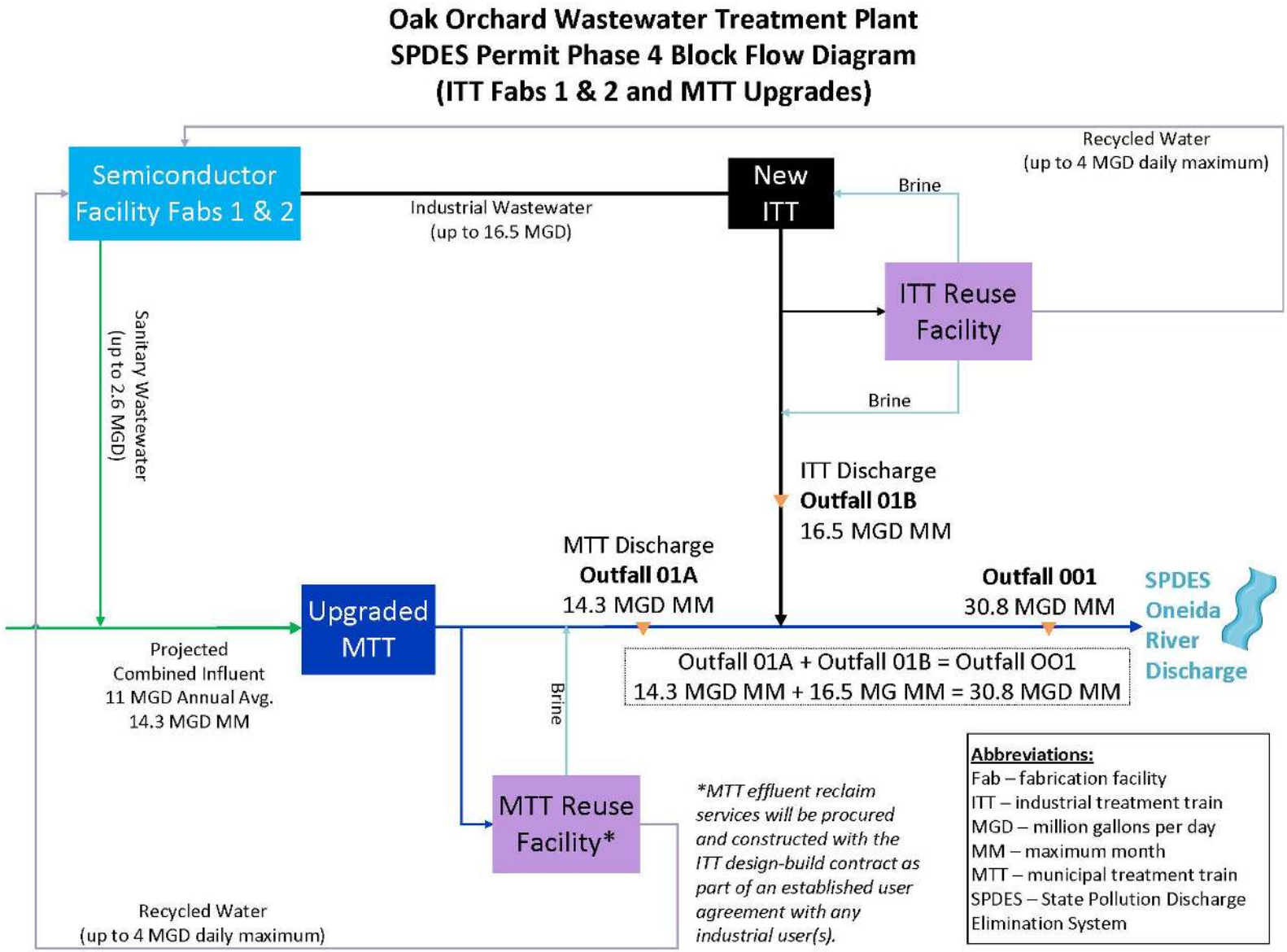


Figure 1. Diagram showing the influent and effluent flow balance of the fully upgraded Oak Orchard WWTP in Phase 4 of the permit.

Site Overview

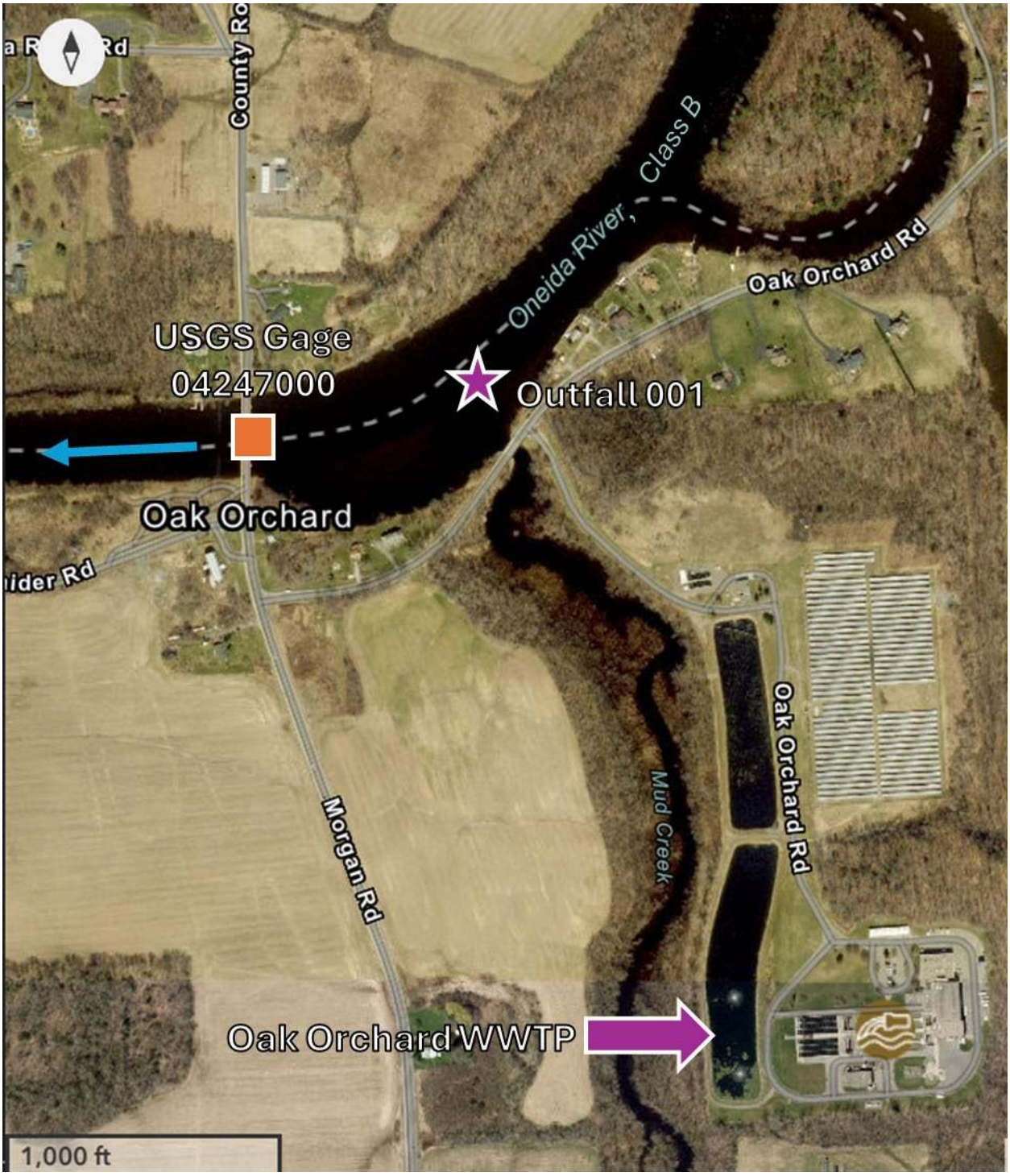


Figure 2. Map showing Oak Orchard Wastewater Treatment Plant (WWTP), Outfall 001, and USGS Gage 04247000 on the Oneida River near Euclid, NY.

Enforcement History

Compliance and enforcement information can be found on the USEPA'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 for the period May 2020 to April 2025 and the application submitted by the permittee. Appendix Link

Interstate Water Pollution Control Agencies

Outfalls 001-004 are located within the Great Lakes watershed and International Joint Commission (IJC) compact area and are subject to 40 CFR Part 132 . Appendix Link

Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	4952	Treated sanitary and process wastewater	Oneida River, Class B
01A	4952	*NEW* Municipal treatment train (MTT) effluent Treated sanitary and process wastewater	N/A (Internal to Outfall 001)
01B	4952	*NEW* Industrial treatment train (ITT) effluent Treated process wastewater	N/A (Internal to Outfall 001)
002	N/A	Stormwater runoff - covered under Multi-Sector General Permit (MSGP) See Stormwater Pollution Prevention Requirements	Oneida River, Class B
003	N/A		Oneida River, Class B
004	N/A		Mud Creek, Class C
005	N/A		Oneida River, Class B
006	4952	*NEW* MTT effluent reuse system discharge Treated sanitary and process wastewater	N/A (Recycled water sent to industrial user)
007	4952	*NEW* ITT effluent reuse system discharge Treated process wastewater	N/A (Recycled water sent to industrial user)

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

Reach Description: The Oneida River (Ont. 66-11 including Barge Canal cuts) is a tributary of the Oswego River and part of the Lake Ontario watershed. The segment of the Oneida River at the point of discharge is classified as B (6 NYCRR 899.4 – Table I – Item 1). The Oneida River joins with the Seneca River (Ont.-66-12) to become the Oswego River (Ont.-66) approximately 4.1 miles downstream of the discharge. The Seneca River is classified as B (6 NYCRR 897.4 – Table I – Item 39). The Oswego River is classified as B (6 NYCRR 897.4 – Table I – Items 2-6)

until it changes to class C (6 NYCRR 897.4 – Table I – Item 1) at the dam and power station at Lock 6 located approximately 21 miles downstream from the confluence of the Seneca and Oneida Rivers and 1.8 miles upstream of the mouth of the Oswego River.

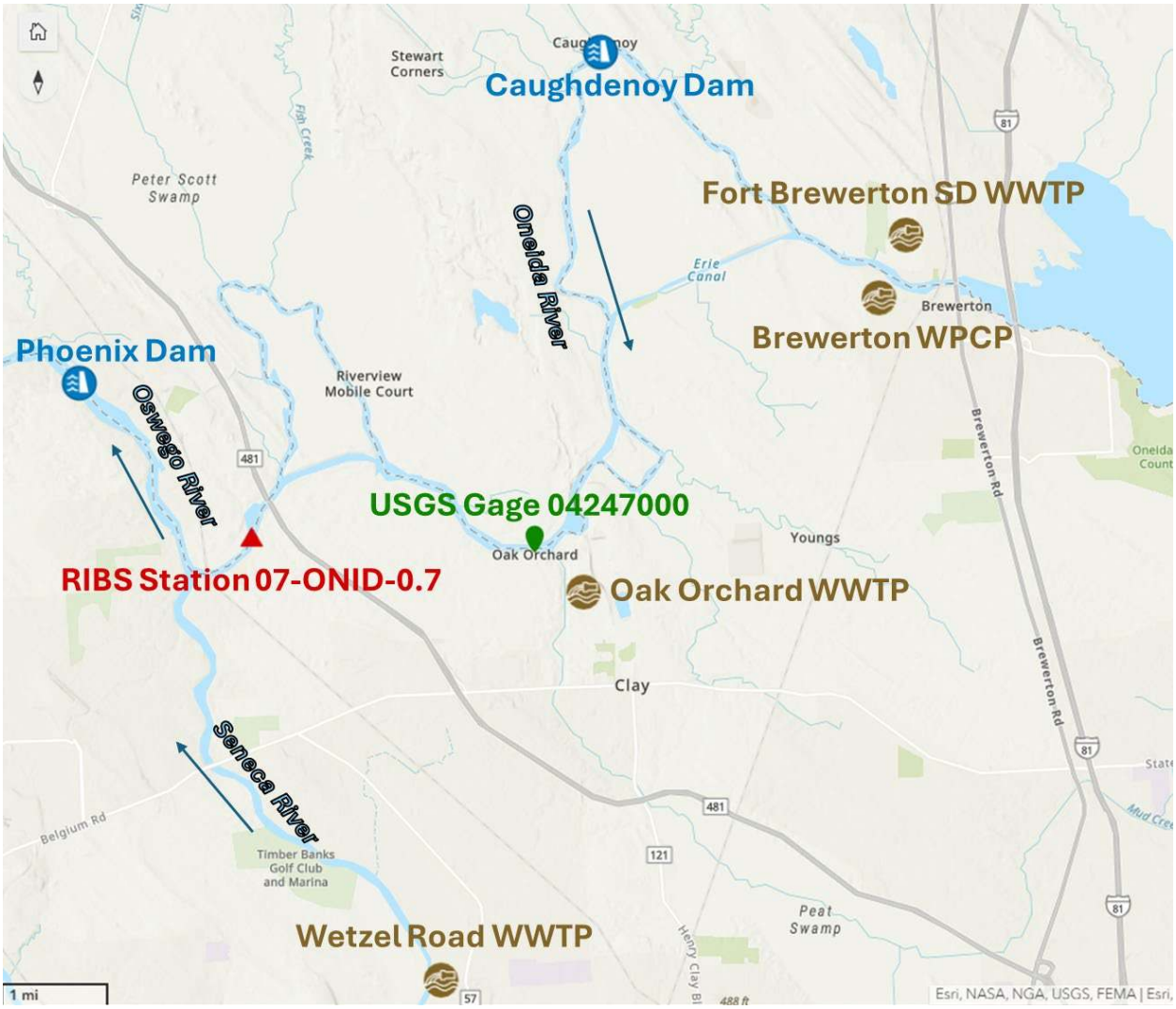


Figure 3. Map showing: Town of Hastings Fort Brewerton Sewer District Wastewater Treatment Plant (NY0245062), Onondaga County Brewerton Water Pollution Control Plant (NY0027596), the Caughdenoy Dam, Oak Orchard Wastewater Treatment Plant (NY0030317), USGS Gage 04247000, and RIBS station 07-ONID-0.7 on the Oneida River (Class B); Onondaga County Wetzel Road Wastewater Treatment Plant (NY0027618) on the Seneca River (Class B); and the Pheonix Dam on the Oswego River (Class B)

Impaired Waterbody Information

The Oneida River segment (PWL No. 0703-0020) is not listed on the 2020/2022 New York State Section 303(d) List of Impaired/TMDL Waters. As such, a TMDL has not been developed and therefore, there are no applicable wasteload allocations (WLAs) for this facility.

Beginning approximately 11 miles downstream from the confluence of the Seneca and Oneida Rivers, the lower main stem of the Oswego River (PWL No. 0701-0006) was first listed on the 2020/2022 New York State Section 303(d) List of Impaired/TMDL Waters as impaired due to total dissolved solids (TDS). A TMDL has not been developed to address the impairment and, therefore, there are no applicable wasteload allocations (WLAs) for this facility.

Critical Receiving Water Data & Mixing Zone

The low flow condition for the Oneida River was obtained from USGS gage station 04247000, Oneida River near Euclid, NY. The 1Q10, 7Q10 and 30Q10 flows at the gage were found from the USGS Hydrologic Toolbox software and an analysis of data from 1997 to 2024.

USGS gage 04247000 is located approximately 800 feet downstream of Outfall 001 and the drainage basin areas are equivalent; therefore, the low flow conditions of the gage are equal to the low flow conditions at the outfall.

DRAINAGE BASIN RATIO	1Q10	7Q10	30Q10
Gage Name	Oneida River near Euclid NY		
Gage ID Number	04247000		
Low Flow at Gage (cfs)	49.87	182.9	312.1
Drainage Area at Gage (mi^2)	1440	1440	1440

Consistent with TOGS 1.3.1 section (s) ("Chronic and Acute Mixing Zones"), the outfall information submitted in the application and mixing zone form was used to develop a mixing zone model to help inform dilution ratios for the water quality analysis. Mixing is constrained by the existing outfall configuration and minimal effluent velocity. Based on the volumetrically available flow rate and the mixing zone model, a dilution of 2:1 was determined to be reasonable for Phases 2 through 4.

Outfall 001	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
Phase 1 (MOPO)	5:1	9:1	11:1*	Existing 2014 Permit
Phase 2	2:1	2:1	2:1	TOGS 1.3.1
Phase 3	2:1	2:1	2:1	TOGS 1.3.1
Phase 4	2:1	2:1	2:1	TOGS 1.3.1

*The acute and chronic dilution ratios from the 2014 permit are being continued during Phase 1. The Phase 1 HEW dilution ratio was estimated as 1.2 times the 2014 chronic dilution ratio.

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

Consistent with TOGS 1.3.2, WET testing will continue to be required based on the following criteria:

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

five. (#4)

- There is the presence of substances in the effluent for which ambient water quality criteria do not exist. (#1)
- 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. (#2)
- There is the presence of substances for which WQBELs are below analytical detectability. (#3)

Consistent with the TOGS 1.3.2, section "Guidance for Reasonable Potential Determination," a reasonable potential analysis of the 2021 data using the dilution ratios for Phases 2 through 4 (2:1 acute, 2:1 chronic) would suggest potential for acute and chronic toxicity. However, given that the major upgrades currently planned for the facility may impact effluent toxicity, WET limits will not be given at this time and instead, WET action levels will be continued and applied for each phase of the permit.

Given the dilution available, and location within the Great Lakes basin, the permit continues to require chronic only WET testing. Routine WET samples will be collected quarterly for a period of one year in years ending 1 and 6. WET samples shall also be collected quarterly during the first year upon start-up of the new industrial treatment train (i.e. the first year of Phase 2), in order to test for possible toxicity introduced by significant volumes of industrial wastewater containing multiple toxic parameters newly introduced to the influent of the Oak Orchard WWTP. Should the timing overlap, routine WET samples may be used to satisfy the additional WET requirements.
Except in the case for the Phase 1 values, the acute dilution (2:1) is less than 3.3, and the acute action levels for each species equal the default value of 0.3 TUa. The acute action levels for each species for Phase 1 represent the acute dilution ratio times a factor of 0.3. The chronic action levels (all phases) represent the chronic dilution ratio. Appendix Link

Table 1: Acute & Chronic Whole Effluent Toxicity (WET) action levels for all phases.

Outfall 001	Acute WET Action Levels (TUa)	Chronic WET Action Levels (TUc)
Phase 1 (MOPO)	1.5	9.0
Phase 2	0.3	2.0
Phase 3		
Phase 4		

Table 2: Original Acute & Chronic Whole Effluent Toxicity (WET) test results for Oak Orchard WWTP (NY0030317), including the required Reasonable Potential Determination (RPD) for comparison. This assessment is based on the currently permitted dilution ratio of 5:1 Acute & 9:1 Chronic.

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
02/21	70.7% (F)	1.4 (F)	1.5	0% (F)	Pass	3.6	**Yes**	25% (FI)/35% (I)	4.0 (FI)/2.9 (I)	9.0	Pass/Pass	7.5	No
05/21	84.1% (F)	1.2 (F)	1.5	25% (F)	Pass	3.1	**Yes**	25% (I)/40.2% (I)	4.0 (I)/2.5 (I)	9.0	Pass/Pass	6.5	No
08/21	>100% (FI)	<0.3 (FI)	1.5	100% (FI)	Pass	<0.8	No	50% (I)/61.1% (I)	2.0 (I)/1.6 (I)	9.0	Pass/Pass	4.2	No
11/21	>100% (FI)	<0.3 (FI)	1.5	100% (FI)	Pass	<0.8	No	>100% (FI)/>100% (FI)	<1.0 (FI)/<1.0 (FI)	9.0	Pass/Pass	<2.6	No

Table 3: Revised Acute & Chronic Whole Effluent Toxicity (WET) test results for Oak Orchard WWTP (NY0030317), including the required Reasonable Potential Determination (RPD) for comparison. This assessment is based on the Phase 2 through 4 dilution ratio of 2:1 for both Acute & Chronic.

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
02/21	70.7% (F)	1.4 (F)	0.3	0% (F)	**Fail**	3.6	**Yes**	25% (FI)/35% (I)	4.0 (FI)/2.9 (I)	2.0	**Fail/Fail**	7.5	**Yes**
05/21	84.1% (F)	1.2 (F)	0.3	25% (F)	**Fail**	3.1	**Yes**	25% (I)/40.2% (I)	4.0 (I)/2.5 (I)	2.0	**Fail/Fail**	6.5	**Yes**
08/21	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.8	**No	50% (I)/61.1% (I)	2.0 (I)/1.6 (I)	2.0	*Pass/Pass*	4.2	**Yes**
11/21	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.8	**No	>100% (FI)/>100% (FI)	<1.0 (FI)/<1.0 (FI)	2.0	Pass/Pass	<2.6	***No

[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 ≤ 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 using the seven-day once-in-ten year low flow (7Q10) 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 2.6), the Reasonable Potential Multiplier when four quarterly tests have been completed, taking 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 (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 reproduction or growth 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 using the seven-day once-in-ten year low flow (7Q10) 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 2.6), the Reasonable Potential Multiplier when four quarterly tests have been completed, taking 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 (a non-detect). Therefore, this data cannot be used to implement a WET limit.

Anti-backsliding

Backsliding of Various Loading Limitations at Outfalls 001, 01A, 01B: Load limitations for $CBOD_5$ and TSS are secondary treatment standards (40 CFR 133.102) calculated at the respective design flow rates for the upgraded MTT and the new ITT for each phase of the project. Load limitations for ammonia during Phases 2 through 4 are WQBELs calculated using the concentration WQBEL and the respective total design flow rate for each phase. As such, the following limitations (applied at Outfall 001 during Phase 1; applied at Outfalls 01A and 01B during Phases 2 through 4) increase across the various phases due to the respective increase in flow

rates explained in the Facility Information and Pollutant Summary Tables sections of this fact sheet:

- Monthly average flow limit
- Monthly average and 7-day average $CBOD_5$ loading limits
- Monthly average and 7-day average TSS loading limits
- Summer and winter monthly average ammonia loading limits

Backsliding is allowed for the flow increases and these loading increases under 6 NYCRR 750-1.10(c)(1), due to material and substantial alterations and additions planned for this facility (see Upgrade Project Description).

However, the following effluent limitations (applied at Outfalls 01A and 01B during Phases 2 through 4) are at least as protective of water quality as the 2014 permit conditions:

- WQBELs for UOD and dissolved oxygen at Outfall 001
- TBELS for $CBOD_5$ and TSS concentration at Outfalls 01A and 01B

Other Parameters Affected at Outfall 001 not Backsliding: Effluent limitations for parameters listed below are being discontinued at Outfall 001 upon start-up of the new ITT because the Phase 2 requirements include new limits at internal Outfalls 01A and 01B, covering all flows contributing to Outfall 001. For the following parameters, the new effluent limitations (applied at Outfall 001 during Phase 1; applied at Outfalls 01A and 01B during Phases 2 through 4) are at least as protective of water quality as the 2014 permit conditions:

- pH (range)
- $CBOD_5$ concentration
- TSS concentration
- Settleable solids

Therefore, the discontinuance of these effluent limitations at Outfall 001 does not constitute backsliding.

Discontinuance of Action Levels not Backsliding: Consistent with 6 NYCRR 750-1.2(a)(2) and TOGS 1.2.1 I.B.3., an action level is not an effluent limit, but a monitoring requirement characterized by a numerical value that, when exceeded, triggers additional permittee monitoring and DEC review to determine if numerical effluent limitations should be imposed. Therefore, discontinuance of any action level does not constitute backsliding under 6 NYCRR 750-1.10(c). See the Pollutant Summary Table for Outfall 001 for information on action levels being discontinued.

Outfall Modification: Effluent limitations included in this permit are based on existing conditions and available data, and the design of the upgraded facility, and may be revisited, in accordance with applicable law and regulations (including but not limited to 6 NYCRR 750-1.10(c) and 40 CFR 122.44(*l*)) if future conditions materially and substantially change.

The permittee is planning an outfall modification project to achieve better mixing conditions in the receiving water but has not yet submitted a design to DEC. Depending on the design, the outfall may be able to achieve better mixing and higher dilution ratios. 6 NYCRR 750-1.10(c)(1) and 40 CFR 122.44(*l*)(2(i)(A) allow for the application of less stringent effluent limitations when material and substantial alterations or additions to the permitted facility occur after permit issuance, as long as water quality standards are attained, and the revision is consistent with antidegradation requirements. Outfall modification constitutes material and substantial alterations to the facility, and therefore a relaxation of WQBELs following an upgrade to the facility's outfall structure would not violate anti-backsliding provisions. 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 will continue to be required to post a sign at each point of wastewater discharge to surface waters, unless a waiver is obtained.

Additionally, the permit contains a requirement to make the DMR sampling data available to the public upon request. This requirement has been continued from the 2014 permit.

Stormwater Pollution Prevention Requirements

The facility is a publicly owned treatment works ≥ 1 MGD that requires SPDES permit coverage under 40 CFR 122.26 (b)(14)(ix). The stormwater pollution prevention language has been removed from the permit and the permittee will seek coverage of their stormwater outfalls (002-005) separately under the SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) Sector [T] (GP-0-23-001).

Mercury[4]

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

The facility is a Class 05 USEPA major municipal facility located within the Great Lakes basin. Consistent with the 2020 DOW 1.3.10, the daily maximum effluent limitation of 50 ng/L, sampled quarterly, will continue. Additionally, the high priority mercury language in the permit has been replaced with requirements for the implementation of MMP Type I, and a new 12-month rolling average (12-MRA) total mercury effluent limitation of 1.4 ng/L has been added. The 12-MRA is set equal to the existing effluent quality (EEQ) calculated from the lognormal 95th percentile of 20 mercury effluent samples collected from May 2020 to April 2025.

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)

Appendix Link

Biennial Pollutant Scan

In accordance with 40 CFR 122.21(j)(4)(vi), the permit includes a new requirement to perform one effluent (Outfall 001) sampling event every two years of the WWTP effluent for the parameters in the NY-2A Application, Tables A – D. This requirement ensures the data is representative of effluent conditions over the permit term and will be available for the next application submittal and permit review. This requirement is new.

[3] As prescribed by 6 NYCRR Part 617
[4] In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.

Industrial Pollutant Scan

In accordance with 6 NYCRR 750-2.9(a)(1)(i), in order to provide adequate notice and characterization of substantial changes in volume or character of pollutants introduced into the publicly owned treatment works, the permit includes a requirement to perform pollutant scans, once within the first 60 days after initial receipt of wastewater to the ITT (Outfall 01B) in Phase 2 and then again one year later, for the parameters in the NY-2A Application, Tables A – D. This sampling will provide information regarding the potential presence of any parameters for which technology-based effluent limitations may be applicable through a future permit modification. This requirement is new.

Industrial Pretreatment Program

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

Schedule of Compliance

A Schedule of Compliance, with phases described in the Upgrade Project Description section of this fact sheet, has been included[5] for the following items (Appendix Link):

- Submittal of a CLCPA Mitigation Plan
- Construction completion and commencement of operation of the new ITT, to be constructed in two subsequent portions
- Construction completion and commencement of operation of the upgraded MTT
- Construction completion and commencement of operation of the municipal effluent reuse system
- Construction completion and commencement of operation of the industrial effluent reuse system
- Construction completion and commencement of operation of the biosolids processing system

Emerging Contaminant Monitoring

The SPDES permit includes action levels for perfluorooctanoic acid (PFOA) and perfluorooctanesulfonic acid (PFOS), and minimization programs when exceedances of these action levels are confirmed, due to 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 recommended contaminant monitoring list for state fish advisory programs; and the need to protect the best usages of the receiving water and downstream waterbodies pursuant to 6 NYCRR 701.1. The use of minimization programs is also supported by 6 NYCRR 750-1.14(f). Appendix Link

Based on the available data at Outfall 001, the permit includes action levels for PFOA and PFOS. The action levels are set at NYS Department of Health (DOH) Maximum Contaminant Level (MCL) of 10 ng/L for drinking water as a proxy for background concentrations in the facility's influent. Discharges above the MCL would indicate the potential presence of a controllable source and the need to implement track down measures. Pursuant to 6 NYCRR 750-1.13(b), the SPDES permit also requires monitoring for the remaining 38 per- and polyfluoroalkyl substances (PFAS) compounds. Monitoring requirements are consistent with guidance released in USEPA memos

[5] Pursuant to 6 NYCRR 750-1.14

dated April 28, 2022[6], and December 5, 2022[7]. Please see the Pollutant Summary Table below for more information.

Also pursuant to 6 NYCRR 750-1.13(b), based on the industrial category of the primary industrial contributor to the ITT influent (semiconductor), additional monitoring for all 40 PFAS compounds is being added at Outfall 01B to provide information regarding the character of the industrial wastewater and to support establishment of future standards or TBELs. See also Pollutant Summary Tables.

Appendix Link

Schedule of Additional Submittals

Biennial Pollutant Scan

Please see above discussion of biennial pollutant scan. The permittee shall implement an ongoing monitoring program and perform effluent sampling at Outfall 001 every two years as specified in the permit. This requirement ensures that, pursuant to 40 CFR 122.21(j)(4)(vi) and 6 NYCRR 750-1.25(c), three effluent samples will be available for the next application submittal and permit review.

Whole Effluent Toxicity (WET) Testing

Consistent with TOGS 1.3.2, the permittee is required to perform WET testing at Outfall 001. Please see above discussion for more information.

Industrial Pollutant Scan

Please see above discussion of industrial pollutant scan. The permittee shall implement one-time sampling of Outfall 01B as specified in the permit.

Emerging Contaminant (EC) Minimization Program

Please see above discussion of emerging contaminants.

Mercury Minimization Plan (MMP) and Status Report

Please see above discussion of MMP and Status Report.

Industrial Pretreatment Program

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

Water Treatment Chemical (WTC) Annual Report

In accordance with 6 NYCRR 750-1.13(a), to determine compliance with effluent limitations and water quality standards, the permit requires submission of an annual report each year that the permittee uses and discharges WTCs. The permittee must summarize all WTC use for the prior calendar year, January 1 through December 31, and attach it either to the December DMR or annual monitoring report required by the permit. More information is located on DEC's website under SPDES Permitting of Water Treatment Chemicals.

[6] "Addressing PFAS Discharges in EPA-Issued NSPDES Permits and Expectations where EPA is the Pretreatment Control Authority," April 28, 2022, USEPA.
[7] "Addressing PFAS Discharges in NPDES Permits and Through the Pretreatment Program and Monitoring Programs," December 5, 2022, USEPA.

Annual Flow Certification

In accordance with 6 NYCRR 750-2.9(C)(4), the chief fiscal officer of the municipality shall submit an Annual Flow Certification form, located on DEC's website at Wastewater forms, as an attachment to its February DMR or through nForm.

Short-Term, High Intensity Monitoring Program

In accordance with 6 NYCRR 750-1.13(a), the permittee shall be subject to monitoring requirements to determine compliance with the water quality standard for heptachlor. Consistent with TOGS 1.2.1, where limited data is available to confirm the presence or absence of a parameter in an outfall, a short-term, high intensity monitoring program may be used. Please see the Pollutant Summary Table for Outfall 001 below for more information.

Special Conditions

Outfall Modification

The permittee is planning an outfall modification project to achieve better mixing conditions in the receiving water but has not yet submitted a design to DEC. Depending on the design, the outfall may be able to achieve better mixing and higher dilution ratios that could result in higher effluent limitations (WQBELs). The permit is currently drafted based on the existing outfall. See the Anti-backsliding section of this fact sheet for more discussion of possible changes to effluent limitations.

Consistent with 6 NYCRR 750-2.10(a), if the outfall project proceeds, the permittee will need to submit an approvable engineering report, plans, and specifications, along with a SPDES permit modification request for DEC to re-assess dilution ratios and permit limitations. Any permit modifications made because of the outfall project will require public notice. Pursuant to 6 NYCRR 750-2.10(b), the construction of any modification to the facility's outfall structure shall not start until the permittee receives written approval of the engineering report, plans, and specifications from DEC and an issued permit.

Climate Leadership and Community Protection Act (CLCPA)

The permittee submitted "Oak Orchard Wastewater Treatment Plant Climate Leadership and Community Protection Act Analysis," (CLCPA Analysis) dated October 29, 2025, and modified on November 7, 2025. As there is no air permit for this facility, the SPDES permit contains conditions to meet the CLCPA Section 7(2). The permittee needs time to develop a detailed Mitigation Plan because the design for the biosolids processing system is still in the preliminary design stage. Additionally, the County Environmental Committee will draft the Mitigation Plan for a vote by the entire County Legislature. County approval of expenditures of funds is needed for the Mitigation Plan to be implemented and enforceable.

In accordance with the Schedule of Compliance, the permittee must submit an approvable Mitigation Plan to the Department at the time of the biosolids processing design submittal, including the mitigation measures needed to meet the provisions of the CLCPA Section 7(2), Chapter 106 of the Laws of 2019. Any measures identified in the approved Mitigation Plan must be fully implemented, and certified complete, prior to commencement of operation of the biosolids processing system. This is consistent with 6 NYCRR 750-2.10(a) and (b). The Mitigation Plan must include details to implement leak detection and repair. Leak detection and repair is a minimum condition of the Mitigation Plan for consistency with the 2022 NYS Climate Action Council Scoping Plan (Chapter 16 discussion of emissions monitoring and leak reduction at water resource recovery facilities).

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	43° 12' 20" N	76° 12' 51" W	Oneida River	B	Ont 66-11 including Barge Canal cuts PWL: 0703-0020	07/03	148[8]	32.2	118	202	30.8	2:1	2:1	2:1
01A	43° 12' 01" N	76° 12' 40" W	*New* Internal to Outfall 001	-	-	-	-	-	-	-	14.3	-	-	-
01B	43° 12' 17" N	76° 12' 35" W		-	-	-	-	-	-	-	16.5	-	-	-
006	43° 12' 01" N	76° 12' 40" W	*New* To off-site industrial user	-	-	-	-	-	-	-	-	-	-	-
007	43° 12' 16" N	76° 12' 36" W	*New* To off-site industrial user	-	-	-	-	-	-	-	-	-	-	-

POLLUTANT SUMMARY TABLES

Upgrades to the municipal treatment train (MTT) and the industrial treatment train (ITT) will occur on a phased schedule to accommodate receipt of wastewaters from industrial users. The permit includes phased limits tables based on the schedule of construction and operation of the upgraded MTT and the new ITT. See the Upgrade Project Description section of this fact sheet for more information. For each parameter at each Outfall, phased limits are shown in sequential rows of the respective Pollutant Summary Table to illustrate the progression of changes to limits and monitoring at each permit phase.

Phase	Total Monthly Average Design Flow (MGD)	MTT Monthly Average Design Flow (MGD)	ITT Monthly Average Design Flow (MGD)	Acute Dilution Ratio	Chronic Dilution Ratio	HEW Dilution Ratio
1 (MOPO)	13.3	10 + 3.3*	-	5:1**	9:1**	10.8**
2	21.6	13.3	8.25	2:1	2:1	2:1
3	22.5	14.3	8.25	2:1	2:1	2:1
4	30.8	14.3	16.5	2:1	2:1	2:1

*During Phase 1, additional equipment will be installed to augment the existing MTT and accommodate an additional 3.3 MGD of pre-production wastewater from industrial users prior to the startup of the new ITT.

**See Critical Receiving Water Data & Mixing Zone section of this fact sheet.

[8] DEC calculated ambient hardness as the average of 4 samples taken during the 2021 Oak Orchard WET testing program.

POLLUTANT SUMMARY TABLES (continued)

Outfall 001

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
General Notes: DEC obtained existing discharge data from May 2020 to April 2025 from Discharge Monitoring Reports provided by the permittee. DEC reviewed all applicable water quality standards for development of the WQBELs. The water quality standard and resulting WQBEL shown below represent the most stringent of any applicable water quality standards. The facility is in the Great Lakes watershed and per Procedure 7 in Appendix F of 40 CFR 132, WQBELs have been expressed as both a concentration value and a corresponding mass loading rate.															
Phase 1	MGD	Monthly Avg	10	5.3 Actual Average	60 / 0	**13.3**	Design Flow	No alterations that will impair the waters for their best usages.					703.2	-	Design Flow
Phases 2 thru 4	MGD	Monthly Avg	See Phase 1 above			**Monitor**	6 NYCRR 750-1.13(b)(1)							-	Monitor 750-1.13(b)(1)
Flow Rate	Consistent with 40 CFR 122.45(b)(1) and TOGS 1.3.3 I.B.1., the permit includes a monthly average flow limitation at Outfall 001 equal to the 30-day average design capacity for Phase 1. The flow limit during Phase 1 is based on the existing MTT design flow (10 MGD) plus an additional 3.3 MGD of capacity from the addition of MBBR tanks which will be repurposed upon startup of the upgraded MTT. Consistent with 40 CFR 122.45(b)(1) and TOGS 1.3.3 I.B.1., beginning in Phase 2, the flow limit for the MTT is transferred from Outfall 001 to Outfall 01A, and the permit includes a monthly average flow limitation equal to 13.3 MGD at Outfall 01A; therefore, consistent with 6 NYCRR 750-1.13(b)(1), monitoring only is required at Outfall 001 during Phases 2 through 4 to calculate pollutant loadings. Additionally, in combination with flow monitoring at new Outfalls 006 and 007, flow monitoring at Outfall 001 provides a complete measurement of the sum of treated effluent flows leaving the facility. See Anti-backsliding for more information regarding flow limit increases.														

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

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	SU	Minimum	**6.0**	5.9 Actual Min	60 / 0	6.0	40 CFR 133.102(c)	7.9[10]	-	6.5 – 8.5	Range	-	703.3	-	TBEL
		Maximum	**9.0**	7.7 Actual Max	60 / 0	9.0									
Phases 2 thru 4	SU	Minimum	See Phase 1 above			See Outfalls 01A and 01B for TBELs						-	703.3	-	Discontinued
		Maximum													
pH	Consistent with 40 CFR 133.102(c) and TOGS 1.3.3 I.B.3., during Phase 1, the permit includes TBELs for pH at Outfall 001. Beginning in Phase 2, TBELs for pH are transferred from Outfall 001 to Outfall 01A for the MTT. Beginning in Phase 2, the permit also includes TBELs for pH at Outfall 01B for the ITT. Since TBELs for pH at internal Outfalls 01A and 01B limit all flows contributing to Outfall 001, TBELs at Outfall 001 have been discontinued from Phases 2 through 4. Based on a review of ambient pH data (RIBS station 07-ONID-0.7) and volumetric flow available in the receiving waterbody (see Critical Receiving Water Data & Mixing Zone), there is no reasonable potential for the discharge to exceed the water quality standard for pH; therefore, the water quality standard is met by the TBELs during all phases. See Outfall 01A, Outfall 01B, and Anti-backsliding for more information.														
All Phases	°C	Daily Max	**Monitor**	26 Actual Max	60 / 0	-	-	-	The water temperature at the surface of a stream shall not be raised to more than 90°F [32°C] 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 750-1.13(a)
Temperature	Consistent with 6 NYCRR 750-1.13(a), the permit includes temperature monitoring during all permit phases to collect data necessary to assess compliance with the water quality standards for temperature and dissolved oxygen, including assessment of mixing conditions in the receiving waterbody. This requirement is continued from the 2014 permit. Since the ITT is anticipated to receive cooling water from industrial users, temperature monitoring is required to assess compliance with the water quality standards for temperature and dissolved oxygen.														

[10] DEC calculated ambient pH from RIBs station 07-ONID-0.7, located approximately 3.5 miles downstream, as the median of 16 samples collected from 1995-2021.

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	mg/L	Daily Min	**2.0**	4.3 Actual Min	60 / 0	-	-	-	5.3 Critical Point*	(Non-Trout) 4.0 mg/L		2.0	703.3	-	Anti-backsliding

Dissolved Oxygen (DO)

Summer (June 1 to October 31)*

DEC modeled the downstream DO concentration using the Streeter-Phelps equations, with iterations of the model performed for each phase of the project as total effluent flow rates increase when new or upgraded treatment trains become operational. The models included the following nearby upstream and downstream dischargers affecting the waste assimilative capacity of the receiving waterbody:

- Town of Hastings Fort Brewerton Sewer District Wastewater Treatment Plant (NY0245062), approximately 9 miles upstream from OOWWTP
- Onondaga County Brewerton Water Pollution Control Plant (NY0027596), approximately 9 miles upstream from OOWWTP
- The Caughdenoy Dam, approximately 5 miles upstream from OOWWTP
- The Three Rivers confluence where the Oneida River joins the Seneca River to become the Oswego River, approximately 4.1 miles downstream from OOWWTP
- Onondaga County Wetzel Road Wastewater Treatment Plant (NY0027618), approximately 5 miles upstream from the Three Rivers confluence
- The Phoenix Dam, approximately 6.3 miles downstream from OOWWTP

DEC used the following inputs for the most conservative scenario for the summer models: effluent DO = 2.0 mg/L (2014 permit limit); effluent UOD = 4,289 lbs/d (previous summer permit limit); effluent and receiving water temperature = 25°C. The summer receiving water temperature was assumed consistent with TOGS 1.3.1D.

- For Phase 1, the model was performed at an effluent flow rate of 13.3 MGD (Phase 1 flow limit at Outfall 001).
- For Phase 4, the model was performed at an effluent flow rate of 30.8 MGD (the sum of the Phase 4 flow limits at Outfalls 01A and 01B representing the total possible flow contributing to Outfall 001).

*The critical DO point represents the lowest ambient DO concentration predicted by the model. For Phase 1, the critical DO point is 5.4 mg/L. For Phase 4, the critical DO point is 5.3 mg/L. Since the critical DO point in the summer for both Phase 1 and Phase 4 is greater than the water quality standard, the summer model showed that DO standards are met during all phases (i.e. from the lowest to the highest phased effluent flow rates) at the 2014 permit limits, and consequently the 2014 summer WQBELs for DO concentration and UOD loading are being maintained to protect water quality and due to antibacksliding. Based on the proposed design, the upgraded facilities are expected to achieve compliance with the continued WQBELs for DO concentration and UOD loading.

*Consistent with TOGS 1.3.1 (page 10), the summer season has been expanded from June 16 to October 31 (2014 permit) to June 1 to October 31, so that data submitted on DMRs is representative of a complete month.

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	mg/L	Daily Min	**2.0**	5.8 Actual Min	60 / 0	-	-	-	3.4 Critical Point**	(Non-Trout) 4.0 mg/L		2.0	703.3	-	WQBEL

Dissolved Oxygen (DO)

Winter (November 1 to May 31)

DEC modeled the downstream DO concentration using the Streeter-Phelps equations, with iterations of the model performed for each phase of the project as total effluent flow rates increase when new or upgraded treatment trains become operational. The models included the following nearby upstream and downstream dischargers affecting the waste assimilative capacity of the receiving waterbody:

- Town of Hastings Fort Brewerton Sewer District Wastewater Treatment Plant (NY0245062), approximately 9 miles upstream from OOWWTP
- Onondaga County Brewerton Water Pollution Control Plant (NY0027596), approximately 9 miles upstream from OOWWTP
- The Caughdenoy Dam, approximately 5 miles upstream from OOWWTP
- The Three Rivers confluence where the Oneida River joins the Seneca River to become the Oswego River, approximately 4.1 miles downstream from OOWWTP
- Onondaga County Wetzel Road Wastewater Treatment Plant (NY0027618), approximately 5 miles upstream from the Three Rivers confluence
- The Phoenix Dam, approximately 6.3 miles downstream from OOWWTP

DEC used the following inputs for the most conservative scenario for the winter models for all phases: effluent DO = 2.0 mg/L (2014 permit limit); effluent $CBOD_5$ = 40 mg/L (2014 permit limit); effluent and receiving water temperature = 10°C (TOGS 1.3.1E).

- For Phase 1, the model was performed at an effluent flow rate of 13.3 MGD (Phase 1 flow limit at Outfall 001), and an effluent ammonia (as N) loading of 1,666 lbs/day (Phase 1 ammonia TBEL).
- For Phase 2, the model was performed at an effluent flow rate of 21.6 MGD (the sum of the Phase 2 flow limits at Outfalls 01A and 01B representing the total possible flow contributing to Outfall 001), and an effluent ammonia (as N) concentration of 1.2 mg/L (winter ammonia WQBEL for Phase 2).
- For Phase 3, the model was performed at an effluent flow rate of 22.5 MGD (the sum of the Phase 3 flow limits at Outfalls 01A and 01B), and an effluent ammonia concentration of 1.2 mg/L (winter ammonia WQBEL for Phase 3).
- For Phase 4, the model was performed at an effluent flow rate of 30.8 MGD (the sum of the Phase 4 flow limits at Outfalls 01A and 01B), and an effluent ammonia concentration of 1.2 mg/L (winter ammonia WQBEL for Phase 4).

**The critical DO represents the lowest ambient DO concentration predicted by the model. For Phase 1, the critical DO point is 2.0 mg/L. For Phase 2, the critical DO point is 5.0 mg/L. For Phase 3, the critical DO point is 4.8 mg/L. For Phase 4, the critical DO point is 3.4 mg/L.

For Phase 1, the critical DO point is less than the water quality standard. During Phase 1, upgrades to the municipal treatment train will not yet be completed and the new industrial treatment train will not yet be online. There is no existing effluent data for UOD at Outfall 001. Therefore, consistent with TOGS 1.3.3 VI.C.8. and 6 NYCRR 750-1.13(a), during Phase 1, the permit includes an interim monitoring requirement for UOD at Outfall 001, to provide data to assess compliance with the water quality standard for DO.

For Phases 2 and 3, since the critical DO points for winter are greater than the water quality standard, the models showed that DO standards are met during Phases 2 and 3, and consequently, effluent limitations for Phases 2 and 3 (including TBELs for $CBOD_5$, WQBELs for ammonia, and WQBELs for DO) are protective of the water quality standard for DO.

Since the critical DO point for winter during Phase 4 is less than the water quality standard, a WQBEL for UOD is necessary to meet the water quality standard for DO during Phase 4. See Outfall 001 UOD for more information.

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)												
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train												
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	mg/L	Monthly Avg	25	7* Actual Max	2 / 58	**25**	40 CFR 133.102	-	See Dissolved Oxygen for Surrogate Standard			-	703.3	-	TBEL
		7 Day Avg	40	12	32 / 28	**40**	40 CFR 133.102	-				-		-	TBEL
	lbs/d	Monthly Avg	2,085	300* Actual Max	3 / 57	**2,800**	-	-				-		-	TBEL
		7 Day Avg	3,336	639	24 / 36	**4,400**	-	-				-		-	TBEL
	% Rem	Minimum	85	96 Actual Min	59 / 0	**85**	40 CFR 133.102	-				-		-	TBEL
Phases 2 thru 4	mg/L	Monthly Avg	See Phase 1 above			-	-	-				-		-	Discontinued
		7 Day Avg				-	-	-				-		-	Discontinued
		Daily Max				**Monitor**	6 NYCRR 750-1.13								Monitor 750-1.13
	lbs/d	Monthly Avg				-	-	-				-	703.3	-	Discontinued
		7 Day Avg				-	-	-				-		-	Discontinued
		Daily Max				**Monitor**	6 NYCRR 750-1.13								Monitor 750-1.13
	% Rem	Minimum				-	-	-				-		-	Discontinued

*Consistent with TOGS 1.2.1 I.B.2.b., sample results reported for June 2020 were found to not be representative of normal operations and therefore are not included in the calculation of EEQ.

5-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)

Consistent with 40 CFR 133.102(a)(4) and TOGS 1.3.3 I.B.2.b.(7) for POTWs, TBELs for $CBOD_5$ reflect secondary treatment standards. During Phase 1, the facility will be expanded from 10 MGD to 13.3 MGD via the addition of MBBR tanks which will later be repurposed, and no technology upgrades at the facility will yet be complete. Therefore, during Phase 1, the permit continues standard secondary TBELs for $CBOD_5$ concentration at Outfall 001 and load limitations for $CBOD_5$ calculated at the Phase 1 flow limit of 13.3 MGD at Outfall 001. Beginning in Phase 2, TBELs for $CBOD_5$ are transferred from Outfall 001 to Outfall 01A for the MTT. Because the permit includes TBELs for $CBOD_5$ at internal Outfalls 01A and 01B, limiting all flows contributing to Outfall 001, TBELs for $CBOD_5$ at Outfall 001 are discontinued beginning in Phase 2. TBELs for CBOD5 at internal Outfalls 01A and 01B limit all flows contributing to Outfall 001, while requiring each treatment train to separately meet the required secondary treatment standards. See Outfall 01A, Outfall 01B, and Anti-backsliding for more information.

Consistent with 6 NYCRR 750-1.13(b)(2)(i), $CBOD_5$ monitoring is continued at Outfall 001 to provide information for the calculation of UOD [UOD = (1.46 × CBOD5) + (4.57 × TKN)]. See Outfall 001 Dissolved Oxygen for an evaluation of reasonable potential to cause or contribute to a violation of the water quality standard for dissolved oxygen, which is affected by $CBOD_5$.

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	mg/L	Daily Max	**Monitor***	120	19 / 6	-	-	-	See Dissolved Oxygen for Surrogate Standard			-	703.3	-	Monitor 750-1.13
	lbs/d	Daily Max	**4,289***	4243 Actual Max	20 / 5	-	-					-			Anti-backsliding
Ultimate Oxygen Demand (UOD) Summer (June 1 to October 31)*	The summer DO models showed that the 2014 summer UOD load limit is protective of the DO water quality standard through all phases of the permit. Therefore, consistent with 6 NYCRR 750-1.10(c) and 6 NYCRR 750-1.11(a)(5)(i), the 2014 summer UOD load limit and concentration monitoring are continued at Outfall 001 through all phases of the permit for the protection of the DO water quality standard. See justification for Outfall 001 Dissolved Oxygen for more information regarding the DO models. *Consistent with TOGS 1.3.1 (page 10), the summer season has been expanded from June 16 to October 31 (2014 permit) to June 1 to October 31, so that data submitted on DMRs is representative of a complete month.														

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)												
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train												
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	mg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13	-	See Dissolved Oxygen for Surrogate Standard			-	703.3	-	Monitor 750-1.13
	lbs/d	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13	-				-			Monitor 750-1.13
Phase 2	mg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13	-				-	703.3	-	Monitor 750-1.13
	lbs/d	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13	-				-			Monitor 750-1.13
Phase 3	mg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13	-				-	703.3	-	Monitor 750-1.13
	lbs/d	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13	-				-			Monitor 750-1.13
Phase 4	mg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13	-				-	703.3	-	Monitor 750-1.13
	lbs/d	Daily Max	-	-	-	-	-	-				**15,600**			WQBEL

Ultimate Oxygen Demand (UOD)

Winter (November 1 to May 31)*

The winter DO model for Phase 1 showed that the DO water quality standard is not met by the standard secondary TBELs for CBOD5 and the interim TBELs for ammonia. There is no existing effluent data for UOD at Outfall 001. Therefore, consistent with TOGS 1.3.3 VI.C.8. and 6 NYCRR 750-1.13(a), during Phase 1, the permit includes an interim monitoring requirement for UOD at Outfall 001, to provide data to assess compliance with the water quality standard for DO.

The winter DO models for Phases 2 and 3 showed that standard secondary TBELs for $CBOD_5$ and WQBELs for ammonia are protective of the water quality standard for DO. Therefore, consistent with 6 NYCRR 750-1.13(a), for winter during Phases 2 and 3, the permit includes monitoring only for UOD concentration and load at Outfall 001, to provide data to assess compliance with the water quality standard for DO.

The winter DO model for Phase 4 showed that the DO water quality standard is not met by the standard secondary TBELs for $CBOD_5$ and WQBELs for ammonia. Therefore, consistent with 6 NYCRR 750-1.11(a)(5)(i), for Phase 4, the permit includes a winter UOD load limitation for the protection of the DO water quality standard.

See justification for Outfall 001 Dissolved Oxygen for more information regarding the DO models.

*Consistent with TOGS 1.3.1 (page 10), the winter season has been changed from November 1 to June 15 (2014 permit) to November 1 to May 31, so that data submitted on DMRs is representative of a complete month.

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)												
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train												
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	mg/L	Monthly Avg	30	7 Actual Max	1 / 59	**30**	40 CFR 133.102	-	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	9.7	6 / 54	**45**	40 CFR 133.102	-						-	TBEL
	lbs/d	Monthly Avg	2,500	300 Actual Max	58 / 2	**3,300**	-	-						-	TBEL
		7 Day Avg	3,750	342	6 / 54	**5,000**	-	-						-	TBEL
	% Rem	Minimum	85	95 Actual Min	60 / 0	**85**	40 CFR 133.102	-						-	TBEL
Phases 2 thru 4	mg/L	Monthly Avg	See Phase 1 above			-	-	-						-	Discontinued
		7 Day Avg				-	-	-						-	Discontinued
	lbs/d	Monthly Avg				-	-	-						-	Discontinued
		7 Day Avg				-	-	-						-	Discontinued
	% Rem	Minimum				-	-	-						-	Discontinued
Total Suspended Solids (TSS)	Consistent with 40 CFR 133.102(b), TBELs for TSS reflect secondary treatment standards. During Phase 1, the facility will be expanded from 10 MGD to 13.3 MGD via the addition of MBBR tanks which will later be repurposed, and no technology upgrades at the facility will yet be complete. Therefore, during Phase 1, the permit continues standard secondary TBELs for TSS concentration at Outfall 001 and includes increased load limitations for TSS calculated at the Phase 1 flow limit of 13.3 MGD at Outfall 001. Beginning in Phase 2, TBELs for TSS are transferred from Outfall 001 to Outfall 01A for the MTT. Because the permit includes TBELs for TSS at internal Outfalls 01A and 01B, limiting all flows contributing to Outfall 001, TBELs and monitoring for TSS at Outfall 001 are discontinued beginning in Phase 2. TBELs for TSS at internal Outfalls 01A and 01B limit all flows contributing to Outfall 001, while requiring each treatment train to separately meet the required secondary treatment standards. See Outfall 01A, Outfall 01B, and Anti-backsliding for more information. Based on a review of volumetric flow available in the receiving waterbody (see Critical Receiving Water Data & Mixing Zone), there is no reasonable potential for the discharge to exceed the narrative water quality standard for suspended solids; therefore, the water quality standard is met by the TBELs during all phases														

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	mL/L	Daily Max	**0.3**	0.15	60 / 0	0.3	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
Phases 2 thru 4	mL/L	Daily Max	See Phase 1 above			-	-	-						-	Discontinued
Settleable Solids	Consistent with TOGS 1.3.3 I.B.4., during Phase 1, the permit includes the TBEL for settleable solids at Outfall 001 continued from the 2014 permit. Beginning in Phase 2, the TBEL for settleable solids is transferred from Outfall 001 to Outfall 01A for the MTT. The permit also includes a TBEL for settleable solids at Outfall 01B beginning in Phase 2. Because the permit includes TBELs for settleable solids at internal Outfalls 01A and 01B, which limit all flow contributing to Outfall 001 while requiring each treatment train separately to meet the required technology-based performance levels, limits and monitoring for settleable solids are discontinued at Outfall 001. See Outfall 01A, Outfall 01B, and Anti-backsliding for more information. Based on a review of volumetric flow available in the receiving waterbody (see Critical Receiving Water Data & Mixing Zone), there is no reasonable potential for the discharge to exceed the narrative water quality standard for settleable solids; therefore, the water quality standard is met by the TBEL during all phases.														

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	mg/L	Monthly Avg	Monitor	2.2*	25 / 0	-	-	0.082	-	0.44	A(C)	**3.9**	703.5	-	WQBEL
	lbs/d	Monthly Avg	**252***	102*	25 / 0	-	-	-	-	-	-	440			Anti-backsliding
Phase 2	mg/L	Monthly Avg	See Phase 1 above			-	-	0.082	-	0.44	A(C)	**0.80**	703.5	-	WQBEL
	lbs/d	Monthly Avg				-	-	-	-	-	-	**144**			WQBEL
Phase 3	mg/L	Monthly Avg	See Phase 1 above			-	-	0.082	-	0.44	A(C)	**0.80**	703.5	-	WQBEL
	lbs/d	Monthly Avg				-	-	-	-	-	-	**150**			WQBEL
Phase 4	mg/L	Monthly Avg	See Phase 1 above			-	-	0.082	-	0.44	A(C)	**0.80**	703.5	-	WQBEL
	lbs/d	Monthly Avg				-	-	-	-	-	-	**205**			WQBEL

*The 2014 summer load limit for monthly average ammonia (as NH_3) is 307 lbs/d. The existing effluent quality for summer ammonia (as NH_3) is 2.6 mg/L and 124 lbs/d. Permit limits and existing effluent quality for ammonia have been changed from (as NH_3) to (as N) for simpler data reporting, as this is consistent with the laboratory reporting units. Values can be converted using the equation: Ammonia (as N) = Ammonia (as NH_3) x 0.8224.

Nitrogen, Ammonia (as N)

Summer (June 1 to October 31)**

DEC determined the WQS for Ammonia using TOGS 1.1.1, a pH of 8.26, and a summer temperature of 25 °C. Consistent with TOGS 1.3.1E, DEC calculated the pH from the 80th percentile of 16 samples taken at RIBS station 07-ONID-0.7 from 1995 to 2021. The temperature of the receiving waterbody was an assumed value consistent with TOGS 1.3.1E. DEC calculated the WQBELs using the chronic water quality standard, the HEW dilution ratio (consistent with TOGS 1.3.1E) for the respective phases, and an ambient background concentration of 0.082 mg/L ammonia, as N, (consistent with TOGS 1.3.1D page 11).

Consistent with 6 NYCRR 750-1.11(a)(5) and 40 CFR 122.45(f)(2), during Phase 1, the permit includes a new ammonia concentration WQBEL for the protection of water quality standard. Consistent with 6 NYCRR 750 1.10(c), the permit continues the 2014 load limit due to anti-backsliding. During Phases 2 through 4, concentration and load WQBELs have been established to protect water quality. See Anti-backsliding for an explanation regarding the increases in loading limits.

**Consistent with TOGS 1.3.1 (page 10), the summer season has been expanded from June 16 to October 31 (2014 permit) to June 1 to October 31, so that data submitted on DMRs is representative of a complete month.

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	mg/L	Monthly Avg	Monitor	17*	40 / 0	**20**	TOGS 1.2.1	0.082	-	0.63	A(C)	6.0	703.5	-	TBEL
	lbs/d	Monthly Avg	**1,666***	954*	40 / 0	-	-	-	-	-	-	660			Anti-backsliding
Phase 2	mg/L	Monthly Avg	See Phase 1 above			-	-	0.082	-	0.63	A(C)	**1.2**	703.5	-	WQBEL
	lbs/d	Monthly Avg				-	-	-	-	-	-	**216**			
Phase 3	mg/L	Monthly Avg	See Phase 1 above			-	-	0.082	-	0.63	A(C)	**1.2**	703.5	-	WQBEL
	lbs/d	Monthly Avg				-	-	-	-	-	-	**225**			
Phase 4	mg/L	Monthly Avg	See Phase 1 above			-	-	0.082	-	0.63	A(C)	**1.2**	703.5	-	WQBEL
	lbs/d	Monthly Avg				-	-	-	-	-	-	**308**			

Nitrogen, Ammonia (as N)

Winter (November 1 to May 31)**

*The 2014 winter load limit for monthly average ammonia (as NH_3) is 2,026 lbs/d. The existing effluent quality for winter ammonia (as NH_3) is 20.5 mg/L and 1,160 lbs/d. Permit limits and existing effluent quality for ammonia are being 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.

DEC determined the WQS for Ammonia using TOGS 1.1.1, a pH of 8.26, and a winter temperature of 10 °C. Consistent with TOGS 1.3.1E, DEC calculated the pH from the 80th percentile of 16 samples taken at RIBS station 07-ONID-0.7 from 1995 to 2021. The temperature of the receiving waterbody was an assumed value and consistent with TOGS 1.3.1E. DEC calculated the WQBELs using the chronic water quality standard, the HEW dilution ratio (consistent with TOGS 1.3.1E) for the respective phases, and an ambient background concentration of ammonia (as N) of 0.082 mg/L consistent with TOGS 1.3.1D (page 11).

During Phase 1, upgrades to the municipal treatment train will not yet be completed and the new industrial treatment train will not yet be online. Therefore, consistent with TOGS 1.3.3 VI.C.8. and 6 NYCRR 750-1.10(c), during Phase 1, the permit includes an interim winter ammonia concentration limit equal to the TBEL for activated sludge systems (TOGS 1.2.1 Attachment C, Reference J) and an interim winter ammonia load limit equal to the 2014 winter load limit. Consistent with 6 NYCRR 750-1.11(a)(5), during Phases 2, 3, and 4, winter ammonia WQBELs have been established for the protection of water quality. See Anti-backsliding for an explanation regarding the increases in loading limits.

**Consistent with TOGS 1.3.1 (page 10), the winter season has been changed from November 1 to June 15 (2014 permit) to November 1 to May 31, so that data submitted on DMRs is representative of a complete month

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	mg/L	Daily Max	**Monitor**	44	60 / 0	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
Total Kjeldahl Nitrogen (TKN)	A numeric water quality standard for total Kjeldahl nitrogen does not exist for Class B waterbodies. However, consistent with 6 NYCRR 750-1.13(b)(2)(i) and TOGS 1.3.3. I.B.5., monitoring is required at Outfall 001 during all phases to provide information for the calculation of UOD [UOD = (1.46 × CBOD5) + (4.57 × TKN)].														
All Phases	mg/L	Monthly Avg	**1.0**	0.15	24 / 36	1.0	TOGS 1.3.3	-	None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.				703.2	-	TBEL
Phosphorus, Total	Consistent with TOGS 1.3.3 I.B.6, during all phases, a monthly average total phosphorus limit equal to 1.0 mg/L is continued at Outfall 001 due to the existing MTT discharging more than 1 MGD of effluent in the Lake Ontario watershed.														
All Phases	ng/L	Daily Max	50	1.4*	8 / 12	-	-	-	-	0.7	H(FC)	**50**	GLCA	-	DOW 1.3.10
	ng/L	12 MRA	-	-	-	-	-	-	-	-	-	**1.4**	-	-	DOW 1.3.10
Mercury, Total	*DEC calculated existing effluent quality from the delta lognormal 95th percentile of 20 mercury effluent samples collected from May 2020 to April 2025. See Mercury section of this fact sheet.														

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)														
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	#/100 ml	30d Geo Mean	**200**	<10 Actual Max	0 / 30	200	TOGS 1.3.3	-	The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.				703.4	-	TBEL
		7d Geo Mean	**400**	200 Actual Max	4 / 26	400	TOGS 1.3.3	-							
Phases 2 thru 4	#/100 ml	30d Geo Mean	See Phase 1 above			-	-	-						-	Discontinued
		7d Geo Mean				-	-	-							
Coliform, Fecal	Consistent with TOGS 1.3.3, due to the class of the receiving waterbody, effluent disinfection is required seasonally for the MTT. The disinfection season has been changed from the previous May 15th – October 15th to May 1st – October 31st so that data submitted on DMRs is representative of a complete month. During Phase 1, fecal coliform limits are continued at Outfall 001. For Phases 2 through 4, fecal coliform limits for the MTT are transferred to Outfall 01A. Beginning in Phase 2, TBELs for fecal coliform are also added to Outfall 01B due to planned effluent reuse, for the protection of human health in case of potential exposure. Since TBELs at Outfall 01A and 01B limit all flows contributing to Outfall 001, beginning in Phase 2, limits at Outfall 001 are discontinued. See Outfall 01A, Outfall 01B, and Anti-backsliding for more information.														
Phase 1	mg/L	Daily Max	**0.045**	<0.1*	0 / 29	-	-	-	-	0.005	A(C)	0.045	703.5	-	Anti-backsliding
Phases 2 thru 4	mg/L	Daily Max	See Phase 1 above			-	-	-	-	0.005	A(C)	0.010	703.5	**0.03**	ML
Total Residual Chlorine (TRC)	Effluent disinfection is currently required seasonally for the MTT effluent. This requirement is being continued through all phases. The disinfection season is being changed from the previous May 15th – October 15th to May 1st – October 31st so that data submitted on DMRs is representative of a complete month. While UV disinfection is proposed for both the municipal and industrial treatment trains, chlorine is used for odor control in the MTT and proposed for use in the ITT to reduce biological fouling in the MBRs. Consistent with TOGS 1.3.1E, DEC calculated the WQBEL by multiplying the WQS by the chronic dilution ratio for each phase. The 2014 permit limit is equal to the Phase 1 WQBEL and is being continued. During Phases 2 through 4, due to the available dilution, the calculated WQBEL is less than the TBEL and less than the minimum level of detection (ML). Therefore, during Phases 2 through 4, the permit includes an effluent limitation equal to the minimum level of detection of 0.030 mg/L. *In a Report of Noncompliance (RONC) submitted to DEC on 8/25/2025, the permittee identified that the analytical method previously used to monitor TRC had a detection limit of 0.1 mg/L. Upon this discovery, the facility immediately implemented a new method with a minimum detection limit of 0.02 mg/L. In the RONC, the permittee included 17 samples of TRC showing a maximum of 0.03 mg/L and five non-detections (<0.02 mg/L) between 8/19/2025 and 8/24/2025.														

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)														
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Pollutants with Existing Action Levels															
Consistent with TOGS 6 NYCRR 750-1.2(a)(2) and 1.2.1 I.B.3., an action level is a monitoring requirement and not an effluent limit; therefore, discontinuance of any action levels listed below does not constitute backsliding under 6 NYCRR 750-1.10(c). See Anti-backsliding for more information.															
All Phases	µg/L	Daily Max	-	< 2	0 / 59	-	-	-	-	0.150 dissolved	A(C)	**No RP**	703.5	-	No Limitation or Monitoring
	lbs/d	Daily Max	Monitor	0.11	6 / 14	-	-	-	-	-	-	-		-	Discontinued
Arsenic, Total	Given non-detection of total arsenic in the effluent, there is no reasonable potential to cause or contribute to a violation of the water quality standard. There are no applicable TBELs for total arsenic. Therefore, daily max load monitoring has been discontinued.														
All Phases	µg/L	Daily Max	-	< 0.8	0 / 59	-	-	-	-	2.85	A(C)	**No RP**		-	No Limitation or Monitoring
	lbs/d	Daily Max	0.4 Action Level	0.04	6 / 14	-	-	-	-	-	-	-	703.5	-	Discontinued
Cadmium, Total	Given non-detection of total cadmium in the effluent, there is no reasonable potential to cause or contribute to a violation of the water quality standard. There are no applicable TBELs. Therefore, the 2014 daily max load action level has been discontinued.														
All Phases	mg/L	Daily Max	-	< 0.008	0 / 59	-	-	-	-	0.102	A(C)	**No RP**		-	No Limitation or Monitoring
	lbs/d	Daily Max	1.9 Action Level	0.46	5 / 15	-	-	-	-	-	-	-	703.5	-	Discontinued
Chromium, Total	Given non-detection of total chromium in the effluent, there is no reasonable potential to cause or contribute to a violation of the water quality standard. There are no applicable TBELs for total chromium. The 2014 daily max load action level has been discontinued.														
All Phases	µg/L	Daily Max	-	12	2 / 57	-	-	1.3	6.4	12.5	A(C)	**No RP**		-	No Limitation or Monitoring
	lbs/d	Daily Max	1.8 Action Level	0.57	5 / 15	-	-	-	-	-	-	-	703.5	-	Discontinued
Copper, Total	DEC calculated the projected instream concentration using the maximum reported effluent concentration of 12 µg/L, a multiplier of 1.0, the chronic dilution ratio, and an upstream ambient concentration*. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.042 was also applied to convert between the 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. There are no applicable TBELs for total copper. Therefore, no WQBEL has been specified, and the action level has been discontinued. *Ambient upstream concentration was determined from RIBs station 07-ONID-0.7, located approximately 3.5 miles downstream, using one sample collected in July 2021.														

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)														
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	mg/L	Daily Max	-	0.15	52 / 0	-	-	-	See Outfall 001 Total Dissolved Solids for water quality analysis					-	No Limitation or Monitoring
	lbs/d	Daily Max	Monitor	8.34	20 / 0	-	-	-						-	Discontinued
Iron, Total	A numeric water quality standard for total recoverable iron does not exist for Class B waterbodies. There are no applicable TBELs for iron. Iron is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality. Therefore, load monitoring for iron has been discontinued.														
All Phases	µg/L	Daily Max	-	< 15	0 / 59	-	-	0.92	-	72.5	A(C)	**No RP**		-	No Limitation or Monitoring
	lbs/d	Daily Max	2.9 Action Level	0.86	5 / 15	-	-	-	-	-	-	-	703.5	-	Discontinued
Nickel, Total	Given non-detection of total nickel in the effluent, there is no reasonable potential to cause or contribute to a violation of the water quality standard. There are no applicable TBELs for total nickel. Therefore, the 2014 daily max load action level has been discontinued. *Ambient upstream concentration was determined from RIBs station 07-ONID-0.7, located approximately 3.5 miles downstream, using one sample collected in July 2021.														
All Phases	mg/L	Daily Max	-	0.047	45 / 14	-	-	-	0.023	0.115	A(C)	**No RP**		-	No Limitation or Monitoring
	lbs/d	Daily Max	5.4 Action Level	2.2	17 / 3	-	-	-	-	-	-	-	703.5	-	Discontinued
Zinc, Total	DEC calculated the projected instream concentration using the existing effluent quality of 0.047 mg/L, a multiplier of 1.0, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.014 was also applied to convert between the 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. There are no applicable TBELs for total zinc. Therefore, no WQBEL has been specified and the 2014 action level has been discontinued.														
All Phases	µg/L	Daily Max	-	10	15 / 11	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
	lbs/d	Daily Max	1.3 Action Level	0.30	8 / 12	-	-	-	-	-	-	-	-	-	Discontinued
Chloroform	A numeric water quality standard for chloroform does not exist for Class B waterbodies. Given the lack of an applicable water quality standard, the load action level has been discontinued.														

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	µg/L	Monthly Avg	-	-	-	**Monitor**	6 NYCRR 750-1.13	-	-	5.0	E(FS)	-	703.5	-	Monitor 750-1.13
		Daily Max	-	148 Actual Max	3 / 26	**Monitor**	6 NYCRR 750-1.13	-	-	-	-	-	-	-	Monitor 750-1.13
	lbs/d	Monthly Avg	-	-	-	**Monitor**	6 NYCRR 750-1.13	-	-	-	-	-	-	-	Monitor 750-1.13
		Daily Max	**Monitor**	0.33	8 / 12	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
Phase 2	µg/L	Monthly Avg	See Phase 1 above			-	-	-	89	5.0	E(FS)	**10**	703.5	-	WQBEL
		Daily Max				-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
	lbs/d	Monthly Avg				-	-	-	-	-	-	**1.8**	-	-	WQBEL
		Daily Max				-	-	-	-	-	-	-	-	-	Discontinued
Phase 3	µg/L	Monthly Avg	See Phase 1 above			-	-	-	89	5.0	E(FS)	**10**	703.5	-	WQBEL
	lbs/d	Monthly Avg				-	-	-	-	-	-	**1.9**	-	-	WQBEL
Phase 4	µg/L	Monthly Avg	See Phase 1 above			-	-	-	89	5.0	E(FS)	**10**	703.5	-	WQBEL
	lbs/d	Monthly Avg				-	-	-	-	-	-	**2.6**	-	-	WQBEL
Total Phenols	DEC calculated the maximum reported total phenols of 148 µg/L as the sum of the 6/17/2020 detections of 3 & 4 methylphenol and phenol, which are both unchlorinated phenols. The water quality standard of 5.0 µg/L applies to total unchlorinated phenols. Consistent with TOGS 1.3.1E (page 5 of 10), the water quality standard is being applied to total phenols. Consistent with 6 NYCRR 750-1.13(a) and TOGS 1.2.1 I.B.3., during Phase 1, the permit includes daily max and monthly average monitoring for total phenols at Outfall 001 to assess the performance of the treatment system. Since no upgrades will yet be completed for the MTT and the new ITT will not yet be online, limits for total phenols are not established until Phase 2, when the first portion of the ITT becomes operational. DEC calculated the projected instream concentration for Phases 2 through 4 using the maximum reported effluent concentration of 148 µg/L, a multiplier of 1.2, the HEW dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore WQBELs are specified for Phases 2 through 4. Beginning in Phase 2, upon introduction of monthly average WQBELs, daily maximum monitoring is discontinued.														

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Additional Pollutants Reported in the Application															
All Phases	mg/L	Daily Avg	-	5.6	365 / 134	-	-	-	See Dissolved Oxygen for Surrogate Standard			-	703.3	-	No Limitation or Monitoring
		Daily Max	-	48	365 / 134	-	-					-		-	No Limitation or Monitoring
5-day Biochemical Oxygen Demand (BOD_5)	During all phases of the project, WQBELs for ammonia, UOD, and DO, and TBELs for $CBOD_5$ have been established for the protection of the dissolved oxygen water quality standard. Limits for $CBOD_5$ and ammonia effectively limit BOD_5. Therefore, no effluent limits or monitoring are necessary for BOD_5. See Outfall 001 Dissolved Oxygen for more information. Due to fluctuating influent loadings related to industrial users, influent BOD_5 monitoring for the MTT has been continued in the permit to ensure the facility is being properly operated and maintained, and not exceeding the rated (design) influent loading to the facility. Beginning in Phase 2, influent BOD_5 monitoring is transferred from Outfall 001 to Outfall 01A for the MTT.														
All Phases	mg/L	Daily Max	-	237 Actual Max	4 / 0	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Hardness (as $CaCO_3$)	A numeric water quality standard for hardness does not exist for Class B waterbodies. There are no applicable TBELs for hardness. Therefore, no limitation or monitoring is specified.														
All Phases	mg/L	Daily Max	-	15.1 Actual Max	4 / 0	-	-	0.069	None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.				703.2	-	No Limitation or Monitoring
Nitrate (as N)	A numeric water quality standard for nitrate does not exist for Class B waterbodies. Consistent with 6 NYCRR 750-1.13(a), during all phases, the permit includes total nitrogen monitoring at Outfall 001 to provide data to determine compliance with the narrative water quality standard for nitrogen. Therefore, no limitation or monitoring is necessary for nitrate. Ambient upstream concentration was determined from RIBs station 07-ONID-0.7, located approximately 3.5 miles downstream, using one sample collected in July 2021.														
All Phases	mg/L	Daily Max	-	0.06 Actual Max	4 / 0	-	-	-	0.078	0.100	A(C)	No RP	703.5	-	No Limitation or Monitoring
Nitrite (as N)	DEC calculated the projected instream concentration using the maximum reported effluent concentration of 0.06 mg/L, a multiplier of 2.6, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential (RP) to cause or contribute to a WQS violation. Therefore, no limitation or monitoring has been specified.														

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	mg/L	Daily Max	-	16.3 Actual Max	4 / 0	**Monitor**	6 NYCRR 750-1.13	0.60*	None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.				703.2	-	Monitor 750-1.13
Total Nitrogen (as N)	A numeric water quality standard for total nitrogen does not exist for Class B waterbodies. Consistent with 6 NYCRR 750-1.13(a), during all phases, the permit includes total nitrogen monitoring at Outfall 001 to provide data to determine compliance with the narrative water quality standard for nitrogen. *Ambient upstream concentration was determined from RIBs station 07-ONID-0.7, located approximately 3.5 miles downstream, using one sample collected in July 2021.														
Phase 1	mg/L	Daily Max	-	714 Actual Max	4 / 0	**Monitor**	6 NYCRR 750-1.13	237*	-	Shall be kept as low as practicable to maintain the best usage of waters but in no case shall it exceed 500 mg/L		-	703.3	-	Monitor 750-1.13
Phases 2 thru 4	mg/L	Daily Max	See Phase 1 above			-	-	237*	1,047			**760**	703.3	-	WQBEL
Total Dissolved Solids (TDS)	Consistent with 6 NYCRR 750-1.13(a) and TOGS 1.2.1 I.B.3., during Phase 1, monitoring has been established at Outfall 001 to assess the performance of the treatment system. For the Phases 2 through 4, the DEC calculated the projected instream concentration using the maximum reported effluent concentration of 714 mg/L, a multiplier of 2.6, the chronic dilution ratio, and an upstream ambient concentration*. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation during Phases 2 through 4. Additionally, beginning in Phase 2, process wastewater from Micron is expected to be a source of TDS to the ITT. Therefore, the permit includes WQBELs for Phases 2 through 4. *DEC estimated ambient TDS from specific conductance data from RIBS station 07-ONID-0.7. The median of 16 specific conductance samples taken from 1995-2021 was 371 µS/cm. Specific conductance was converted to TDS in mg/L by dividing by 1.56.														
Phase 1	mg/L	Daily Max	-	17 Max	1 / 3	**15**	TOGS 1.2.1 Ref. J Miscellaneous	-	No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease				703.2	-	TBEL
Phases 2 thru 4	mg/L	Daily Max	See Phase 1 above			-	-	-						-	No Limitation or Monitoring
Oil & Grease	Due to detection of oil & grease in the existing MTT effluent and consistent with TOGS 1.2.1 Attachment C, during Phase 1, the permit includes an effluent limit equal to the TBEL for oil & grease at Outfall 001. Based on a review of volumetric flow available in the receiving waterbody (see Critical Receiving Water Data & Mixing Zone), there is no reasonable potential for the discharge to exceed the water quality standard for oil & grease; therefore, the water quality standard is met by the TBEL during all phases. For Phases 2 through 4, the TBEL for oil & grease are transferred to internal Outfall 01A for the MTT. Based on the predicted characteristics of the wastewater to be treated at the ITT, oil & grease is not expected to be present in the influent to the ITT. Therefore, the no limits or monitoring for oil & grease are specified for Outfall 001 beginning in Phase 2, and the TBEL at Outfall 01A will be protective.														

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)														
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	µg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13	-	-	200	A(C)	-	703.5	-	Monitor 750-1.13
Sulfite	Sulfite may be present in the municipal treatment train effluent due to use of water treatment chemicals for dechlorination. There are no applicable TBELs for sulfite. Therefore, consistent with 6 NYCRR 750-1.13(a), during all phases, the permit includes monitoring to determine compliance with the water quality standard for sulfite.														
All Phases	µg/L	Daily Max	-	3 Actual Max	2 / 22	-	-	-	2.0 Dissolved	4.6 Dissolved	A(C)	No RP	703.5	-	No Limitation or Monitoring
Selenium, Total	DEC calculated the projected instream concentration using the maximum reported effluent concentration of 0.003 mg/L, a multiplier of 1.3, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A metals translator of 1.0 was also applied to convert between the total and dissolved form in accordance with 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. There are no applicable TBELs for total selenium. Therefore, no limitation or monitoring has been specified.														
All Phases	µg/L	Daily Max	-	0.055 Actual Max	1 / 3	-	-	-	-	0.0002	H(FC)	-	703.5		STHIM
Heptachlor	Consistent with 6 NYCRR 750-1.13(a) and TOGS 1.2.1 I.E.1.b., the permit includes a short-term high intensity monitoring (STHIM) program to collect more data regarding the presence or absence of heptachlor in the MTT effluent and to determine compliance with the water quality standard. There are no applicable TBELs for heptachlor.														
All Phases	µg/L	Daily Max	-	13 Actual Max	1 / 5	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Methyl Chloride	There is no applicable numeric water quality standard for methyl chloride to a class B receiving waterbody. There are no applicable TBELs for methyl chloride. Therefore, no limitation or monitoring is being specified.														
All Phases	µg/L	Daily Max	-	110 Actual Max	2 / 1	-	-	-	-	5.0	E(FS)	See Total Phenols	703.5	-	No Limitation or Monitoring
3 & 4 Methylphenol	3&4 methylphenol is an unchlorinated phenol. The water quality standard of 5.0 µg/L applies to total unchlorinated phenols. See Outfall 001 Total Phenols for applicable WQBELs. Since WQBELs are being established for total phenols, no limitation or monitoring is necessary for 3&4 methylphenol as an individual species.														

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	µg/L	Daily Max	-	38 Actual Max	2 / 26	-	-	-	-	5.0	E(FS)	See Total Phenols	703.5	-	No Limitation or Monitoring
Phenol	Phenol is an unchlorinated phenolic compound (a.k.a. an unchlorinated phenol). The water quality standard of 5.0 µg/L applies to total unchlorinated phenols. See Outfall 001 Total Phenols for water quality analysis. Since WQBELs are being established for total phenols, no limitation or monitoring is necessary for phenol as an individual species.														
Additional Pollutants Affected by the Proposed Reuse System for the OOWWTP Effluent (01A)[11]															
All Phases	-	-	-	-	-	-	-	-	See Outfall 001 Total Dissolved Solids for water quality analysis					-	No Limitation or Monitoring
Chloride	A numeric water quality standard for chloride does not exist for Class B waterbodies. There are no applicable TBELs for chloride. Chloride is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 is be protective of water quality; therefore, no limitation or monitoring is being specified for chloride as an individual species.														
Phase 1	mg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13	-	-	3.0	A(C)	-	703.5	-	Monitor 750-1.13
Phases 2 thru 4	mg/L	Daily Max	-	-	-	-	-	-	-	3.0	A(C)	**6.0**	703.5	-	WQBEL
Fluoride	Fluoride is a pollutant of concern in process wastewater contributed to the ITT influent by Micron. See Outfall 01B for more information on predicted ITT effluent quality. Consistent with 6 NYCRR 750-1.13(a), during Phase 1, the permit includes monitoring at Outfall 001 to determine compliance with the water quality standard. DEC determined the WQS for fluoride using a hardness of 148 mg/L[8]. DEC calculated the WQBEL based on the WQS, the chronic dilution ratio, and an assumed negligible ambient background concentration. For Phases 2 through 4, the WQBEL is added for the protection of water quality.														
All Phases	-	-	-	-	-	-	-	-	See Outfall 001 Total Dissolved Solids for water quality analysis					-	No Limitation or Monitoring
Sulfate	A numeric water quality standard for sulfate does not exist for Class B waterbodies. There are no applicable TBELs for sulfate. Sulfate is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring is being specified for sulfate as an individual species.														

[11] See Table 1.13 Requested Water Quality Targets for Ultrapure Water (UPW) Source Water (Provided by Micron) in the engineering report titled "OOWWTP Expansion Program Basis of Design / DEC Engineering Report" (August 2025).

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	µg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13	-	-	100 Ionic	A(C)	-	703.5	-	Monitor 750-1.13
Phases 2 thru 4	µg/L	Daily Max	-	-	-	-	-	-	-	100 Ionic	A(C)	-	703.5	-	No Limitation or Monitoring
Aluminum, Total	Aluminum is present in water treatment chemicals used in the MTT. Consistent with 6 NYCRR 750-1.13(a), during Phase 1, the permit includes monitoring for aluminum at Outfall 001 to determine compliance with the water quality standard. Beginning in Phase 2, aluminum monitoring for the MTT is transferred from Outfall 001 to Outfall 01A, and the permit also includes monitoring for aluminum at internal Outfall 01B (ITT), to provide information regarding the performance of the two treatment trains.														
All Phases	-	-	-	-	-	-	-	-	See Outfall 001 Total Dissolved Solids for water quality analysis					-	No Limitation or Monitoring
Barium, Total	A numeric water quality standard for total barium does not exist for Class B waterbodies. There are no applicable TBELs for barium. Barium is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring has been specified for barium as an individual species.														
Phase 1	mg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13	-	-	10 Acid-Soluble	A(C)	-	703.5	-	Monitor 750-1.13
Phases 2 thru 4	mg/L	Daily Max	-	-	-	-	-	-	-	10 Acid-Soluble	A(C)	**20**	703.5	-	Action Level
Boron, Total	The concentration of boron in the facility effluent (Outfall 001) may be increased by the operation of the effluent reuse systems. Therefore, consistent with 6 NYCRR 750-1.13(a), the permit includes monitoring at Outfall 001 during Phase 1 to assess compliance with the water quality standard. DEC calculated the WQBEL for Phases 2 through 4 using the WQS, the chronic dilution ratio, and an assumed negligible ambient background concentration. Consistent with 6 NYCRR 750-1.13(a) and TOGS 1.2.1 I.B.3., for Phases 2 through 4, an action level equal to the WQBEL is added to provide a target for the design of the upgraded MTT and the new ITT in case boron treatment is determined to be necessary.														
All Phases	mg/L	Daily Max	-	68 Actual Max	4 / 0	-	-	-	See Outfall 001 Total Dissolved Solids for water quality analysis					-	No Limitation or Monitoring
Calcium, Total	A numeric water quality standard for total calcium does not exist for Class B waterbodies. There are no applicable TBELs for calcium. Calcium is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring has been specified for calcium.														

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	-	-	-	-	-	-	-	-	See Outfall 001 Total Dissolved Solids for water quality analysis					-	No Limitation or Monitoring
Manganese, Total	A numeric water quality standard for total manganese does not exist for Class B waterbodies. There are no applicable TBELs for manganese. Manganese is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring has been specified for manganese.														
All Phases	-	-	-	-	-	-	-	-	See Outfall 001 Total Dissolved Solids for water quality analysis					-	No Limitation or Monitoring
Sodium, Total	A numeric water quality standard for total sodium does not exist for Class B waterbodies. There are no applicable TBELs for sodium. Sodium is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring has been specified for sodium.														
Additional Pollutants of Concern (Outfall 01B)[12]															
All Phases	µg/L	-	-	17.4	4 / 0	-	-	-	See Outfall 001 Total Dissolved Solids for water quality analysis					-	No Limitation or Monitoring
Magnesium, Total	A numeric water quality standard for total magnesium does not exist for Class B waterbodies There are no applicable TBELs for magnesium. Magnesium is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring has been specified for magnesium.														
All Phases	-	-	-	-	-	-	-	-	See Outfall 001 Total Dissolved Solids for water quality analysis					-	No Limitation or Monitoring
Potassium, Total	A numeric water quality standard for total potassium does not exist for Class B waterbodies. There are no applicable TBELs for potassium. Potassium is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring has been specified for potassium.														

[12] See *Table 1-2. FAB1 and FAB2 Evaluation Basis of Design* and *Figure J-1 Alternative 11: OCWEP IWWTP FAB2 Mass Balance* in the engineering report titled "Oak Orchard Industrial Wastewater Treatment Plant and Water Reclamation Facility Conceptual Design Engineering Report" (August 2025). Additional parameters also identified in the application submitted by the permittee.

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	-	-	40*	A(C)	**No RP**	703.5	-	No Limitation or Monitoring
Benzene-sulfonic acid, 4- ethenyl-, sodium salt, homopolymer	Benzenesulfonic acid, 4- ethenyl-, sodium salt, homopolymer is a linear alkyl benzene sulfonate (LAS). *The water quality standard of 40 µg/L applies to the sum of all LAS with side chains greater than 13 carbons only. Benzenesulfonic acid, 4- ethenyl-, sodium salt, homopolymer is expected to be present in the influent to the ITT but addressed by the industrial treatment train and consequently absent from the effluent (<10 µg/L); therefore, there is no reasonable potential to cause or contribute to an exceedance of the WQS. Therefore, no limitation or monitoring is specified for benzenesulfonic acid, 4- ethenyl-, sodium salt, homopolymer.														
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	-	-	1*	A(C)	-	703.5	-	No Limitation or Monitoring
5-Chloro-2-methyl-4-isothiazolin-3-one	*The A(C) water quality standard of 1 µg/L applies to the sum of total isothiazolones. 5-chloro-2-methyl-4-isothiazolin-3-one is an isothiazolone. The predicted absence of 5-chloro-2-methyl-4-isothiazolin-3-one in the effluent of the ITT (<10 µg/L) is not sufficiently sensitive to assess compliance with the WQS. There are no approved methods under 40 CFR Part 136 for 5-chloro-2-methyl-4-isothiazolin-3-one or total isothiazolones. Therefore, consistent with TOGS 1.3.7, DEC is reviewing availability of alternative test methods. Due to lack of currently identified testing methods, no limit or monitoring is specified. Consistent with TOGS 1.3.2 criteria #3, required WET testing will confirm potential toxicity concerns.														
All Phases	mg/L	-	-	<0.010 Expected Absent	-	-	-	-	-	500	A(C)	**No RP**	703.5	-	No Limitation or Monitoring
Ethylene Glycol	Ethylene glycol is expected to be present in the influent to the ITT but addressed by the industrial treatment train and consequently absent from the effluent (<10 µg/L); therefore, there is no reasonable potential to cause or contribute to an exceedance of the WQS. No Limitation or monitoring is specified for ethylene glycol.														
All Phases	µg/L	-	-	>10 Expected Present	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
1-Hydroxy-benzotriazole	There are no applicable water quality standards for 1-hydroxybenzotriazole to a class B waterbody. There are no applicable TBELs. There are no approved methods for 1-hydroxybenzotriazole under 40 CFR Part 136. Therefore, no limitation or monitoring is specified for 1-hydroxybenzotriazole. Consistent with TOGS 1.3.2 criteria #1, required WET testing will confirm potential toxicity concerns.														

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Methoxyirane polymer with oxirane, ether with 2,4,7,9-tetramethyl-5-decyne-4,7-cicl (2:1)	There are no applicable numeric water quality standards for methoxyirane polymer with oxirane, ether with 2,4,7,9-tetramethyl-5-decyne-4,7-cicl (2:1). There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for methoxyirane polymer with oxirane, ether with 2,4,7,9-tetramethyl-5-decyne-4,7-cicl (2:1). Therefore, no limitation or monitoring is specified for methoxyirane polymer with oxirane, ether with 2,4,7,9- tetramethyl-5-decyne-4,7-cicl (2:1). Consistent with TOGS 1.3.2 criteria #1, required WET testing will confirm potential toxicity concerns.													
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
3-Methoxy-3-methyl-1-butanol	There are no applicable numeric water quality standards for 3-methoxy-3-methyl-1-butanol. There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for 3-methoxy-3-methyl-1-butanol. Therefore, no limitation or monitoring is specified for 3-methoxy-3-methyl-1-butanol. Consistent with TOGS 1.3.2 criteria #1, required WET testing will confirm potential toxicity concerns.													
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
6-Methyl-benzotriazole	There are no applicable numeric water quality standards for 6-methylbenzotriazole to a class B waterbody. There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for 6-methylbenzotriazole. Therefore, no limitation or monitoring is specified for 6-methylbenzotriazole. Consistent with TOGS 1.3.2 criteria #1, required WET testing will confirm potential toxicity concerns.													
All Phases	µg/L	-	-	>10 Expected Present	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Oxirane, methyl-, polymer with oxirane	There are no applicable numeric water quality standards for oxirane, methyl-, polymer with oxirane. There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for oxirane, methyl-, polymer with oxirane. Therefore, no limitation or monitoring is specified for oxirane, methyl-, polymer with oxirane. Consistent with TOGS 1.3.2 criteria #1, required WET testing will confirm potential toxicity concerns.													
All Phases	-	-	-	Unknown	-	See Ammonia at Outfalls 01A and 01B		See Outfall 001 Ammonia for water quality analysis						-	No Limitation or Monitoring
Poly(acrylic acid) ammonium salt	Poly(acrylic acid) ammonium salt, or ammonium polyacrylate, was identified in the application as potentially present in the effluent of the ITT. There is no numeric water quality standard for ammonium polyacrylate as an individual pollutant. The ammonia water quality standard applies – see Outfall 001 ammonia for reasonable potential analysis and WQBELs. No limitation or monitoring is specified for ammonium polyacrylate.													

Outfall #	001	**Description of Wastewater:** Treated sanitary and process wastewater (Outfall 01A municipal treatment train effluent + Outfall 01B industrial treatment train effluent)													
		Type of Treatment: See Outfall 01A for description of municipal treatment train and Outfall 01B for description of industrial treatment train													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Polyethylene glycol	There are no applicable numeric water quality standards for polyethylene glycol. There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for polyethylene glycol. Therefore, no limitation or monitoring is specified for polyethylene glycol. Consistent with TOGS 1.3.2 criteria #1, required WET testing will confirm potential toxicity concerns.														
All Phases	µg/L	-	-	>10 Expected Present	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
N,N,N',N'-Tetra-ethylethylene-diamine	There is no applicable numeric water quality standard for N,N,N',N'-tetraethylethylenediamine. There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for N,N,N',N'-tetraethylethylenediamine. Therefore, no limitation or monitoring is specified for N,N,N',N'-tetraethylethylenediamine. Consistent with TOGS 1.3.2 criteria #1, required WET testing will confirm potential toxicity concerns.														
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	-	-	10*	A(C)	**No RP**	703.5	-	No Limitation or Monitoring
Tetramethyl-ammonium hydroxide (TMAH)	TMAH is a quaternary ammonium compound (QAC). *The water quality standard of 10 µg/L applies to the sum of all QACs. TMAH is expected to be present in the influent to the ITT but addressed by the industrial treatment train and consequently absent from the effluent (i.e. <10 µg/L); therefore, there is no reasonable potential to cause or contribute to an exceedance of the WQS for the sum of all QACs. While monitoring would allow for confirmation of effluent quality assumptions provided in the application, there are no approved test methods for TMAH or QACs under 40 CFR Part 136. DEC conducted a search for alternative test methods but found none available that would meet the requirements under TOGS 1.3.7. Due to lack of currently identified testing methods, the permit does include a limit or require monitoring. Consistent with TOGS 1.3.2 criteria #3, required WET testing will confirm potential toxicity concerns.														
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
1,2,4-Triazole	There are no applicable numeric water quality standards for 1,2,4-triazole to a class B waterbody. There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for 1,2,4-triazole. Therefore, no limitation or monitoring is specified for 1,2,4-triazole. Consistent with TOGS 1.3.2 criteria #1, required WET testing will confirm potential toxicity concerns.														

Outfall 001 Emerging Contaminants

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		
Notes: See Emerging Contaminant Monitoring section above. Effluent samples were analyzed for the 40 PFAS compounds and 1,4-Dioxane. Existing discharge data was obtained from the application provided by the permittee. Unless otherwise noted below, existing effluent quality represents the maximum reported value of available samples, and monitoring and action levels are applied during all phases.															
Perfluoro-butanoic Acid (PFBA)	ng/L	Daily Max	-	< 8.1	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-pentanoic Acid (PFPeA)	ng/L	Daily Max	-	23* Estimate	8 / 0	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements. *The maximum reported value of 23 ng/L was flagged by the laboratory as an estimated maximum possible concentration.														
Perfluoro-hexanoic Acid (PFHxA)	ng/L	Daily Max	-	15* Estimate	8 / 0	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements. *The maximum reported value of 15 ng/L was flagged by the laboratory as an estimated maximum possible concentration.														
Perfluoro-heptanoic Acid (PFHpA)	ng/L	Daily Max	-	6.7* Estimate	3 / 5	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements. *The maximum reported value of 6.7 ng/L was flagged by the laboratory as an estimated maximum possible concentration.														
Perfluoro-octanoic Acid (PFOA)	ng/L	Daily Max	-	6.0	8 / 1	**10** Action Level	BPJ MCL	-	-	-	-	-	TOGS 1.1.1 February 2023 addendum	-	Action Level
	Due to the presence of PFOA and PFOS in the existing facility's effluent, the permit includes an action level equal to the NYSDOH MCL of 10 ng/L. See the Emerging Contaminant and Action Level section for more information.														
Perfluoro-nonanoic Acid (PFNA)	ng/L	Daily Max	-	2.3	2 / 6	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														

[13] Existing Effluent Quality: Unless otherwise stated, existing effluent quality for Outfall 001 Emerging Contaminants represents the maximum reported value of available samples.

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		
Perfluoro-decanoic Acid (PFDA)	ng/L	Daily Max	-	< 2.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-undecanoic Acid (PFUnA)	ng/L	Daily Max	-	< 2.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-dodecanoic Acid (PFDoA)	ng/L	Daily Max	-	< 2.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-tridecanoic Acid (PFTriA)	ng/L	Daily Max	-	< 2.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-tetradecanoic Acid (PFTeA)	ng/L	Daily Max	-	< 2.0	0 / 7	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-butanesulfonic Acid (PFBS)	ng/L	Daily Max	-	16* Estimate	6 / 2	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements. *The maximum reported value of 16 ng/L was flagged by the laboratory as an estimated maximum possible concentration.														
Perfluoro-pentanesulfonic Acid (PFPeS)	ng/L	Daily Max	-	< 2.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-hexanesulfonic Acid (PFHxS)	ng/L	Daily Max	-	< 2.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-heptanesulfonic Acid (PFHpS)	ng/L	Daily Max	-	< 2.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														

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		
Perfluoro-octanesulfonic Acid (PFOS)	ng/L	Daily Max	-	16	6 / 2	**10** Action Level	BPJ MCL	-	15	160,000	A(C)	No RP	TOGS 1.1.1 February 2023 addendum	-	Action Level
	DEC calculated the projected instream concentration using the maximum reported effluent concentration of 16 ng/L, a multiplier of 1.9, the HEW dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the guidance value indicates no reasonable potential to cause or contribute to a water quality violation. However, due to the presence of PFOS, the permit includes an action level equal to the NYSDOH MCL of 10 ng/L. See the Emerging Contaminant and Action Level sections for more information.														
Perfluoro-nonanesulfonic Acid (PFNS)	ng/L	Daily Max	-	< 2.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-decanesulfonic Acid (PFDS)	ng/L	Daily Max	-	4.7* Estimate	1 / 7	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements. *The maximum reported value of 4.7 ng/L was flagged by the laboratory as an estimated maximum possible concentration.														
Perfluoro-dodecane-sulfonic Acid (PFDoS)	ng/L	Daily Max	-	< 2.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-octane-sulfonamide (FOSA)	ng/L	Daily Max	-	< 2.0	0 / 7	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
N-methyl Perfluoro-octanesulfon-amidoacetic Acid (NMeFOSAA)	ng/L	Daily Max	-	< 4.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
N-ethyl Perfluoro-octanesulfon-amidoacetic Acid (NEtFOSAA)	ng/L	Daily Max	-	< 2.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														

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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		
4:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	< 8.1	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
6:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	< 8.1	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
8:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	< 8.1	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
N-ethyl Perfluoro-octanesulfon-amide (NEtFOSA)	ng/L	Daily Max	-	< 2.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
N-methyl Perfluoro-octanesulfon-amide (NMeFOSA)	ng/L	Daily Max	-	< 2.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
N-methyl Perfluoro-octanesulfon-amidoethanol (NMeFOSE)	ng/L	Daily Max	-	< 20	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
N-ethyl Perfluoro-octanesulfon-amidoethanol (NEtFOSE)	ng/L	Daily Max	-	< 20	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														

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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		
9-Chlorohexadeca-fluoro-3-oxanonane-1-sulfonic Acid (9Cl-PF3ONS)	ng/L	Daily Max	-	< 8.1	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Hexafluoro-propylene Oxide Dimer Acid (HFPO-DA or GenX)	ng/L	Daily Max	-	< 8.1	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid (11Cl-PF3OUdS)	ng/L	Daily Max	-	< 8.1	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)	ng/L	Daily Max	-	< 8.1	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
3-Perfluoropropyl Propanoic Acid (3:3 FTCA)	ng/L	Daily Max	-	< 10	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
2H,2H,3H,3H-Perfluoro-octanoic Acid (5:3 FTCA)	ng/L	Daily Max	-	< 50	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														

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		
3-Perfluoroheptyl Propanoic Acid (7:3 FTCA)	ng/L	Daily Max	-	< 50	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA)	ng/L	Daily Max	-	< 4.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-4-methoxy-butanoic Acid (PFMBA)	ng/L	Daily Max	-	< 4.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-3-methoxy-propanoic Acid (PFMPA)	ng/L	Daily Max	-	< 4.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro(2-ethoxyethane)sulfonic Acid (PFEESA)	ng/L	Daily Max	-	< 4.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
1,4-Dioxane	µg/L	Daily Max	-	0.25	2 / 7	-	-	-	0.23	18,000	A(C)	36,000	TOGS 1.1.1	-	No Limitation or Monitoring
	DEC calculated the projected instream concentration using the maximum reported effluent concentration of 0.25 µg/L, a multiplier of 1.8, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the guidance value indicates no reasonable potential to cause or contribute to a water quality violation. Therefore, no limitation or monitoring has been specified.														

Outfall 01A – Municipal Treatment Train Effluent

Outfall #	01A	**Description of Wastewater:** Treated sanitary and process wastewater – municipal treatment train (MTT) effluent **Type of Treatment:** Screening, grit removal, primary clarification, fine screening, membrane bioreactors (MBRs), UV disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[14]	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	ML	Basis for Permit Requirement
General Notes: See Outfall 001 for review of applicable water quality standards and development of WQBELs. Existing discharge data from May 2020 to April 2025 was obtained from Discharge Monitoring Reports provided by the permittee for Outfall 001. The existing data for Outfall 001 is used to represent EEQ for Outfall 01A. The technology based effluent limitations (TBELs) were developed from TOGS 1.3.3. Limitations and monitoring requirements at Outfall 01A begin in Phase 2, upon startup of the industrial treatment train (ITT) and introduction of separate internal sampling locations for the MTT (Outfall 01A) and the ITT (Outfall 01B).														
Phase 1	-	-	-	-	-	-	-	No alterations that will impair the waters for their best usages.					703.2	-	No Limitation or Monitoring
Phases 2	MGD	Monthly Avg	-	5.3 Actual Average	60 / 0	**13.3**	Design Flow							-	Design Flow
Phase 3 thru 4	MGD	Monthly Avg	See Phase 2 above			**14.3**	Design Flow							-	Design Flow
Flow Rate	Consistent with 40 CFR 122.45(b)(1) and TOGS 1.3.3 I.B.1., beginning in Phase 2, the flow limit for the MTT is transferred from Outfall 001 to 01A, and the permit includes a monthly average flow limitation equal to the average daily design capacity of the existing MTT (10 MGD) plus an additional 3.3 MGD of capacity from the addition of MBBR tanks which will be repurposed upon startup of the upgraded MTT. Consistent with 40 CFR 122.45(b)(1) and TOGS 1.3.3 I.B.1., during Phases 3 and 4, the flow limit is equal to the 30-day average design flow of the upgraded MTT.														
Phase 1	SU	Minimum	-	-	-	-	-	See Outfall 001 for water quality analysis for pH						-	No Limitation or Monitoring
		Maximum	-	-	-	-	-								
Phases 2 thru 4	SU	Minimum	-	5.9 Actual Min	60 / 0	**6.0**	40 CFR 133.102(c)							-	TBEL
		Maximum	-	7.7 Actual Max	60 / 0	**9.0**									
pH	Consistent with 40 CFR 133.102(c) and TOGS 1.3.3. I.B.3., beginning in Phase 2, TBELs for pH are transferred from Outfall 001 to Outfall 01A for the MTT. See Outfall 001 for water quality analysis.														
All phases	°C	Daily Max	-	26 Actual Max	60 / 0	-	-	See Outfall 001 for water quality analysis for temperature						-	No Limitation or Monitoring
Temperature	Temperature monitoring at Outfall 001 will provide data to assess compliance with the water quality standards for temperature and dissolved oxygen. Therefore, no limitation or monitoring is required at Outfall 01A.														

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

Outfall #	01A	**Description of Wastewater:** Treated sanitary and process wastewater – municipal treatment train (MTT) effluent													
		Type of Treatment: Screening, grit removal, primary clarification, fine screening, membrane bioreactors (MBRs), 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[14]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	-	-	-	-	-	-	-	See Outfall 001 Dissolved Oxygen for water quality analysis						-	No Limitation or Monitoring
Phase 2	mg/L	Monthly Avg	-	7 Actual Max*	2 / 58	**25**	40 CFR 133.102							-	TBEL
		7 Day Avg	-	12	32 / 28	**40**	40 CFR 133.102							-	
	lbs/d	Monthly Avg	-	300 Actual Max*	3 / 57	**2,800**	-							-	
		7 Day Avg	-	639	24 / 36	**4,400**	-							-	
	% Rem	Minimum	-	96 Actual Min	59 / 0	**85**	40 CFR 133.102							-	
Phases 3 thru 4	mg/L	Monthly Avg	See Phase 2 and 3 above			**25**	40 CFR 133.102							-	TBEL
		7 Day Avg				**40**	40 CFR 133.102							-	
	lbs/d	Monthly Avg				**3,000**	-							-	
		7 Day Avg				**4,800**	-							-	
	% Rem	Minimum				**85**	40 CFR 133.102							-	
5-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	*Consistent with TOGS 1.2.1 I.B.2.b., sample results reported for June 2020 were found to not be representative of normal operations, and therefore are not included in the calculation of EEQ. See Outfall 001 Dissolved Oxygen for water quality analysis. Consistent with 40 CFR 133.102(a)(4) and TOGS 1.3.3 I.B.2.b.(7) for POTWs, TBELs for $CBOD_5$ reflect secondary treatment standards. Beginning in Phase 2, TBELs for $CBOD_5$ are transferred from Outfall 001 to Outfall 01A. DEC calculated load limits for Phases 2 at the corresponding flow limit of 13.3 MGD. DEC calculated load limits for Phases 3 and 4 at the corresponding flow limit of 14.3 MGD (design flow of upgraded MTT). See Anti-backsliding for more information.														

Outfall #	01A	**Description of Wastewater:** Treated sanitary and process wastewater – municipal treatment train (MTT) effluent													
		Type of Treatment: Screening, grit removal, primary clarification, fine screening, membrane bioreactors (MBRs), 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 [14]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TSS						-	No Limitation or Monitoring
Phase 2	mg/L	Monthly Avg	-	7 Actual Max	1 / 59	**30**	40 CFR 133.102							-	TBEL
		7 Day Avg	-	9.7	6 / 54	**45**	40 CFR 133.102							-	
	lbs/d	Monthly Avg	-	300 Actual Max	58 / 2	**3,300**	-							-	
		7 Day Avg	-	342	6 / 54	**5,000**	-							-	
	% Rem	Minimum	-	95 Actual Min	60 / 0	**85**	40 CFR 133.102							-	
Phases 3 thru 4	mg/L	Monthly Avg	See Phase 2 and 3 above			**30**	40 CFR 133.102							-	TBEL
		7 Day Avg				**45**	40 CFR 133.102							-	
	lbs/d	Monthly Avg				**3,600**	-							-	
		7 Day Avg				**5,400**	-							-	
	% Rem	Minimum				**85**	40 CFR 133.102							-	
Total Suspended Solids (TSS)	See Outfall 001 for water quality analysis. Consistent with 40 CFR 133.102(b), TBELs for TSS reflect secondary treatment standards. Beginning in Phase 2, TBELs for TSS for the MTT are transferred from Outfall 001 to Outfall 01A. DEC calculated load limits for Phases 2 at the corresponding flow limit of 13.3 MGD. DEC calculated load limits for Phases 3 and 4 at the corresponding flow limit of 14.3 MGD (design flow of the upgraded MTT). See Anti-backsliding for more information.														

Outfall #	01A	**Description of Wastewater:** Treated sanitary and process wastewater – municipal treatment train (MTT) effluent													
		Type of Treatment: Screening, grit removal, primary clarification, fine screening, membrane bioreactors (MBRs), 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 [14]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	mL/L	Daily Max	-	0.15	60 / 0	-	-							-	No Limitation
Phase 2	mL/L	Daily Max	See Phase 1 above			**0.3**	TOGS 1.3.3	See Outfall 001 for water quality analysis for settleable solids						-	TBEL
Phases 3 thru 4	mL/L	Daily Max				**0.1**	TOGS 1.3.3							-	TBEL
Settleable Solids	See Outfall 001 for water quality analysis. Consistent with TOGS 1.3.3 I.B.4., beginning in Phase 2, The TBEL for settleable solids is transferred from Outfall 001 to Outfall 01A for the MTT. Consistent with TOGS 1.3.3 I.B.4., during Phase 2, the permit includes a settleable solids limit equal to the TBEL of 0.3 mL/L for POTWs providing secondary treatment without filtration. Consistent with TOGS 1.3.3 I.B.4., during Phases 3 and 4, the permit includes an effluent limitation equal to the TBEL of 0.1 mL/L for POTWs providing secondary treatment and filtration.														
Phase 1	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for ammonia (as N)						-	No Limitation or Monitoring
Phases 2 thru 4	mg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
	lbs/d	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
	mg/L	Monthly Avg	-	2.2*	25 / 0	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
	lbs/d	Monthly Avg	-	102*	25 / 0	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
Nitrogen, Ammonia (as N) Summer (June 1 to October 31)**	*The existing effluent quality for summer ammonia (as NH_3) is 2.6 mg/L and 124 lbs/d. Permit limits and existing effluent quality for ammonia have 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. See Outfall 001 for the reasonable potential analysis and WQBELs for ammonia. Consistent with 6 NYCRR 750-1.13(a), beginning in Phase 2, monitoring for ammonia is added at Outfall 01A for the MTT to provide data needed to assess and maintain the performance of the treatment system and to determine the contribution of this source towards the total discharge at Outfall 001. **Consistent with TOGS 1.3.1 (page 10), the summer season has been expanded from June 16 to October 31 (2014 permit) to June 1 to October 31, so that data submitted on DMRs is representative of a complete month.														

Outfall #	01A	**Description of Wastewater:** Treated sanitary and process wastewater – municipal treatment train (MTT) effluent													
		Type of Treatment: Screening, grit removal, primary clarification, fine screening, membrane bioreactors (MBRs), 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 [14]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for ammonia (as N)						-	No Limitation or Monitoring
Phases 2 thru 4	mg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
		Monthly Avg	-	17*	40 / 0	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
	lbs/d	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
		Monthly Avg	-	954*	40 / 0	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
Nitrogen, Ammonia (as N) Winter (November 1 to May 31)**	*The existing effluent quality for winter ammonia (as NH_3) is 20 mg/L and 1,160 lbs/d. Permit limits and existing effluent quality 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. See Outfall 001 for the reasonable potential analysis and WQBELs for ammonia. Consistent with 6 NYCRR 750-1.13(a), beginning in Phase 2, the permit includes monitoring for ammonia at Outfall 01A to provide data needed to assess and maintain the performance of the MTT and to determine the contribution of this source towards the total discharge at Outfall 001. *Consistent with TOGS 1.3.1 (page 10), the winter season has been changed from November 1 to June 15 (2014 permit) to November 1 to May 31, so that data submitted on DMRs is representative of a complete month														
All Phases	mg/L	Daily Max	-	44	60 / 0	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Total Kjeldahl Nitrogen (TKN)	See Outfall 001 for water quality analysis and TKN monitoring. There is no applicable TBEL for TKN at Outfall 01A. No limitation or monitoring is specified at Outfall 01A.														

Outfall #	01A	**Description of Wastewater:** Treated sanitary and process wastewater – municipal treatment train (MTT) effluent													
		Type of Treatment: Screening, grit removal, primary clarification, fine screening, membrane bioreactors (MBRs), 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 [14]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for phosphorus						-	No Limitation or Monitoring
Phases 2 thru 4	mg/L	Monthly Avg	-	0.15	24 / 36	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
Phosphorus, Total	Consistent with TOGS 1.3.3 I.B.6, during all phases, a monthly average total phosphorus limit equal to 1.0 mg/L has been continued at Outfall 001 due to the existing MTT discharging more than 1 MGD of effluent in the Lake Ontario watershed. Consistent with 6 NYCRR 750-1.13(a), beginning in Phase 2, monitoring is added at Outfall 01A to provide data needed to assess and maintain the performance of the treatment system and to determine the contribution of this source towards the total discharge at Outfall 001.														
All Phases	ng/L	Daily Max	-	1.4*	8 / 12	-	-	See Outfall 001 and the Mercury section of this fact sheet						-	DOW 1.3.10
	ng/L	12 MRA	-	-	-	-	-							-	DOW 1.3.10
Mercury, Total	*DEC calculated existing effluent quality from the lognormal 95th percentile of 20 mercury effluent samples collected from May 2020 to April 2025. No limitations or monitoring are specified for mercury at Outfall 01A. See Outfall 001 and the Mercury section of this fact sheet.														
Phase 1	#/100 ml	30d Geo Mean	-	-	-	-	-	See Outfall 001 for water quality analysis for fecal coliform						-	No Limitation or Monitoring
		7d Geo Mean	-	-	-	-	-								
Phases 2 thru 4	#/100 ml	30d Geo Mean	-	<10 Actual Max	0 / 30	**200**	TOGS 1.3.3							-	TBEL
		7d Geo Mean	-	200 Actual Max	4 / 26	**400**	TOGS 1.3.3								
Coliform, Fecal	Consistent with TOGS 1.3.3, due to the class of the receiving waterbody, effluent disinfection is required seasonally for the MTT. The disinfection season has been changed from the previous May 15th – October 15th to May 1st – October 31st, so that data submitted on DMRs is representative of a complete month. See Outfall 001 for water quality analysis. Beginning in Phase 2, fecal coliform limits for the MTT are transferred from Outfall 001 to Outfall 01A.														

Outfall #	01A	**Description of Wastewater:** Treated sanitary and process wastewater – municipal treatment train (MTT) effluent **Type of Treatment:** Screening, grit removal, primary clarification, fine screening, membrane bioreactors (MBRs), UV disinfection												
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality [14]	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	ML	Basis for Permit Requirement
Phase 1	mg/L	Daily Max	-	-	-	-	-	See Outfall 001 for water quality analysis for TRC						-	No Limitation or Monitoring
Phases 2 thru 4	mg/L	Daily Max	-	ND	0 / 29	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
Total Residual Chlorine (TRC)	Effluent disinfection is currently required seasonally for the MTT effluent. This requirement is being continued through all phases. The disinfection season has been changed from the previous May 15th – October 15th to May 1st – October 31st so that data submitted on DMRs is representative of a complete month. While UV disinfection is proposed for the upgraded MTT, chlorine is used in the MTT for odor control. WQBELs for TRC have been established at Outfall 001 for all phases of the project. Consistent with 6 NYCRR 750-1.13(a), beginning in Phase 2, the permit includes monitoring for TRC at Outfall 01A to assess and maintain performance of the MTT and to determine the contribution of this source towards the total discharge at Outfall 001.													
Pollutants with 2014 Action Levels for the Municipal Treatment Train														
All Phases	mg/L	Daily Max	-	< 2	0 / 59	-	-	See Outfall 001 for water quality analysis for arsenic						-	No Limitation or Monitoring
	lbs/d	Daily Max	-	0.12	6 / 14	-	-							-	No Limitation or Monitoring
Arsenic, Total	There are no applicable TBELs for total arsenic. Therefore, no limits or monitoring is established at Outfall 01A. See Outfall 001 for the reasonable potential analysis.													
All Phases	mg/L	Daily Max	-	< 0.8	0 / 59	-	-	See Outfall 001 for water quality analysis for cadmium						-	No Limitation or Monitoring
	lbs/d	Daily Max	-	0.05	6 / 14	-	-							-	No Limitation or Monitoring
Cadmium, Total	There are no applicable TBELs for total cadmium. Therefore, no limits or monitoring is established at Outfall 01A. See Outfall 001 for the reasonable potential analysis.													
All Phases	mg/L	Daily Max	-	< 0.008	0 / 59	-	-	See Outfall 001 for water quality analysis for chromium						-	No Limitation or Monitoring
	lbs/d	Daily Max	-	0.47	5 / 15	-	-							-	No Limitation or Monitoring
Chromium, Total	There are no applicable TBELs for total chromium. Therefore, no limits or monitoring is established at Outfall 01A. See Outfall 001 for the reasonable potential analysis.													

Outfall #	01A	**Description of Wastewater:** Treated sanitary and process wastewater – municipal treatment train (MTT) effluent **Type of Treatment:** Screening, grit removal, primary clarification, fine screening, membrane bioreactors (MBRs), 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 [14]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	mg/L	Daily Max	-	12	2 / 57	-	-	See Outfall 001 for water quality analysis for copper						-	No Limitation or Monitoring
	lbs/d	Daily Max	-	0.58	5 / 15	-	-							-	No Limitation or Monitoring
Copper, Total	There are no applicable TBELs for total copper. Therefore, no limits or monitoring is established at Outfall 01A. See Outfall 001 for the reasonable potential analysis.														
All Phases	mg/L	Daily Max	-	0.15	52 / 0	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
	lbs/d	Daily Max	-	8.34	20 / 0	-	-							-	No Limitation or Monitoring
Iron, Total	A numeric water quality standard for total recoverable iron does not exist for Class B waterbodies. There are no applicable TBELs for iron. Iron is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality. Therefore, no limits or monitoring are specified at Outfall 01A.														
All Phases	mg/L	Daily Max	-	< 15	0 / 59	-	-	See Outfall 001 for water quality analysis for nickel						-	No Limitation or Monitoring
	lbs/d	Daily Max	-	0.88	5 / 15	-	-							-	No Limitation or Monitoring
Nickel, Total	There are no applicable TBELs for total nickel. Therefore, no limits or monitoring are established at Outfall 01A. See Outfall 001 for the reasonable potential analysis.														
All Phases	mg/L	Daily Max	-	0.047	45 / 14	-	-	See Outfall 001 for water quality analysis for zinc						-	No Limitation or Monitoring
	lbs/d	Daily Max	-	2.2	17 / 3	-	-							-	No Limitation or Monitoring
Zinc, Total	There are no applicable TBELs for total zinc. Therefore, no limits or monitoring are established at Outfall 01A. See Outfall 001 for the reasonable potential analysis.														
All Phases	µg/L	Daily Max	-	10	15 / 11	200	TOGS 1.2.1	-	-	-	-	-	-	-	No Limitation or Monitoring
	lbs/d	Daily Max	-	0.30	8 / 12	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Chloroform	A numeric water quality standard for chloroform does not exist for Class B waterbodies. Based on a review of the existing effluent quality and the proposed use of UV disinfection in the upgraded MTT, the TBEL for chloroform (TOGS 1.2.1 Attachment C, Reference E for activated sludge systems) is not necessary to ensure the proper operation and maintenance of the MTT [6 NYCRR 750-2.8(a)(2)]. Therefore, no limitation or monitoring is established at Outfall 01A.														

Outfall #	01A	**Description of Wastewater:** Treated sanitary and process wastewater – municipal treatment train (MTT) effluent **Type of Treatment:** Screening, grit removal, primary clarification, fine screening, membrane bioreactors (MBRs), UV disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality [14]	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	ML	Basis for Permit Requirement
Phase 1	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for total phenols						-	No Limitation or Monitoring
Phases 2 thru 4	µg/L	Daily Max	-	148 Actual Max	3 / 26	1000	TOGS 1.2.1							-	**Monitor** 750-1.13
	µg/L	Monthly Avg	-	-	-	500	TOGS 1.2.1							-	**Monitor** 750-1.13
	lbs/d	Daily Max	-	0.36	8 / 12	-	-							-	No Limitation
Total Phenols	See Outfall 001 for the reasonable potential analysis and WQBELs. Based on a review of the existing effluent quality and the addition of WQBELs at Outfall 001, the TBELs for total phenols (TOGS 1.2.1 Attachment C, Reference E for activated sludge systems) are not necessary to ensure the proper operation and maintenance of the MTT [6 NYCRR 750-2.8(a)(2)]. Consistent with 6 NYCRR 750-1.13(a), beginning in Phase 2, the permit includes monitoring for total phenols at Outfall 01A to assess and maintain performance of the MTT and to determine the contribution of this source towards the total discharge at Outfall 001.														
Additional Pollutants Detected and Reported in the Application Tables															
All Phases	mg/L	Daily Avg	-	5.6	365 / 134	See Outfall 01A $CBOD_5$		See Outfall 001 for Dissolved Oxygen water quality analysis						-	No Limitation or Monitoring
		Daily Max	-	48	365 / 134									-	No Limitation or Monitoring
5-day Biochemical Oxygen Demand (BOD_5)	During all phases of the project, WQBELs for ammonia, UOD, and DO, and TBELs for $CBOD_5$ are established for the protection of the dissolved oxygen water quality standard. Therefore, no effluent limits or monitoring are necessary for BOD_5. See Outfall 01A $CBOD_5$ for standard secondary treatment TBELs and Outfall 001 Dissolved Oxygen for more water quality analysis. Due to fluctuating influent loadings related to industrial users, influent BOD_5 monitoring for the MTT has been maintained in the permit to ensure the facility is properly operated and maintained, and not exceeding the rated (design) influent loading to the facility. Beginning in Phase 2, influent BOD_5 monitoring is transferred from Outfall 001 to Outfall 01A for the MTT.														
All Phases	mg/L	Daily Max	-	237 Actual Max	4 / 0	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Hardness (as $CaCO_3$)	A numeric water quality standard for hardness does not exist for Class B waterbodies. There are no applicable TBELs for hardness. Therefore, no limitation or monitoring is specified.														
All Phases	mg/L	Daily Max	-	15.1 Actual Max	4 / 0	-	-	See Outfall 001 for water quality analysis for nitrate						-	No Limitation or Monitoring
Nitrate (as N)	See Outfall 001 for reasonable potential analysis for nitrate. There are no applicable TBELs for nitrate at Outfall 01A (MTT). Therefore, no limitation or monitoring is specified.														

Outfall #	01A	**Description of Wastewater:** Treated sanitary and process wastewater – municipal treatment train (MTT) effluent **Type of Treatment:** Screening, grit removal, primary clarification, fine screening, membrane bioreactors (MBRs), 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 [14]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	mg/L	Daily Max	-	0.06 Actual Max	4 / 0	-	-	See Outfall 001 for water quality analysis for nitrite						-	No Limitation or Monitoring
Nitrite (as N)	See Outfall 001 for reasonable potential analysis for nitrite. There are no applicable TBELs for nitrite at Outfall 01A (MTT). Therefore, no limitation or monitoring is specified.														
All Phases	mg/L	Daily Max	-	16.3 Actual Max	4 / 0	-	-	See Outfall 001 for water quality analysis for total nitrogen						-	No Limitation or Monitoring
Total Nitrogen (as N)	See Outfall 001 for reasonable potential analysis for total nitrogen. There are no applicable TBELs for total nitrogen at Outfall 01A (MTT). Therefore, no limitation or monitoring is specified.														
All Phases	mg/L	Daily Max	-	714 Actual Max	4 / 0	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Total Dissolved Solids (TDS)	See Outfall 001 for reasonable potential analysis and WQBELs. There are no applicable TBELs for TDS at Outfall 01A (MTT). Therefore, no limitation or monitoring is specified.														
Phase 1	mg/L	Daily Max	-	17 Max	1 / 3	-	-	See Outfall 001 for water quality analysis for oil & grease						-	No Limitation or Monitoring
Phases 2 thru 4	mg/L	Daily Max	See Phase 1 above			**15**	TOGS 1.2.1 Ref. J Miscellaneous							-	TBEL
Oil & Grease	See Outfall 001 for water quality analysis for oil & grease. Due to detection of oil & grease in the existing MTT effluent and consistent with TOGS 1.2.1 Attachment C, beginning in Phase 2, the TBEL for oil & grease is transferred from Outfall 001 to Outfall 01A.														
All Phases	µg/L	Daily Max	-	-	-	Monitor	6 NYCRR 750-1.13	See Outfall 001 for water quality analysis for sulfite						-	No Limitation or Monitoring
Sulfite	See Outfall 001 for water quality analysis for sulfite. Sulfite may be present in the MTT effluent due to use of water treatment chemicals for dechlorination. There are no applicable TBELs for sulfite. Consistent with 750-1.13(a), during all phases, the permit includes monitoring for sulfite at Outfall 001 to determine compliance with the water quality standard for sulfite. No limitations or monitoring are necessary or specified at Outfall 01A.														
All Phases	µg/L	Daily Max	-	3 Actual Max	2 / 22	-	-	See Outfall 001 for water quality analysis for selenium						-	No Limitation or Monitoring
Selenium, Total	See Outfall 001 for reasonable potential analysis and WQBELs. There are no applicable TBELs for selenium at Outfall 01A (MTT). Therefore, no limitation or monitoring is specified.														

Outfall #	01A	**Description of Wastewater:** Treated sanitary and process wastewater – municipal treatment train (MTT) effluent **Type of Treatment:** Screening, grit removal, primary clarification, fine screening, membrane bioreactors (MBRs), UV disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality [14]	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	ML	Basis for Permit Requirement
All Phases	µg/L	Daily Max	-	0.055 Actual Max	1 / 3	-	-	See Outfall 001 for water quality analysis for heptachlor						-	No Limitation or Monitoring
Heptachlor	See Outfall 001 for water quality analysis. There are no applicable TBELs for heptachlor. Consistent with 6 NYCRR 750-1.13(a) and TOGS 1.2.1 I.E.1.b., the permit includes a short-term high intensity monitoring (STHIM) program at Outfall 001 to collect more data regarding the presence or absence of heptachlor in the MTT effluent and to determine compliance with the water quality standard. The duration of the STHIM occurs during Phase 1, before internal Outfall 01A become introduced; therefore, no limitation or monitoring is included for Outfall 01A.														
All Phases	µg/L	Daily Max	-	13	1 / 5	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Methyl Chloride	There is no applicable numeric water quality standard for methyl chloride to a class B receiving waterbody. There are no applicable TBELs for methyl chloride. Therefore, no limitation or monitoring is specified.														
All Phases	µg/L	Daily Max	-	110 Actual Max	2 / 1	See Outfall 01A Total Phenols		See Outfall 001 for water quality analysis for 3 & 4 methylphenol						-	No Limitation or Monitoring
3 & 4 Methylphenol	3&4 methylphenol is an unchlorinated phenol. The water quality standard of 5.0 µg/L applies to total unchlorinated phenols. See Outfall 001 Total Phenols for applicable WQBELs. See Outfall 01A Total Phenols for applicable TBELs. Since WQBELs have been established for total phenols, no limitation or monitoring is necessary for 3&4 methylphenol as an individual species.														
All Phases	µg/L	Daily Max	-	38 Actual Max	2 / 26	See Outfall 01A Total Phenols		See Outfall 001 for water quality analysis for phenol						-	No Limitation or Monitoring
Phenol	Phenol is an unchlorinated phenolic compound (a.k.a. an unchlorinated phenol). The water quality standard of 5.0 µg/L applies to total unchlorinated phenols. See Outfall 001 Total Phenols for applicable WQBELs. See Outfall 01A Total Phenols for applicable TBELs. Since WQBELs have been established for total phenols, no limitation or monitoring is necessary for phenol as an individual species.														
Additional Pollutants Affected by the Proposed Reuse System for the OOWWTP Effluent (01A) [15]															
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Chloride	A numeric water quality standard for chloride does not exist for Class B waterbodies. There are no applicable TBELs for chloride. Chloride is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring is being specified for chloride as an individual species at Outfall 01A.														

[15] See Table 1.13 Requested Water Quality Targets for Ultrapure Water (UPW) Source Water (Provided by Micron) in the engineering report titled "OOWWTP Expansion Program Basis of Design / DEC Engineering Report" (August 2025).

Outfall #	01A	**Description of Wastewater:** Treated sanitary and process wastewater – municipal treatment train (MTT) effluent **Type of Treatment:** Screening, grit removal, primary clarification, fine screening, membrane bioreactors (MBRs), 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 [14]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	mg/L	-	-	-	-	-	-	See Outfall 001 for water quality analysis for fluoride						-	No Limitation or Monitoring
Fluoride	See Outfall 001 for reasonable potential analysis and WQBELs. There are no applicable TBELs for fluoride at Outfall 01A (MTT). Fluoride is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring is being specified for fluoride as an individual species at Outfall 01A.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Sulfate	A numeric water quality standard for sulfate does not exist for Class B waterbodies. There are no applicable TBELs for sulfate. Sulfate is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring is being specified for sulfate as an individual species at Outfall 01A.														
Phase 1	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for aluminum						-	No Limitation or Monitoring
Phases 2 thru 4	µg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
Total Aluminum	See Outfall 001 for water quality analysis for aluminum. Aluminum is present in water treatment chemicals used in the MTT. Consistent with 6 NYCRR 750-1.13(a), beginning in Phase 2, the permit includes monitoring for total aluminum at Outfall 01A for the MTT to provide information regarding the performance of the treatment system.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Total Barium	A numeric water quality standard for total barium does not exist for Class B waterbodies. There are no applicable TBELs for barium. Barium is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring has been specified for barium as an individual species at Outfall 01A.														
All Phases	µg/L	-	-	-	-	-	-	See Outfall 001 for water quality analysis for boron						-	No Limitation or Monitoring
Total Boron	See Outfall 001 for water quality analysis. There are no applicable TBELs for boron at Outfall 01A (MTT). Since monitoring and an action level are included for boron at Outfall 001, no limitations or monitoring are necessary at Outfall 01A.														

Outfall #	01A	**Description of Wastewater:** Treated sanitary and process wastewater – municipal treatment train (MTT) effluent													
		Type of Treatment: Screening, grit removal, primary clarification, fine screening, membrane bioreactors (MBRs), 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 [14]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	mg/L	Daily Max	-	68 Actual Max	4 / 0	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Total Calcium	A numeric water quality standard for total calcium does not exist for Class B waterbodies. There are no applicable TBELs for calcium. Calcium is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 will be protective of water quality; therefore, no limitation or monitoring has been specified for calcium at Outfall 01A.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Total Manganese	A numeric water quality standard for total manganese does not exist for Class B waterbodies. There are no applicable TBELs for manganese. Manganese is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring has been specified for manganese at Outfall 01A.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Total Sodium	A numeric water quality standard for total sodium does not exist for Class B waterbodies. There are no applicable TBELs for sodium. Sodium is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring has been specified for sodium at Outfall 01A.														

Outfall 01B – Industrial Treatment Train Effluent

Outfall #	01B	**Description of Wastewater:** Industrial Treatment Train (ITT) - treated process wastewater **Type of Treatment: (Proposed for Phase 2)** Equalization and diversion tanks, influent screening, biological treatment in mixed anoxic tanks followed by aeration tanks, membrane bioreactors (MBRs), UV disinfection. **(Proposed for Phase 3)** Addition of solids de-watering, ion exchange, de-carbonization, and crystallization.													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality[16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
General Notes: See Outfall 001 for review of applicable water quality standards and development of WQBELs. The technology based effluent limitations (TBELs) were developed from TOGS 1.3.3.															
Phase 1	MGD	Monthly Avg	-	-	-	-	-	No alterations that will impair the waters for their best usages.					703.2	-	No Limitation or Monitoring
Phases 2 thru 3	MGD	Monthly Avg	-	-	-	**8.25**	Design Flow							-	Monitor 750-1.13
Phase 4	MGD	Monthly Avg	-	-	-	**16.5**	Design Flow							-	Monitor 750-1.13
Flow Rate	Consistent with 40 CFR 122.45(b)(1) and TOGS 1.3.3 I.B.1., during Phases 2 through 4, the permit includes a monthly average flow limitation at Outfall 01B equal to the design flow of the ITT during the respective phase. The flow limit during Phases 2 and 3 is equal to the design flow of the 1st portion of the ITT to be constructed. The flow limit during Phase 4 is equal to the design flow of the full ITT after the 2nd portion of the ITT is constructed.														
Phase 1	SU	Minimum	-	-	-	-	-	See Outfall 001 for water quality analysis for pH						-	No Limitation or Monitoring
		Maximum	-	-	-	-	-							-	
Phases 2 thru 4	SU	Minimum	-	-	-	**6.0**	TOGS 1.3.3							-	TBEL
		Maximum	-	-	-	**9.0**								-	
pH	Consistent with 40 CFR 133.102(c) and TOGS 1.3.3 I.B.3., beginning in Phase 2, the permit includes TBELs for pH at Outfall 01B for the ITT. See Outfall 001 for water quality analysis.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for temperature						-	No Limitation or Monitoring
Temperature	Temperature monitoring at Outfall 001 will provide data to assess compliance with the water quality standards for temperature and dissolved oxygen. Therefore, no limitation or monitoring is required at Outfall 01B.														

[16] Predicted Effluent Quality: The industrial treatment train has not yet been constructed; therefore, no effluent data is available to calculate effluent quality. Effluent quality is projected based on the design and calculations presented in the engineering report titled "*Oak Orchard Industrial Wastewater Treatment Plant and Water Reclamation Facility Conceptual Design Engineering Report*" (August 20, 2025).

Outfall #	01B	**Description of Wastewater:** Industrial Treatment Train (ITT) - treated process wastewater
		Type of Treatment: (Proposed for Phase 2) Equalization and diversion tanks, influent screening, biological treatment in mixed anoxic tanks followed by aeration tanks, membrane bioreactors (MBRs), UV disinfection. **(Proposed for Phase 3)** Addition of solids de-watering, ion exchange, de-carbonization, and crystallization.

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality [16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	-	-	-	-	-	-	-	See Outfall 001 Dissolved Oxygen for water quality analysis							No Limitation or Monitoring
Phases 2 thru 3	mg/L	Monthly Avg	-	-	-	**25**	40 CFR 133.102								TBEL
		7 Day Avg	-	-	-	**40**	40 CFR 133.102								TBEL
	lbs/d	Monthly Avg	-	-	-	**1,700**	-								TBEL
		7 Day Avg	-	-	-	**2,800**	-								TBEL
	% Rem	Minimum	-	-	-	**85**	40 CFR 133.102								TBEL
Phase 4	mg/L	Monthly Avg	-	-	-	**25**	40 CFR 133.102								TBEL
		7 Day Avg	-	-	-	**40**	40 CFR 133.102								TBEL
	lbs/d	Monthly Avg	-	-	-	**3,400**	-								TBEL
		7 Day Avg	-	-	-	**5,500**	-								TBEL
	% Rem	Minimum	-	-	-	**85**	40 CFR 133.102								TBEL

5-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)

See Outfall 001 Dissolved Oxygen for review of applicable water quality standards and development of WQBELs.

Consistent with 40 CFR 133.102(a)(4) and TOGS 1.3.3 I.B.2.b.(7) for POTWs, beginning in Phase 2, TBELs for $CBOD_5$ reflect secondary treatment standards. DEC calculated Phase 2 and 3 loading limits at a design flow rate of 8.25 MGD for the first portion of the ITT. DEC calculated Phase 4 loading limits at a total ITT design flow rate of 16.5 MGD. See Anti-backsliding for more information.

Outfall #	01B	**Description of Wastewater:** Industrial Treatment Train (ITT) - treated process wastewater
		Type of Treatment: (Proposed for Phase 2) Equalization and diversion tanks, influent screening, biological treatment in mixed anoxic tanks followed by aeration tanks, membrane bioreactors (MBRs), UV disinfection. **(Proposed for Phase 3)** Addition of solids de-watering, ion exchange, de-carbonization, and crystallization.

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality [16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TSS						-	No Limitation or Monitoring
Phases 2 thru 3	mg/L	Monthly Avg	-	-	-	**30**	40 CFR 133.102							-	TBEL
		7 Day Avg	-	-	-	**45**	40 CFR 133.102							-	TBEL
	lbs/d	Monthly Avg	-	-	-	**2,100**	-							-	TBEL
		7 Day Avg	-	-	-	**3,100**	-							-	TBEL
	% Rem	Minimum	-	-	-	**85**	40 CFR 133.102							-	TBEL
Phase 4	mg/L	Monthly Avg	-	-	-	**30**	40 CFR 133.102							-	TBEL
		7 Day Avg	-	-	-	**45**	40 CFR 133.102							-	TBEL
	lbs/d	Monthly Avg	-	-	-	**4,100**	-							-	TBEL
		7 Day Avg	-	-	-	**6,200**	-							-	TBEL
	% Rem	Minimum	-	-	-	**85**	40 CFR 133.102							-	TBEL
Total Suspended Solids (TSS)	See Outfall 001 for water quality analysis for TSS. Consistent with 40 CFR 133.102(b), TBELs for TSS reflect secondary treatment standards. Beginning in Phase 2, the permit includes effluent limitations equal to the TBELs. DEC calculated Phase 2 and 3 loading limits at the design flow rate of 8.25 MGD for the first portion of the ITT. DEC calculated Phase 4 loading limits at the total ITT design flow rate of 16.5 MGD.														
Phase 1	mL/L	Daily Max	-	-	-	-	-	See Outfall 001 for water quality analysis for settleable solids						-	No Limitation or Monitoring
Phases 2 thru 4	mL/L	Daily Max	-	-	-	**0.1**	TOGS 1.3.3							-	TBEL
Settleable Solids	See Outfall 001 for water quality analysis. Consistent with TOGS 1.3.3 I.B.4., beginning in Phase 2, the permit includes an effluent limitation equal to the TBEL for POTWs providing secondary treatment and filtration.														

Outfall #	01B	**Description of Wastewater:** Industrial Treatment Train (ITT) - treated process wastewater
		Type of Treatment: (Proposed for Phase 2) Equalization and diversion tanks, influent screening, biological treatment in mixed anoxic tanks followed by aeration tanks, membrane bioreactors (MBRs), UV disinfection. **(Proposed for Phase 3)** Addition of solids de-watering, ion exchange, de-carbonization, and crystallization.

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality [16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	mg/L	Daily Max	-	-	-	-	-	See Outfall 001 water quality analysis for TDS						-	No Limitation or Monitoring
Phases 2 thru 4	mg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
Total Dissolved Solids (TDS)	See Outfall 001 water quality analysis for TDS. Process wastewater from Micron is expected to be a source of TDS to the ITT. Consistent with 6 NYCRR 750-1.13(a) and TOGS 1.2.1 I.B.3., beginning in Phase 2, the permit includes monitoring for TDS at Outfall 01B to determine the contribution of this source towards the discharge at Outfall 001.														
Phase 1	mg/L	Daily Max	-	-	-	-	-	See Outfall 001 Nitrogen, Ammonia (as N) for water quality analysis						-	No Limitation or Monitoring
Phases 2 thru 4	mg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
		Monthly Avg	-	-	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
	lbs/d	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
		Monthly Avg	-	-	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
Nitrogen, Ammonia (as N)	See Outfall 001 for the reasonable potential analysis and WQBELs for ammonia. Consistent with 6 NYCRR 750-1.13(a), beginning in Phase 2, the permit includes monitoring for ammonia at Outfall 01B for the ITT to provide data needed to assess and maintain the performance of the ITT and to determine the contribution of this source towards the total discharge at Outfall 001.														

Outfall #	01B	**Description of Wastewater:** Industrial Treatment Train (ITT) - treated process wastewater
		Type of Treatment: (Proposed for Phase 2) Equalization and diversion tanks, influent screening, biological treatment in mixed anoxic tanks followed by aeration tanks, membrane bioreactors (MBRs), UV disinfection. **(Proposed for Phase 3)** Addition of solids de-watering, ion exchange, de-carbonization, and crystallization.

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality [16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	mg/L	Monthly Avg	-	-	-	-	-	See Outfall 001 for water quality analysis for phosphorus						-	No Limitation or Monitoring
Phases 2 thru 4	mg/L	Monthly Avg	-	-	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
Phosphorus, Total	Consistent with TOGS 1.3.3 I.B.6, during all phases, a monthly average total phosphorus limit equal to 1.0 mg/L has been continued at Outfall 001 due to the existing MTT discharging more than 1 MGD of effluent in the Lake Ontario watershed. Consistent with 6 NYCRR 750-1.13(a), beginning in Phase 2, monitoring is added at Outfall 01B to provide data needed to assess and maintain the performance of the treatment system and to determine the contribution of this source towards the total discharge at Outfall 001.														
All Phases	ng/L	Daily Max	-	-	-	-	-	See Outfall 001 and the Mercury section of this fact sheet						-	DOW 1.3.10
	ng/L	12 MRA	-	-	-	-	-							-	DOW 1.3.10
Mercury, Total	No limitations or monitoring are being established for mercury at Outfall 01B. See Outfall 001 and the Mercury section of this fact sheet														
Phase 1	#/100 ml	30d Geo Mean	-	-	-	-	-	See Outfall 001 for water quality analysis for fecal coliform						-	No Limitation or Monitoring
		7d Geo Mean	-	-	-	-	-							-	No Limitation or Monitoring
Phases 2 thru 4	#/100 ml	30d Geo Mean	-	-	-	**200**	TOGS 1.3.3							-	TBEL
		7d Geo Mean	-	-	-	**400**	TOGS 1.3.3							-	TBEL
Coliform, Fecal	The new ITT is designed to receive industrial process wastewater but no sanitary sewage. However, effluent from the ITT is planned for reuse at off-site industrial users. Consistent with TOGS 1.3.3, due to the potential for human exposure to the recycled effluent flows, disinfection is required seasonally for the ITT. The disinfection season is May 1st – October 31st to be consistent with Outfall 01A. Beginning in Phase 2, the permit includes fecal coliform limits.														

Outfall #	01B	**Description of Wastewater:** Industrial Treatment Train (ITT) - treated process wastewater
		Type of Treatment: (Proposed for Phase 2) Equalization and diversion tanks, influent screening, biological treatment in mixed anoxic tanks followed by aeration tanks, membrane bioreactors (MBRs), UV disinfection. **(Proposed for Phase 3)** Addition of solids de-watering, ion exchange, de-carbonization, and crystallization.

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality[16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Phase 1	mg/L	Daily Max	-	-	-	-	-	See Outfall 001 for water quality analysis for TRC						-	No Limitation or Monitoring
Phases 2 thru 4	mg/L	Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
Total Residual Chlorine (TRC)	WQBELs for TRC are being established at Outfall 001 for all phases of the project. Chlorine is proposed for use in the ITT to reduce biological fouling in the MBRs. Consistent with 6 NYCRR 1.13(a), beginning in Phase 2, the permit includes monitoring for TRC at Outfall 01B to provide data needed to assess and maintain the performance of the treatment system and to determine contribution of this source towards the total discharge at Outfall 001.														
Phase 1	mg/L	Daily Max	-	-	-	-	-	See Outfall 001 for water quality analysis for fluoride						-	No Limitation or Monitoring
Phases 2 thru 4	mg/L	Daily Max	-	7.62	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
Fluoride	See Outfall 001 for water quality analysis and WQBELs for fluoride. Fluoride is a pollutant of concern in process wastewater contributed to the ITT influent by Micron. Consistent with 6 NYCRR 750-1.13(a), beginning in Phase 2, the permit includes fluoride monitoring at Outfall 01B to collect data needed to assess and maintain the performance of the treatment system and to determine contribution of this source towards the total discharge at Outfall 001.														
Phase 1	µg/L	Daily Max	-	-	-	-	-	See Outfall 001 for water quality analysis for aluminum						-	No Limitation or Monitoring
Phases 2 thru 4	µg/L	Daily Max	-	600	-	**Monitor**	6 NYCRR 750-1.13							-	Monitor 750-1.13
Aluminum, Total	Aluminum is identified as a parameter of concern for the ITT effluent.[17] Consistent with 6 NYCRR 750-1.13(a), beginning in Phase 2, the permit includes monitoring for total aluminum at Outfall 01B to collect data needed to assess and maintain the performance of the treatment system and to determine contribution of this source towards the total discharge at Outfall 001.														

[17] See *Table 1-2. FAB1 and FAB2 Evaluation Basis of Design* and *Figure J-1 Alternative 11: OCWEP IWWTP FAB2 Mass Balance* in the engineering report titled "Oak Orchard Industrial Wastewater Treatment Plant and Water Reclamation Facility Conceptual Design Engineering Report" (August 2025). Additional parameters also identified in the application submitted by the permittee.

Outfall #	01B	**Description of Wastewater:** Industrial Treatment Train (ITT) - treated process wastewater **Type of Treatment: (Proposed for Phase 2)** Equalization and diversion tanks, influent screening, biological treatment in mixed anoxic tanks followed by aeration tanks, membrane bioreactors (MBRs), UV disinfection. **(Proposed for Phase 3)** Addition of solids de-watering, ion exchange, de-carbonization, and crystallization.

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality [16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Additional Parameters of Concern[17] (No Limitation or Monitoring Specified)															
All Phases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Alkalinity (as $CaCO_3$)	There is no applicable water quality standards or TBELs for alkalinity (as $CaCO_3$). Therefore, no limitation or monitoring is specified for alkalinity.														
All Phases	-	-	-	-	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Total Organic Carbon (TOC)	There are no applicable numeric water quality standards or TBELs for TOC. Total organic carbon in the effluent will be controlled by TBELs for both $CBOD_5$ and TSS at Outfall 01B. Therefore, no limitation or monitoring is specified for TOC at Outfall 01B.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 Dissolved Oxygen for water quality analysis						-	No Limitation or Monitoring
Chemical Oxygen Demand (COD)	There are no applicable numeric water quality standards or TBELs for COD. COD affects DO concentrations in the receiving waterbody. See Outfall 001 Dissolved Oxygen for water quality analysis. TBELs for $CBOD_5$ and ammonia (as N) are being established at Outfall 01B, and WQBELs for UOD and DO are being established at Outfall 001, limiting oxygen-demanding substances in the effluent. Therefore, no limitation or monitoring is necessary for COD at Outfall 01B.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Chloride	A numeric water quality standard for chloride does not exist for Class B waterbodies. There are no applicable TBELs for chloride. Chloride is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring is being specified for chloride as an individual species at Outfall 01B.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for nitrate						-	No Limitation or Monitoring
Nitrate (as N)	See Outfall 001 for water quality analysis for nitrate. There is no applicable numeric water quality standard for nitrate (as N). There are no applicable TBELs for nitrate. Therefore, no limitation or monitoring is specified for nitrate at Outfall 01B.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for total nitrogen						-	No Limitation or Monitoring
Total Nitrogen (as N)	See Outfall 001 for water quality analysis for total nitrogen. There is no applicable numeric water quality standard for total nitrogen (as N). There are no applicable TBELs for total nitrogen. Therefore, no limitation or monitoring is specified for total nitrogen at Outfall 01B.														

Outfall #	01B	**Description of Wastewater:** Industrial Treatment Train (ITT) - treated process wastewater
		Type of Treatment: (Proposed for Phase 2) Equalization and diversion tanks, influent screening, biological treatment in mixed anoxic tanks followed by aeration tanks, membrane bioreactors (MBRs), UV disinfection. **(Proposed for Phase 3)** Addition of solids de-watering, ion exchange, de-carbonization, and crystallization.

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality [16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Sulfate	A numeric water quality standard for sulfate does not exist for Class B waterbodies. There are no applicable TBELs for sulfate. Sulfate is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring is being specified for sulfate as an individual species at Outfall 01B.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Total Silica	A numeric water quality standard for sulfate does not exist for Class B waterbodies. There are no applicable TBELs for sulfate. Silica is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring is being specified for total silica at Outfall 01B.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Barium, Total	A numeric water quality standard for total barium does not exist for Class B waterbodies. There are no applicable TBELs for barium. Barium is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality; therefore, no limitation or monitoring has been specified for barium as an individual species at Outfall 01B.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Calcium, Total	A numeric water quality standard for total calcium does not exist for Class B waterbodies. There are no applicable TBELs for calcium. Calcium is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are be protective of water quality; therefore, no limitation or monitoring has been specified for calcium at Outfall 01B.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for copper						-	No Limitation or Monitoring
Copper, Total	See Outfall 001 for reasonable potential analysis for copper. There are no applicable TBELs for total copper. Therefore, no limits or monitoring are established for copper at Outfall 01B.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Iron, Total	A numeric water quality standard for total recoverable iron does not exist for Class B waterbodies. There are no applicable TBELs for iron. Iron is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality. Therefore, no limits or monitoring are specified at Outfall 01B.														

Outfall #	01B	**Description of Wastewater:** Industrial Treatment Train (ITT) - treated process wastewater **Type of Treatment: (Proposed for Phase 2)** Equalization and diversion tanks, influent screening, biological treatment in mixed anoxic tanks followed by aeration tanks, membrane bioreactors (MBRs), UV disinfection. **(Proposed for Phase 3)** Addition of solids de-watering, ion exchange, de-carbonization, and crystallization.

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality [16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Magnesium, Total	A numeric water quality standard for total magnesium does not exist for Class B waterbodies. There are no applicable TBELs for magnesium. Magnesium is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality. Therefore, no limits or monitoring are specified at Outfall 01B.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Potassium, Total	A numeric water quality standard for total magnesium does not exist for Class B waterbodies. There are no applicable TBELs for potassium. Potassium is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality. Therefore, no limits or monitoring are specified at Outfall 01B.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for TDS						-	No Limitation or Monitoring
Sodium, Total	A numeric water quality standard for total sodium does not exist for Class B waterbodies. There are no applicable TBELs for sodium. Sodium is a dissolved solid. WQBELs for TDS included in the permit for Outfall 001 are protective of water quality. Therefore, no limits or monitoring are specified at Outfall 01B.														
All Phases	-	-	-	-	-	-	-	See Outfall 001 for water quality analysis for zinc						-	No Limitation or Monitoring
Zinc, Total	See Outfall 001 for reasonable potential analysis. There are no applicable TBELs for total zinc. Therefore, no limits or monitoring are established for zinc at Outfall 01B.														
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	See Outfall 001 Benzene-sulfonic acid, 4- ethenyl-, sodium salt, homopolymer for water quality analysis						-	No Limitation or Monitoring
Benzene-sulfonic acid, 4-ethenyl-, sodium salt, homopolymer	Benzenesulfonic acid, 4- ethenyl-, sodium salt, homopolymer is a linear alkyl benzene sulfonate (LAS). See Outfall 001 for reasonable potential analysis. Benzenesulfonic acid, 4- ethenyl-, sodium salt, homopolymer is expected to be present in the influent to the ITT but absent from the effluent (<10 µg/L). There are no applicable TBELs. There are no approved test methods under 40 CFR Part 136 for benzenesulfonic acid, 4- ethenyl-, sodium salt, homopolymer. Therefore, no limitation or monitoring is specified for benzenesulfonic acid, 4- ethenyl-, sodium salt, homopolymer at Outfall 01B.														

Outfall #	01B	**Description of Wastewater:** Industrial Treatment Train (ITT) - treated process wastewater **Type of Treatment: (Proposed for Phase 2)** Equalization and diversion tanks, influent screening, biological treatment in mixed anoxic tanks followed by aeration tanks, membrane bioreactors (MBRs), UV disinfection. **(Proposed for Phase 3)** Addition of solids de-watering, ion exchange, de-carbonization, and crystallization.

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality [16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	See Outfall 001 5-Chloro-2-methyl-4-isothiazolin-3-one for water quality analysis						-	No Limitation or Monitoring
5-Chloro-2-methyl-4-isothiazolin-3-one	5-chloro-2-methyl-4-isothiazolin-3-one is an isothiazolone. There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for 5-chloro-2-methyl-4-isothiazolin-3-one or total isothiazolones. Therefore, consistent with TOGS 1.3.7, DEC is reviewing availability of alternative test methods. Due to lack of currently identified testing methods, no limit or monitoring is specified at Outfall 01B.														
All Phases	mg/L	-	-	<0.010 Expected Absent	-	-	-	See Outfall 001 Ethylene Glycol for water quality analysis						-	No Limitation or Monitoring
Ethylene Glycol	Ethylene glycol is expected to be present in the influent to the ITT but absent from the effluent (<10 µg/L); therefore, there is no reasonable potential to cause or contribute to an exceedance of the WQS. No Limitation or monitoring is specified for ethylene glycol at Outfall 01B.														
All Phases	µg/L	-	-	>10 Expected Present	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
1-Hydroxy-benzotriazole	There are no applicable water quality standards for 1-hydroxybenzotriazole to a class B waterbody. There are no applicable TBELs. There are no approved methods for 1-hydroxybenzotriazole under 40 CFR Part 136. Therefore, no limitation or monitoring is specified for 1-hydroxybenzotriazole at Outfall 01B.														
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Methoxyirane polymer with oxirane, ether with 2,4,7,9-tetramethyl-5-decyne-4,7-cicl (2:1)	There are no applicable numeric water quality standards for methoxyirane polymer with oxirane, ether with 2,4,7,9-tetramethyl-5-decyne-4,7-cicl (2:1). There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for methoxyirane polymer with oxirane, ether with 2,4,7,9-tetramethyl-5-decyne-4,7-cicl (2:1). Therefore, no limitation or monitoring is specified for methoxyirane polymer with oxirane, ether with 2,4,7,9- tetramethyl-5-decyne-4,7-cicl (2:1) at Outfall 01B.														
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
3-Methoxy-3-methyl-1-butanol	There are no applicable numeric water quality standards for 3-methoxy-3-methyl-1-butanol. There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for 3-methoxy-3-methyl-1-butanol. Therefore, no limitation or monitoring is specified for 3-methoxy-3-methyl-1-butanol at Outfall 01B.														

Outfall #	01B	**Description of Wastewater:** Industrial Treatment Train (ITT) - treated process wastewater
		Type of Treatment: (Proposed for Phase 2) Equalization and diversion tanks, influent screening, biological treatment in mixed anoxic tanks followed by aeration tanks, membrane bioreactors (MBRs), UV disinfection. **(Proposed for Phase 3)** Addition of solids de-watering, ion exchange, de-carbonization, and crystallization.

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality [16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
6-Methyl-benzotriazole	There are no applicable numeric water quality standards for 6-methylbenzotriazole to a class B waterbody. There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for 6-methylbenzotriazole. Therefore, no limitation or monitoring is specified for 6-methylbenzotriazole at Outfall 01B.														
All Phases	µg/L	-	-	>10 Expected Present	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Oxirane, methyl-, polymer with oxirane	There are no applicable water quality standards for oxirane, methyl-, polymer with oxirane. There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for oxirane, methyl-, polymer with oxirane. Therefore, no limitation or monitoring is specified for oxirane, methyl-, polymer with oxirane at Outfall 01B..														
All Phases	-	-	-	Unknown	-	-	See Outfall 001 Ammonia for water quality analysis							-	No Limitation or Monitoring
Poly(acrylic acid) ammonium salt	Poly(acrylic acid) ammonium salt, or ammonium polyacrylate, was identified in the application as potentially present in the effluent of the ITT. See Outfall 001 for reasonable potential analysis. No limitation or monitoring is specified for ammonium polyacrylate at Outfall 01B.														
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	See Outfall 001 polyethylene glycol for water quality analysis						-	No Limitation or Monitoring
Polyethylene glycol	There are no applicable numeric water quality standards for polyethylene glycol. There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for polyethylene glycol. Therefore, no limitation or monitoring is specified for polyethylene glycol at Outfall 01B.														
All Phases	µg/L	-	-	>10 Expected Present	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
N,N,N',N'-Tetra-ethylethylene-diamine	There is no applicable numeric water quality standard for N,N,N',N'-tetraethylethylenediamine. There are no applicable TBELs. Therefore, no limitation or monitoring is specified for N,N,N',N'-tetraethylethylenediamine at Outfall 01B.														

Outfall #	01B	**Description of Wastewater:** Industrial Treatment Train (ITT) - treated process wastewater
		Type of Treatment: (Proposed for Phase 2) Equalization and diversion tanks, influent screening, biological treatment in mixed anoxic tanks followed by aeration tanks, membrane bioreactors (MBRs), UV disinfection. **(Proposed for Phase 3)** Addition of solids de-watering, ion exchange, de-carbonization, and crystallization.

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality[16]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	See Outfall 001 TMAH for water quality analysis						-	No Limitation or Monitoring
Tetramethyl-ammonium hydroxide (TMAH)	TMAH is a quaternary ammonium compound (QAC). See Outfall 001 for reasonable potential analysis. There are no applicable TBELs. There are no approved test methods for TMAH or QACs under 40 CFR 136. Therefore, no limitation or monitoring is specified for TMAH at Outfall 01B.														
All Phases	µg/L	-	-	<10 Expected Absent	-	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
1,2,4-Triazole	There are no applicable numeric water quality standards for 1,2,4-triazole to a class B waterbody. There are no applicable TBELs. There are no approved methods under 40 CFR Part 136 for 1,2,4-triazole. Therefore, no limitation or monitoring is specified for 1,2,4-triazole at Outfall 01B.														

Outfall 01B Emerging Contaminants

Emerging Contaminants Outfall 01B															
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[18]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Notes: See Emerging Contaminant Monitoring section above. Consistent with 6 NYCRR 750-1.13(b), the permit includes monitoring for all 40 PFAS compounds at Outfall 01B to provide information regarding the character of the industrial wastewater and to support establishment of future standards or TBELs.															
Perfluoro-butanoic Acid (PFBA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														

[18] Predicted Effluent Quality: The industrial treatment train has not yet been constructed; therefore, no effluent data is available to calculate effluent quality. Effluent quality is projected based on the design and calculations presented in the engineering report titled "*Oak Orchard Industrial Wastewater Treatment Plant and Water Reclamation Facility Conceptual Design Engineering Report*" (August 20, 2025).

Emerging Contaminants Outfall 01B

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality [18]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Perfluoro-pentanoic Acid (PFPeA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-hexanoic Acid (PFHxA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-heptanoic Acid (PFHpA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-octanoic Acid (PFOA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-nonanoic Acid (PFNA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-decanoic Acid (PFDA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-undecanoic Acid (PFUnA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-dodecanoic Acid (PFDoA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-tridecanoic Acid (PFTriA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														

Emerging Contaminants Outfall 01B

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[18]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Perfluoro-tetradecanoic Acid (PFTeA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-butanesulfonic Acid (PFBS)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-pentanesulfonic Acid (PFPeS)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-hexanesulfonic Acid (PFHxS)	ng/L	Daily Max	-	< 2.0	0 / 8	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-heptanesulfonic Acid (PFHpS)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-octanesulfonic Acid (PFOS)	ng/L	Daily Max	-	-	-	-	-	See Outfall 001 for water quality analysis						-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-nonanesulfonic Acid (PFNS)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-decanesulfonic Acid (PFDS)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-dodecane-sulfonic Acid (PFDoS)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														

Emerging Contaminants Outfall 01B

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[18]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Perfluoro-octane-sulfonamide (FOSA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
N-methyl Perfluoro-octanesulfon-amidoacetic Acid (NMeFOSAA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
N-ethyl Perfluoro-octanesulfon-amidoacetic Acid (NEtFOSAA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
4:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
6:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
8:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
N-ethyl Perfluoro-octanesulfon-amide (NEtFOSA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														

Emerging Contaminants Outfall 01B

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[18]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
N-methyl Perfluoro-octanesulfon-amide (NMeFOSA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
N-methyl Perfluoro-octanesulfon-amidoethanol (NMeFOSE)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
N-ethyl Perfluoro-octanesulfon-amidoethanol (NEtFOSE)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
9-Chlorohexadeca-fluoro-3-oxanonane-1-sulfonic Acid (9Cl-PF3ONS)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Hexafluoro-propylene Oxide Dimer Acid (HFPO-DA or GenX)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
11-Chloroeicosafluoro-3-oxaundecane-1-sulfonic Acid (11Cl-PF3OUdS)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														

Emerging Contaminants Outfall 01B

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality [18]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
3-Perfluoropropyl Propanoic Acid (3:3 FTCA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
2H,2H,3H,3H-Perfluoro-octanoic Acid (5:3 FTCA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
3-Perfluoroheptyl Propanoic Acid (7:3 FTCA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-4-methoxy-butanoic Acid (PFMBA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro-3-methoxy-propanoic Acid (PFMPA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														
Perfluoro(2-ethoxyethane)sulfonic Acid (PFEESA)	ng/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13(b)
	Consistent with 6 NYCRR 750-1.13(b) and USEPA memos dated April 28, 2022, and December 5, 2022, the permit includes monitoring to support establishment of future standards or performance-based requirements.														

Outfall 006

Outfall #	006	**Description of Wastewater:** Effluent reuse from municipal treatment train													
		Type of Treatment: Reverse osmosis, chemical addition													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality[19]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Upon startup of MTT effluent reuse system	MGD	Monthly Avg	-	-	-	**Monitor**	6 NYCRR 750-1.13(b)(1)	Discharge to industrial user, no environmental receiving waterbody.						-	Monitor 750-1.13(b)(1)
		Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13(b)(1)							-	Monitor 750-1.13(b)(1)
Flow Rate	Consistent with 6 NYCRR 750-1.13(b)(1), the permit includes flow monitoring at Outfall 006 to provide a total flow balance of all effluent leaving the facility. In combination with flow monitoring at Outfall 001 and new Outfall 007, flow monitoring at Outfall 006 provides a complete balance of treated effluent flows leaving the facility.														

Outfall 007

Outfall #	007	**Description of Wastewater:** Effluent reuse from industrial treatment train													
		Type of Treatment: Ion exchange, decarbonization, high pH reverse osmosis, chemical addition													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Predicted Effluent Quality	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Upon startup of ITT effluent reuse system	MGD	Monthly Avg	-	-	-	**Monitor**	6 NYCRR 750-1.13(b)(1)	Discharge to industrial user, no environmental receiving waterbody.						-	Monitor 750-1.13(b)(1)
		Daily Max	-	-	-	**Monitor**	6 NYCRR 750-1.13(b)(1)							-	Monitor 750-1.13(b)(1)
Flow Rate	Consistent with 6 NYCRR 750-1.13(b)(1), the permit includes flow monitoring at Outfall 007 to provide a total flow balance of all effluent leaving the facility. In combination with flow monitoring at Outfall 001 and new Outfall 006, flow monitoring at Outfall 007 provides a complete balance of treated effluent flows leaving the facility.														

[19] Predicted Effluent Quality: The effluent reuse systems for the MTT and the ITT have not yet been constructed, therefore no effluent data is available to calculate effluent 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) and 750-1.10(d), CWA sections 402(o), 303(d)(4), ECL 17-0809, 40 CFR 122.44(*l*)
Best Management Practices (BMPS) for CSOs	6 NYCRR 750-2.8(a)(2)
Environmental Benefits Permit Strategy (EBPS)	6 NYCRR 750-1.18, NYS ECL 17-0817(4), TOGS 1.2.2 (revised January 25,2012)
Exceptions for Type I SSO Outfalls (bypass)	6 NYCRR 750-2.8(b)(2), 40 CFR 122.41
Mercury Multiple Discharge Variance	Division of Water Program Policy 1.3.10 (DOW 1.3.10)
Mixing Zone and Critical Water Information	TOGS 1.3.1 & Amendments
PCB Minimization Program	40 CFR Part 132 Appendix F Procedure 8, 6 NYCRR 750-1.13(a) and 750-1.14(f), and TOGS 1.2.1
Pollutant Minimization Program (PMP)	6 NYCRR 750-1.13(a), 750-1.14(f), TOGS 1.2.1
Schedules of Compliance	6 NYCRR 750-1.14
Sewage Pollution Right to Know (SPRTK)	NYS ECL 17-0826-a, 6 NYCRR 750-2.7
State Administrative Procedure Act (SAPA)	State Administrative Procedure Act Section 401(2), 6 NYCRR 621.11(l)
State Environmental Quality Review (SEQR)	6 NYCRR Part 617
USEPA Effluent Limitation Guidelines (ELGs)	40 CFR Parts 405-471
USEPA National CSO Policy	33 USC Section 1342(q)
Whole Effluent Toxicity (WET) Testing	TOGS 1.3.2
General Provisions of a SPDES Permit Department Request for Additional Information	NYCRR 750-2.1(i)

Outfall and Receiving Water Information

Impaired Waters

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

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

Interstate Water Pollution Control Agencies

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

Existing Effluent Quality

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

Permit Requirements

Basis for Effluent Limitations

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

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

Anti-backsliding

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

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

Antidegradation Policy

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

Effluent Limitations

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

Technology-based Effluent Limitations (TBELs)

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

Water Quality-Based Effluent Limitations (WQBELs)

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

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, 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.

Action Levels

As defined in 6 NYCRR 750-1.2(a)(2), when used in a SPDES permit, an Action Level means a monitoring requirement characterized by a numerical value that, when exceeded, triggers additional permittee monitoring and DEC review to determine if numerical effluent limitations should be imposed.

TOGS 1.2.1 Section I.B.3 describes the application of an Action Level in a permit. If the Action Level is exceeded, the permittee is required to conduct confirmatory monitoring. If Action Levels are routinely or excessively exceeded, in accordance with the Environmental Benefit Permit Strategy (EBPS), DEC will adjust the Action Levels or replace with limits. An Action Level is not a limit, and an exceedance does not constitute a permit violation unless the confirmatory sampling is not performed in accordance with the permit requirements.

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). 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.

Emerging Contaminants

Emerging Contaminants, such as Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), and 1,4-Dioxane (1,4-D), have been used in a wide variety of consumer and industrial products as well as in manufacturing processes for decades. Based on available research, water quality assessments for 1,4-D will follow existing WQBEL development. PFOA and PFOS do not break down easily; therefore, their presence in wastewater can remain a concern for years following their discontinued use. As the science surrounding these

contaminants is still evolving, additional monitoring is needed to better understand potential sources and background levels. For more information on emerging contaminants, please see the DEC Division of Water web page: Emerging Contaminants In NY's Waters - NYSDEC.

Schedule(s) of Additional Submittals

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