State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**4952**	NAICS Code:	**221320**	SPDES Number:	**NY 002 2446**
Discharge Class (CL):		**05**		DEC Number:	**3-3348-00055/00003**
Toxic Class (TX):		**T**		Effective Date (EDP):	**TBD**
Major-Sub Drainage Basin:		**13 - 03**		Expiration Date (ExDP):	**TBD**
Water Index Number:		**H-89**	Item No.: **862 - 77**	Modification Dates (EDPM):	
Compact Area:		**-**			

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:	**Town of New Windsor**	Attention:	**Supervisor and Town Board**		
Street:	**555 Union Avenue**				
City:	**New Windsor**	State:	**NY**	Zip Code:	**12553**
Email:		Phone:			

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL														
Name:	**New Windsor (T) Sewage Treatment Plant**													
Address / Location:	**145 Caesars Lane**									County:	**Orange**			
City:	**New Windsor**					State:	**NY**			Zip Code:	**12553**			
Facility Location:		Latitude:	**41**	°	**27**	’	**39**	” N	& Longitude:	**74**	°	**01**	’	**35** ” W
Primary Outfall No.:	**001**	Latitude:	**41**	°	**27**	’	**36**	” N	& Longitude:	**74**	°	**01**	’	**35** ” W
Outfall Description:	**Treated Sanitary**	Receiving Water:	**Moodna Creek**						Class:	**C**	Standard:	**-**		

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:

Permit Administrator:	Rebecca S. Crist		
Address:	21 South Putt Corners Road New Paltz, NY 12561		
Signature:		Date:	

Contents

DEFINITIONS

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

PERMIT LIMITS, LEVELS AND MONITORING (During Construction)

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All Year (except where noted)	Moodna Creek	EDP	Upon Construction Completion + 60 Days

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly Average	5.0	MGD			Continuous	Recorder		X	
	Daily Maximum	Monitor	MGD			Continuous	Recorder		X	
BOD_5	Monthly Average	30	mg/L	1300	lbs/d	1/Week	24-hr. Comp.	X	X	1
	7-Day Average	45	mg/L	1900	lbs/d	1/Week	24-hr. Comp.		X	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	1300	lbs/d	1/Week	24-hr. Comp.	X	X	1
	7-Day Average	45	mg/L	1900	lbs/d	1/Week	24-hr. Comp.		X	
Settleable Solids	Daily Maximum	0.3	mL/L			2/Day	Grab		X	
pH	Daily Minimum	6.0	SU			2/Day	Grab		X	
	Daily Maximum	9.0	SU			2/Day	Grab		X	
Ammonia (as N) June 1 – Sept. 30	Monthly Average	14	mg/L			1/Week	24-hr. Comp.		X	
Ammonia (as N) Oct. 1 – May 31	Monthly Average	20	mg/L			1/Week	24-hr. Comp.		X	
Temperature	Monthly Average	Monitor	ºC			2/Day	Grab		X	
	Daily Maximum	Monitor	ºC			2/Day	Grab		X	
Dissolved Oxygen	Daily Minimum	Monitor	mg/L			2/Day	Grab		X	
Total Lead	Daily Maximum	44	µg/L			1/Month	24-hr. Comp.		X	
Total Mercury	Daily Maximum	50	ng/L			Quarterly	Grab		X	
Bis(2-ethylhexyl) phthalate	Daily Maximum	7.5	µg/L			1/Month	24-hr. Comp.		X	2
Total Unchlorinated Phenols	Monthly Average	55	µg/L			1/Month	24-hr. Comp.		X	2
ACTION LEVEL PARAMETERS	Type	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Total Copper	Daily Maximum	Monitor	µg/L	3.6	lbs/d	Quarterly	Grab		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/Week	Grab		X	
Coliform, Fecal	7-Day Geometric Mean	400	No./ 100 mL			1/Week	Grab		X	
Chlorine, Total Residual	Daily Maximum	55	µg/L	Monitor	lbs/d	2/Day	Grab		X	3

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			1.8	TUa	Quarterly	See footnote		X	4
WET - Acute Vertebrate	See footnote			1.8	TUa	Quarterly	See footnote		X	4
WET - Chronic Invertebrate	See footnote			11	TUc	Quarterly	See footnote		X	4
WET - Chronic Vertebrate	See footnote			11	TUc	Quarterly	See footnote		X	4

FOOTNOTES:

1. Effluent shall not exceed 30% and 20% of influent concentration values for BOD_5 & TSS respectively.

2. Composite samples shall be collected in accordance with 6 NYCRR 750-2.5(a)(2)(iii).

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. **Whole Effluent Toxicity (WET) Testing:**
   Testing Requirements – Chronic WET testing is required, but report both the acute and chronic results. Testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be Ceriodaphnia dubia (water flea - invertebrate) and Pimephales promelas (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 6:1 for acute, and 11:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

   Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in **4** and **9**.

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

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

   WET Testing Action Level Exceedances - If an action level is exceeded then the Department may require the permittee to conduct additional WET testing including Acute and/or Chronic tests. Additionally, the permittee may be required to perform a Toxicity Identification/Reduction Evaluation (TI/RE) in accordance with Department

guidance. Enforceable WET limits may also apply. The permittee shall be notified in writing by their Regional DEC office of additional requirements. The written notification shall include the reason(s) why such testing, TI/RE and/or limits are required.

PERMIT LIMITS, LEVELS AND MONITORING (Post Construction)

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	All Year (except where noted)	Moodna Creek	Upon Construction Completion + 60 Days	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	8.0	MGD			Continuous	Recorder		X	
	Daily Maximum	Monitor	MGD			Continuous	Recorder		X	
pH	Range	6.5-8.5	SU			3/Day	Grab		X	
Temperature	Monthly Average	Monitor	ºC			3/Day	Grab		X	
	Daily Maximum	Monitor	ºC			3/Day	Grab		X	
Dissolved Oxygen	Daily Minimum	4.0	mg/L			2/Week	Grab		X	
BOD_5	7-Day Average	20	mg/L	1300	lbs/d	2/Week	24-hr. Comp.	X	X	1
Total Suspended Solids (TSS)	7-Day Average	10	mg/L	670	lbs/d	2/Week	24-hr. Comp.	X	X	1
Settleable Solids	Daily Maximum	0.1	mL/L			3/Day	Grab		X	
Ammonia (as N) June 1 - Oct. 31	Monthly Average	1.2	mg/L	82	lbs/d	2/Week	24-hr. Comp.		X	
Ammonia (as N) Nov. 1 – May 31	Monthly Average	1.9	mg/L	120	lbs/d	2/Week	24-hr. Comp.		X	
Total Mercury	12 MRA	16	ng/L			Quarterly	Calculated	X	X	6,9
	Daily Maximum	50	ng/L			Quarterly	Grab	X	X	9
Total Lead	Daily Maximum	13	µg/L			1/Month	24-hr. Comp.		X	
Total Copper	Daily Maximum	21	µg/L			1/Month	24-hr. Comp.		X	
Bis(2-ethylhexyl) phthalate	Daily Maximum	7.5	µg/L			1/Month	24-hr. Comp.		X	5,10
Phenolic Compounds (total phenols)	Monthly Average	5.0	µg/L			1/Month	24-hr. Comp.		X	7,8
Biennial Pollutant Scan						1/Two Years	-		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			1/Week	Grab		X	
Coliform, Fecal	7-Day Geometric Mean	400	No./ 100 mL			1/Week	Grab		X	
Chlorine, Total Residual	Daily Maximum	0.03	mg/L			2/Day	Grab		X	3,4

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	Quarterly	See footnote		X	9,11
WET - Acute Vertebrate	See footnote			0.3	TUa	Quarterly	See footnote		X	9,11
WET - Chronic Invertebrate	See footnote			1.0	TUc	Quarterly	See footnote		X	9,11
WET - Chronic Vertebrate	See footnote			1.0	TUc	Quarterly	See footnote		X	9,11

FOOTNOTES:

1. Effluent shall not exceed 15% of influent concentration values for BOD_5 & TSS.

2. 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.

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. This is a Compliance Level. The calculated WQBEL is 0.005 mg/L.

5. This is a Compliance Level. The calculated WQBEL is 0.6 µg/L.

6. The 12-month rolling average for total mercury is defined as the sum of the current month's monthly average concentration 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. At least 4 individual manual grab samples must be collected over the course of 24 hours analyzed separately, and the concentrations averaged. Alternatively, grab samples may be collected in the field and composited in the laboratory and analyzed as a single sample if the results are equivalent to the arithmetic averaging of individual grab samples. Where effluent flows do not vary more than 10 percent over the course of composite sample collection, composite samples may be composed of equal size grab samples taken at equal time intervals. Where effluent flows do vary more than 10 percent over the course of sample collection, composite samples must be flow proportioned.

8. 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.

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

10. The permittee may develop and submit a sampling plan for approval for bis(2-ethylhexyl) phthalate sampling to determine if detections of bis(2-ethylhexyl) phthalate are from a source within the collection system, or from laboratory contamination. If the bis(2-ethylhexyl) phthalate is in fact detected within the collection system, the permittee must determine what that source is. If it can be determined that the source of the bis(2-ethylhexyl) phthalate is from laboratory contamination, the permittee may apply for a permit modification to remove the bis(2-ethylhexyl) phthalate limit.

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 Department. The test species shall be Ceriodaphnia dubia (water flea - invertebrate) and Pimephales promelas (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution

series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 1:1 for acute, and 1:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in **4** and **9**.

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

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

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

STORMWATER POLLUTION PREVENTION REQUIREMENTS

NO EXPOSURE CERTIFICATION

The permittee submitted a Conditional Exclusion for No Exposure Form on June 30, 2023, certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and/or stormwater runoff. The permittee must maintain a condition of no exposure for the exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to stormwater, the permittee must notify the Regional Water Engineer. The permittee must recertify a condition of no exposure every five years by completing the “No Exposure Certification Form” found on the NYSDEC website.

MERCURY MINIMIZATION PROGRAM (MMP) - Type I

1. General - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below, to reduce mercury effluent levels with the goal of achieving the WQBEL of 0.7 ng/L.

2. MMP Elements - The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements as described in detail below:

   a. Monitoring - Monitoring at Outfall 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[1]. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate. Monitoring must be coordinated so that the results can be effectively compared between locations.

      Minimum required monitoring is as follows:

      i. Sewage Treatment Plant Influent and/or Effluent – The permittee must collect samples at the location(s) and frequency as specified in the SPDES permit limitations table.

      ii. *Key Locations* and *Potential Mercury Sources* – The permittee must sample *key locations*, chosen to identify *potential mercury sources*, at least semi-annually. Sampling of discharges from dental facilities in compliance with 6 NYCRR 374.4 is not required.

      iii. Hauled Wastes – The permittee must establish procedures for the acceptance of hauled waste to ensure the hauled waste is not a potential mercury source. Loads which may exceed 500 ng/L,[2] must receive approval from the Department prior to acceptance.

      iv. Decreased Monitoring Requirements - Facilities with EEQ at or below 12 ng/L are eligible for the following:
         1) Reduced requirements, through a permittee-initiated permit modification
            a) Conduct influent monitoring, sampling quarterly, in lieu of monitoring within the collection system, such as at *key locations*; and
            b) Conduct effluent compliance sampling quarterly.
         2) If a facility with reduced requirements reports discharges above 12 ng/L for two of four consecutive effluent samples, the Department may undertake a Department-initiated modification to remove the allowance of reduced requirements.
         3) Under the decreased permit requirements, the facility must continue to conduct a status report, as applicable in accordance with 2.c of this MMP, to determine if any waste streams have changed.

      v. Additional monitoring must be completed as required elsewhere in this permit (e.g., locations tributary to 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.

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

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

2. The permittee must inspect each dental facility at least once every five years to verify compliance with the wastewater treatment operation, maintenance, and notification elements of 6 NYCRR 374.4. Alternatively, the permittee may develop and implement an outreach program,[3] which informs users of their responsibilities, and collect the "Amalgam Waste Compliance Report for Dental Dischargers"[4] form, as needed, to satisfy the inspection requirements. The permittee must conduct the outreach program at least once every five years and ensure the "Amalgam Waste Compliance Report for Dental Dischargers" are submitted by new users, as necessary. The outreach program could be supported by a subset of site inspections.
3. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)a) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.

b) Other *potential mercury sources*
1. The permittee must maintain an inventory of other *potential mercury sources.*
2. The permittee must inspect other *potential mercury sources* once every five years. Alternatively, the permittee may develop and implement an outreach program which informs users of their responsibilities as *potential mercury sources.* The permittee must conduct the outreach program at least once every five years. The outreach program should be supported by a subset of site inspections.
3. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)b) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.

iii. Systems with CSO & Type II SSO Outfalls – Permittees must prioritize *potential mercury sources* upstream of CSOs and Type II SSOs for mercury reduction activities and/or controlled-release discharge.

iv. Equipment and Materials – Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.

v. Bulk Chemical Evaluation – For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. If possible, the permittee must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.

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 Outfall 001 for the previous reporting period;
ii. A list of known and *potential mercury sources* for Outfall 001
1) If the permittee meets the criteria for MMP Type IV, the permittee must notify the Department for a permittee-initiated modification;
iii. All actions undertaken, pursuant to the control strategy, during the previous reporting period;
iv. Actions planned, pursuant to the control strategy, for the upcoming reporting period; and
v. Progress towards achieving a dissolved mercury concentration of 0.70 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation and/or installation/modification of a treatment system).

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

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

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

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

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

DEFINITIONS:

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

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

DISCHARGE NOTIFICATION REQUIREMENTS

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

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

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

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

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

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

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

OR:

NYSDEC Division of Water Regional Office Address:

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

(e) Upon request, the permittee shall make available electronic or hard copies of the sampling data to the public. In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained (either electronically or as a hard copy) on record for a period of five years.

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

INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS

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

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

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

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

4. Program Submission(s): requests for approval or modification of the POTW Pretreatment Program submitted in accordance with 40 CFR 403.11 or 403.18 and approved by USEPA on **September 4, 1995**.

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

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

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

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

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

INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

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

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

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

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

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

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

INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

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

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

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

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

E. ADDITIONAL PRETREATMENT CONDITIONS:
1. Notification of Material Change: Facility shall notify the NYSDEC prior to the addition of any SIUs or CIUs which may materially change the nature of the discharge from the POTW or increase the discharge of one or more substances authorized in this permit or discharge a substance not currently authorized in this permit (6 NYCRR Part 750-2.9(a)(1)). The noticed act is prohibited until the Department determines whether a permit modification is necessary pursuant to 750-2.9(a)(2).

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date[5]
	SCHEDULE OF COMPLIANCE STATUS REPORTS[6] Submit interim status reports on the progress related to meeting the specified Schedule of Compliance items.	EDP + 9 Months, and every 9 months thereafter
	DESIGN DOCUMENTS The permittee shall submit approvable[7] Design Documents, and Plans and Specifications for the selected alternative that will ensure compliance with final effluent limitations.	EDP + 6 Months
	COMPLETE CONSTRUCTION The permittee shall provide a Certificate of Completion[8] to the Department that the disposal system has been fully completed in accordance with the approved Design Documents.	10/1/2026
	COMMENCE OPERATION Following receipt of Department acceptance of Certificate of Completion, the permittee shall comply with the final effluent limitation(s) described in this permit.	Upon Department Acceptance
Unless noted otherwise, the above actions are one-time requirements.		

b) The permittee shall submit a written notice of compliance or non-compliance 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 such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:
   1. A short description of the non-compliance;
   2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
   3. Any details which tend to explain or mitigate an instance of non-compliance; and
   4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

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

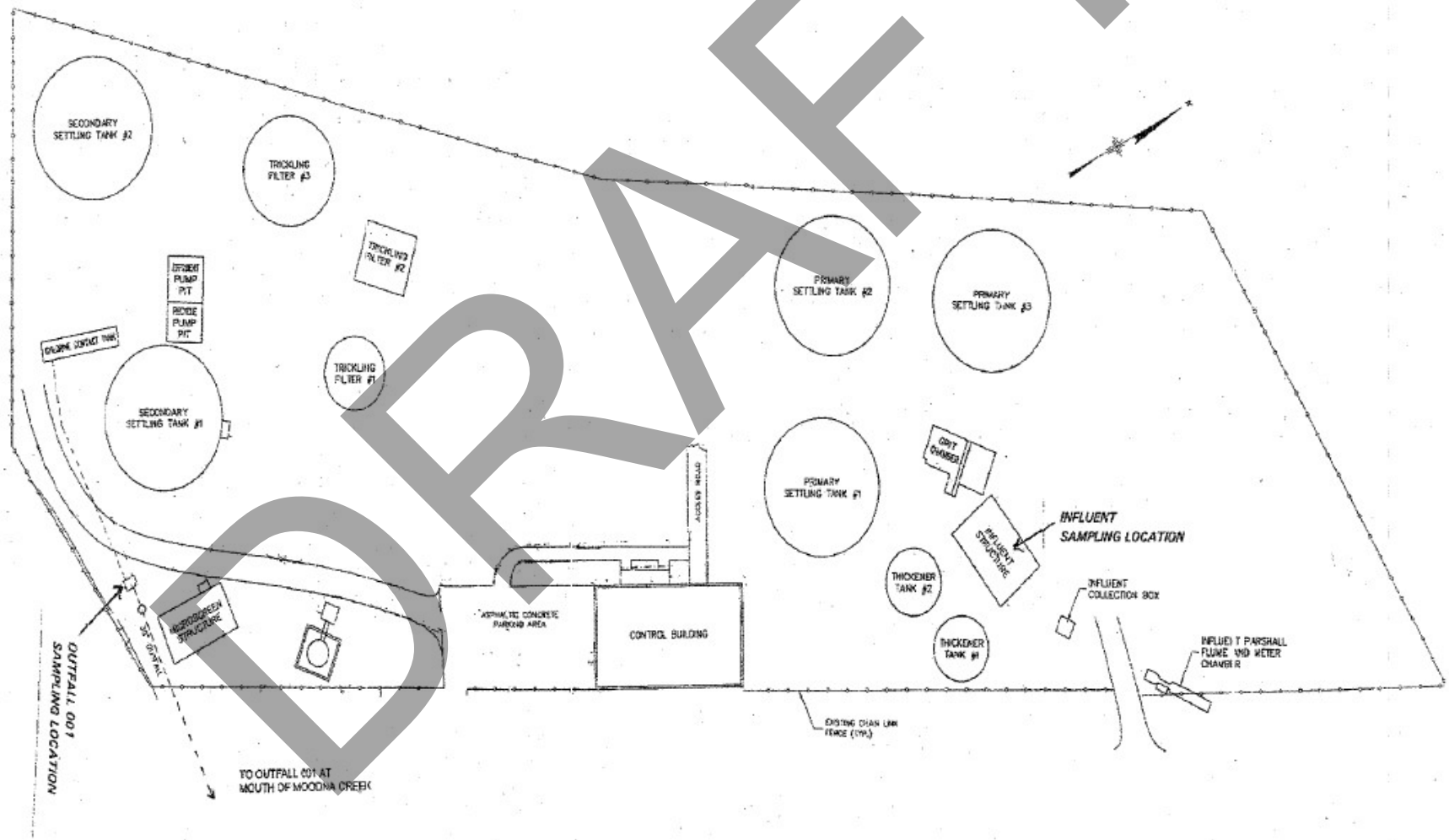
[5] 6 NYCRR 750-1.14 (a)
[6] 6 NYCRR 750-1.14 (b)
[7] 6 NYCRR 750 1.2 (a)(8)
[8] 6 NYCRR 750-2.10 (c)

MONITORING LOCATIONS – During Construction

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in the permit for the timeframe during construction, at the location(s) specified below:

Influent: Before the grit chamber

Effluent: After the chlorine contact tank

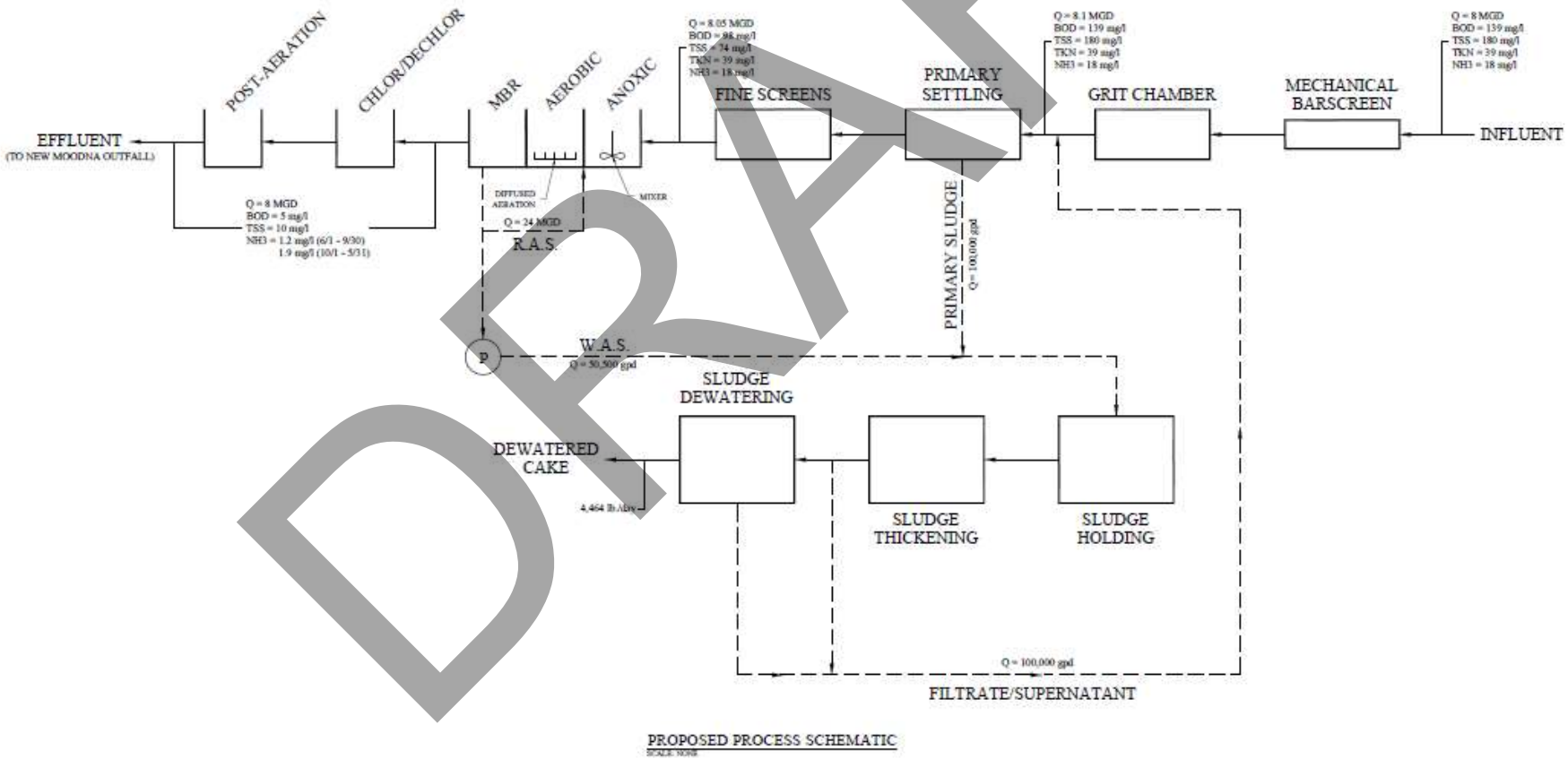


MONITORING LOCATIONS – Post Construction

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

Influent: Before the mechanical bar screen

Effluent: After the post-aeration tank



PROPOSED PROCESS SCHEMATIC

GENERAL REQUIREMENTS

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

B. General Conditions

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

C. Operation and Maintenance

1.	Proper Operation & Maintenance	6 NYCRR 750-2.8
2.	Bypass	6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7
3.	Upset	6 NYCRR 750-1.2(a)(94) & 2.8(c)

D. Monitoring and Records

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

E. Reporting Requirements

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

F. Planned Changes

1. The permittee shall give notice to the Department as soon as possible of planned physical alterations or additions to the permitted facility when:

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

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

GENERAL REQUIREMENTS (continued)

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

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

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

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

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

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

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

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

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by NYSDEC. Instructions on the use of NetDMR can be found at https://www.dec.ny.gov/chemical/103774.html. **Hardcopy paper DMRs will only be 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 3
220 White Plains Road, Suite 110, Tarrytown, NY 10591 Phone: (914) 803-8157

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

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	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	December DMR (January 28th)
001	ANNUAL FLOW CERTIFICATION The permittee shall submit an Annual Flow Certification form each year in accordance with 750-2.9(C)(4). The form shall be attached to the February DMR or submitted through nForm.	February DMR (March 28th)

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	SHORT-TERM HIGH-INTENSITY MONITORING PROGRAM The permittee shall collect 12 samples representative of normal discharge conditions and treatment operations over 12 months for Total Dissolved Solids, Nitrite (as N), Heptachlor Epoxide, and Methoxychlor. The permittee shall use approved EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136 for the determination of the concentrations of parameters listed. The permittee shall submit a summary of the results.	EDP + 13 months
001	WHOLE EFFLUENT TOXICITY (WET) TESTING WET testing shall be performed as required in the footnote of the permit limits table. The toxicity test report including all information requested of this permit shall be attached to your WET DMRs and sent to the WET@dec.ny.gov email address.	Within 60 days following the end of each monitoring period
001	STORMWATER NO EXPOSURE CERTIFICATION Permittee must recertify every five years a condition of no exposure to stormwater in order to continue to qualify for the no exposure exclusion. The No Exposure Certification Form can be found on the NYSDEC website.	6/30/2028 and every 5 years thereafter
001	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	***Maintained Onsite*** EDP + 12 months, annually thereafter
001	EMERGING CONTAMINANT SHORT-TERM MONITORING PROGRAM The permittee shall collect grab samples of both the influent and effluent from the facility's treatment system(s) associated with the identified outfall for Per-and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane (1,4-D), unless permittee receives written notification from the Department during this time that sampling can be discontinued. Samples must be analyzed utilizing EPA draft analytical method 1633 and EPA Method 8270D SIM or 8270E SIM, respectively. The samples must represent normal discharge conditions and treatment operations and shall be obtained on a quarterly basis for at least 4 consecutive quarters, unless written notification from the Department indicates otherwise. The results shall be reported through the "Emerging Contaminants Survey for POTWs" found at: https://www.dec.ny.gov/chemical/127939.html. The permittee shall initiate track down of potential sources by completing the "Emerging Contaminants Investigation Checklist for POTWs" available at the above link. The Department may periodically request updates and/or additional monitoring to check progress on track down investigations. Elements of the checklist may be used as permit conditions in future permit modifications.	EDP + 14 months Within 90 days of DEC written notification

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	**Required Action**	**Due Date**
001	PRETREATMENT PROGRAM Submit a report that briefly describes the permittee's program activities over the previous year. The report shall follow the guidelines contained in this permit and be submitted to the Regional Water Engineer and the Bureau of Water permits as well as the USEPA Region II office.	Within 60 days following the end of each reporting period

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 Town of New Windsor Caesars Lane Wastewater Treatment Facility NY0022446

Contents

Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) permittee-initiated permit modification has been drafted for the Caesars Lane Wastewater Treatment Facility. The changes to the permit are summarized below:

- Updated permit format, definitions, and general conditions
- Updated the primary outfall coordinates
- Updated the monthly average flow limit to 8.0 MGD
- Updated the pH range to 6.5-8.5 SU
- Updated the daily minimum dissolved oxygen limit to 4.0 mg/L
- Removed the monthly average BOD_5 limit
- Reduced the 7-day average BOD_5 limit to 20 mg/L
- Removed the monthly average TSS limit
- Reduced the 7-day average TSS limit to 10 mg/L
- Reduced the daily maximum settleable solids limit to 0.1 mL/L
- Reduced the summer monthly average ammonia limit to 1.2 mg/L and 82 lbs/day
- Reduced the winter monthly average ammonia limit to 1.9 mg/L and 120 lbs/day
- Added a 12-month rolling average mercury limit of 16 ng/L
- Reduced the daily maximum total lead limit to 13 µg/L
- Removed the total copper action level
- Added a daily maximum total copper limit of 21 µg/L
- Updated the daily maximum bis(2-ethylhexyl) phthalate limit to 7.5 µg/L
- Removed the total unchlorinated phenols limit
- Added a monthly average phenolic compound (total phenols) limit of 5 µg/L
- Reduced the daily maximum total residual chlorine limit to 0.03 mg/L
- Removed the total zinc action level
- Added a biennial pollutant scan requirement
- Reduced the WET action levels to 0.3 TUa and 1.0 TUc for acute and chronic, respectively
- Updated sampling frequency for all effluent parameters
- Updated the Stormwater Pollution Prevention requirements
- Updated the Mercury Minimization Program
- Updated the Schedule of Compliance
- Updated the monitoring locations
- Added a new process flow diagram
- Updated the Schedule of Additional Submittals

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

Administrative History

9/22/2017 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 8/31/2022. The 2017 permit, along with all subsequent modifications, has formed the basis of this permit.

1/8/2018 Permit was modified to update the compliance action deadlines for Bis(2-ethylhexyl) phthalate and Total Unchlorinated Phenols.

10/15/2021 The Town of New Windsor submitted a request to modify the permit to increase the design flow and relocate the outfall.

6/30/2022 Permit was modified to update compliance requirements for the permittee to submit all necessary permit applications, complete construction to comply with final effluent limitations for Ammonia (as N), Bis(2-ethylhexyl) phthalate and Total Unchlorinated Phenols, to submit interim status reports, and removed completed actions.

8/31/2022 The current permit was extended pursuant to SAPA[1].

9/28/2022 The Town of New Windsor submitted a NY-2A permit application.

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

Facility Information

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

The current 5.0 MGD treatment plant consists of:

- Preliminary Treatment: Mechanical bar screen and grit removal
- Primary Treatment: Primary clarification
- Secondary Treatment: Secondary clarification and trickling filters
- Disinfection: Chlorination and dechlorination

Sludge is aerobically digested, dewatered using a belt filter press, and then hauled offsite for disposal.

The proposed primary outfall (Outfall 001) will be a 4’ wide by 2’ deep by 80’ long channel that discharges to the Moodna Creek at the bank.

The facility is planning the following upgrades/improvements:

- Upgrade design flow to 8.0 MGD
- Plant headworks improvements (additional bar screen train, grit removal equipment)
- New MBR treatment system
- Addition of post aeration basin to increase effluent DO levels
- Construction of new administration/control building
- Relocation of outfall

The estimated timeline of improvements is set to begin June 2024 and end June 2026.

The facility accepts wastewater from the following municipalities:

Municipality	POSS # or SPDES #	Collection System
Town of New Windsor	NY0022446	Separate
Cornwall (T) POSS to New Windsor	NYS300100	Separate

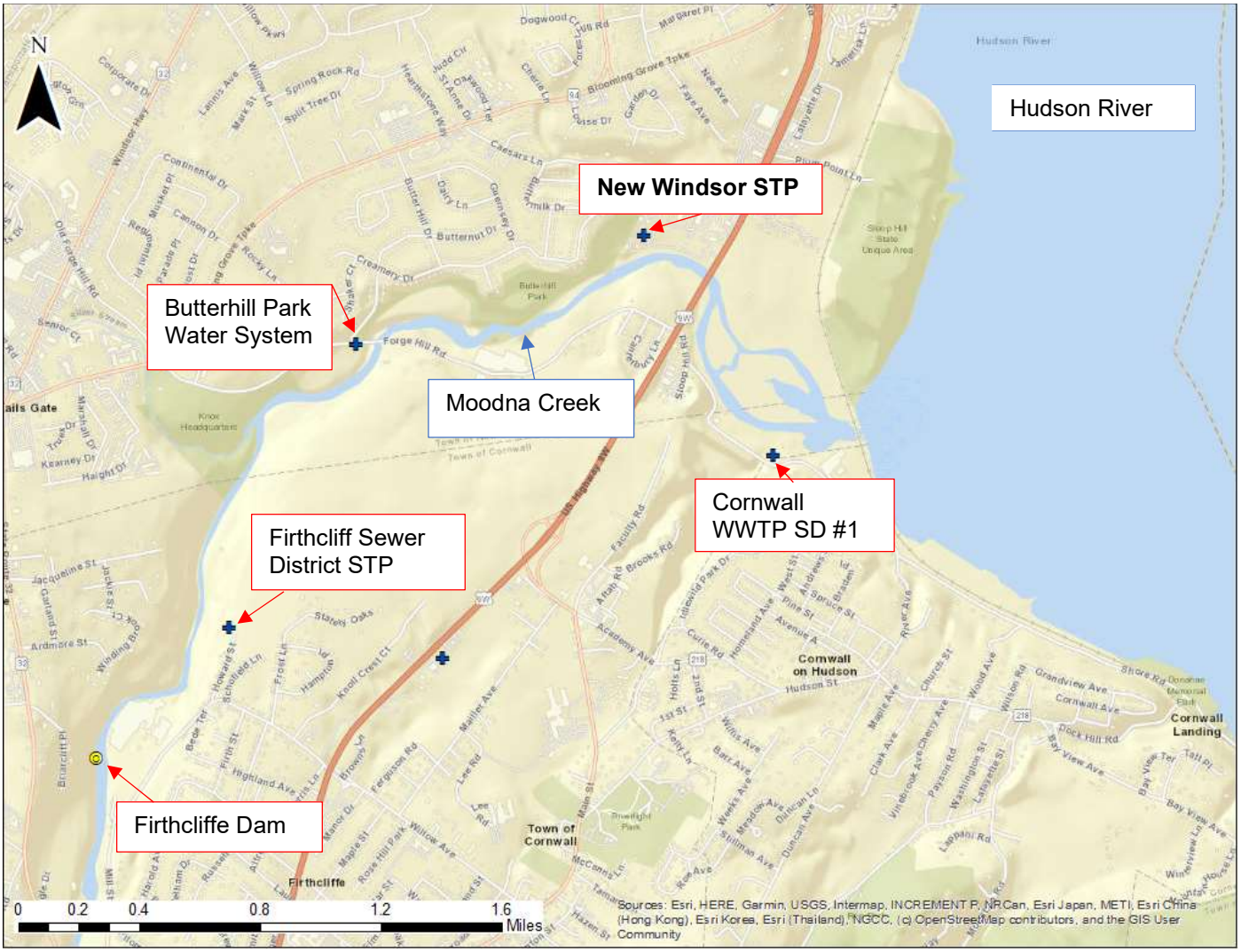
[1] State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(*l*)

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

Significant Industrial User (SIU)	SIC Code	Categorical Reference (if applicable to 40 CFR)
American Felt Filter	2299	410
Town of New Windsor Landfill	4953	445
NYS Air National Guard, Stewart	-	449
USDA Animal Import Center	-	-
Stewart International Airport	-	449
Metal Can Corporation	3411	465
Atlantic Aviation	4581	-
Beaver Dam Lake Water	-	-

Site Overview

Reach Overview



Enforcement History

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

Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports and the application submitted by the permittee for the period 9/1/2017 to 8/31/2022.

Receiving Water Information

The facility discharges via the following outfalls:

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

Reach Description: Moodna Creek (H-89) is a tributary of the Hudson River. The segment of Moodna Creek at the point of discharge is classified as C (6NYCRR 862.6 – Table I – Item 77). Cornwall WWTP Sewer District #1 is located approximately 0.66 miles downstream.

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

Impaired Waterbody Information

The Moodna Creek segment (PWL No. 1301-0003) is not listed on the 2018 New York State Section 303(d) List of Impaired/TMDL Waters, and therefore, there are no applicable wasteload allocations (WLAs) for this discharge.

Critical Receiving Water Data & Mixing Zone

Consistent with TOGS 1.3.1, the outfall information submitted in the application and mixing zone form was used by MixZon to develop a mixing zone model to establish dilution ratios for the water quality analysis. The model shows that limited physical mixing is available.

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001	1:1	1:1	1:1	CORMIX

Intermittent stream effluent limits (ISEL) have been applied because, according to the Mixing Zone Feasibility Study performed by MixZon, mass balance analysis limits physical dilution available in the Moodna Creek at the location of the proposed new outfall. Under low flow conditions, there is not sufficient dilution available. Consistent with TOGS 1.3.1, the water quality standards will be applied as end-of-pipe limitations with no mixing or dilution.

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

Permit Requirements

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

Whole Effluent Toxicity (WET) Testing

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

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

Consistent with TOGS 1.3.2, a reasonable potential analysis was performed using the existing WET data for this facility (see data below). It was determined that while the analysis indicated no potential for toxicity in the effluent, WET testing is required based on the criteria listed above and WET action levels are being maintained in the permit. Given the dilution available and location outside of the Great Lakes basin, the permit requires chronic only WET testing. Samples will be collected quarterly every five years. WET testing action levels of 0.3 TUa and 1.0 TUc have been included in the permit for each species. The acute dilution ratio is less than 3.3 and the acute action level has been set equal to the default value of 0.3 TUa. The chronic action levels represent the chronic dilution ratio.

Test Date	[1]MSS 48H LC50 (%Effluent)	[2]MSS TUa	[3]TUa Action Level	[4]MSS Survival 100% Effluent	[5]Acute Test Result	[6]MSS RPD TUa	[7]Acute WET Limit Required	[8]MSS 7D NOEC/IC25 (%Effluent)	[9]MSS NOEC/IC25 TUc	[10]TUc Action Level	[11]Chronic Test Result NOEC/IC25	[12]MSS RPD IC25 TUc	[13]Chronic WET Limit Required
01/19	>100% (FI)	<0.3 (FI)	1.8	97.5% (F)	Pass	<0.8	No	25.0% (I)/>100% (FI)	4.0 (I)/<1.0 (FI)	11.0	Pass/Pass	<2.6	No
04/19	>100% (FI)	<0.3 (FI)	1.8	100% (FI)	Pass	<0.8	No	50% (I)/>100% (FI)	2.0 (I)/<1.0 (FI)	11.0	Pass/Pass	<2.6	No
07/19	>100% (FI)	<0.3 (FI)	1.8	100% (FI)	Pass	<0.8	No	>100% (FI)/>100% (FI)	<1.0 (FI)/<1.0 (FI)	11.0	Pass/Pass	<2.6	No
10/19	>100% (FI)	<0.3 (FI)	1.8	90% (F)	Pass	<0.8	No	25% (I) / 29.2% (I)	4.0 (I) / 3.4 (I)	11.0	Pass/Pass	8.8	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+1) 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+1) 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

The effluent limitation for bis (2-ethylhexyl) phthalate is being increased because new information has revealed that the lowest Minimum Level (ML), which is the lowest concentration at which an analyte can be accurately quantitated, per EPA's Methods Update Rule is greater than the current effluent limitation set in the SPDES permit. The less stringent limit is allowed under 6NYCRR Part 750-1.10(C)(2)(i). 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)[2] determination. Appendix Link

Discharge Notification Act Requirements

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

Additionally, the permit contains a requirement to make the DMR sampling data available to the public upon request. This requirement is being continued from the previous permit.

Stormwater Pollution Prevention Requirements

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

On June 30, 2023, the permittee submitted a Conditional Exclusion for No Exposure Form, certifying that all industrial activities and materials are completely sheltered from exposure. This condition must be maintained for the exclusion to remain applicable. The schedule of submittals also includes a due date for re-certification every five years as required by 40 CFR 122.26(g)(iii). This requirement is updated from the previous permit.

Mercury[3]

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

The facility is not located within the Great Lakes Basin, however it is an EPA Major Class 05 POTW and will continue to receive requirements for implementation of the MMP Type I.

The permit includes a daily max total mercury effluent limitation of 50 ng/L, sampled quarterly. The facility has ≥10 effluent mercury data points and the existing effluent quality (EEQ) of 16.25 ng/L was calculated from the lognormal 99th percentile of 19 mercury effluent samples collected between September 2017 to August 2022. A mercury minimization program consisting of the following is also required:

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

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

The facility is located outside the Great Lakes Basin and the EEQ is >12 ng/L; therefore, the permit includes a 12-month rolling average total mercury effluent limitation equal to the EEQ.

Biennial Pollutant Scan

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

Industrial Pretreatment Program

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

Schedule(s) of Compliance

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

- Schedule of Compliance Status Reports
- Design Documents for plant upgrade including
  - Plans and Specifications
  - Construction Schedule
- Complete Construction – permittee shall submit a Certificate of Completion to the Department.

Emerging Contaminant Monitoring

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 product as well as in manufacturing processes for decades. These contaminants do not break down easily, therefore their presence in wastewater can remain a concern for years following their discontinued use. As the science surrounding these contaminants is still evolving, additional monitoring is needed to better understand potential sources and background levels. For more information on emerging contaminants, please see the NYSDEC Division of Water web page: https://www.dec.ny.gov/chemical/127939.html.

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

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

The Department will consider this information and progress made to track down and reduce or eliminate the source of the identified pollutants in determining if a permit modification is needed.

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

Schedule(s) of Additional Submittals

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

- Water Treatment Chemical (WTC) Annual Report Form
- Annual Flow Certification
- Biennial Pollutant Scan
- Short-Term High-Intensity Monitoring Program for the following parameters:
    - Total Dissolved Solids
    - Nitrite (as N)
    - Heptachlor Epoxide
    - Methoxychlor
- Stormwater No Exposure Certification
- Annual Mercury Minimization Status Report (to be maintained onsite)
- Emerging Contaminant Short-Term Monitoring Program
- Pretreatment Program

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	41° 27' 36" N	74° 01' 34" W	Moodna Creek	C	H-89 PWL: 1301-0003	13 / 03	136[6]	5.3	10.6	12.7	8.0	1:1	1:1	1:1

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage														
		Type of Treatment: Mechanical bar screen and grit removal, primary clarification, MBR treatment system, post aeration, chlorination/dechlorination														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality[7]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
General Notes: Existing discharge data from September 2017 to August 2022 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.																
Flow Rate	MGD	Monthly Avg	5.0	4.6 Actual Average	60 / 0	**8.0**	Design Flow	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	TBEL	
		Daily Max	Monitor	16.1 Actual Max	60 / 0	**Monitor**	750-1.13 Monitor									
	Consistent with TOGS 1.3.3, a monthly average flow limitation equal to the average daily design capacity of the treatment plant is specified.															
pH	SU	Minimum	6.0	6.7 Actual Min	60 / 0	6.0	TOGS 1.3.3	8.0[8]	-	6.5 – 8.5	Range	**6.5 - 8.5**	703.3	-	WQBEL	
		Maximum	9.0	8.5 Actual Max	60 / 0	9.0										
	Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given that adequate dilution is not available, an effluent limitation equal to the WQS is appropriate.															

[6] Ambient hardness data obtained from RIBS Station 13-MOOD-0.8.
[7] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)
[8] Ambient pH obtained from RIBS Station 13-MOOD-0.8.

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage **Type of Treatment:** Mechanical bar screen and grit removal, primary clarification, MBR treatment system, post aeration, chlorination/dechlorination													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[7]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
Temperature	°C	Monthly Avg	Monitor	16 Actual Average	60 / 0	**Monitor**	750-1.13 Monitor	20.4	Narrative (Non-Trout): The water temperature at the surface of a stream shall not be raised to more than 90F at any point and... shall not be raised or lowered to more than 5F over the temperature that existed before the addition				704.2	-	TBEL
		Daily Max	Monitor	26 Actual Max	60 / 0	**Monitor**									
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions. This requirement is continued from the previous permit.														
Dissolved Oxygen (DO)	mg/L	Daily Min	Monitor	1.1 Actual Min	57 / 0	-	-	8.9	5.0 End of Reach DO	(Non-Trout) 4.0 mg/L	Narrative	**4.0**	703.3	-	WQBEL
	The downstream DO concentration was modeled using the Streeter-Phelps equations and the following assumptions: Effluent DO = 2.00 mg/l ((assumed value consistent with TOGS 1.3.1D)), Effluent BOD_5 = 45 mg/L (existing permit limit), Effluent NOD = 8.77 mg/L (converted from new summer ammonia limit of 1.2 mg/L (as N)). Reach Description: The model included the Firthcliffe Dam located ~2.3 miles upstream, the Firthcliffe Sewer District STP located ~1.8 miles upstream, Butterhill Park Water System located ~0.94 miles upstream, and Cornwall WWTP SD #1 located ~ 0.7 miles downstream. The model showed that a WQBEL for DO, BOD, and Ammonia is necessary to maintain adequate downstream water quality.														
5-day Biochemical Oxygen Demand (BOD_5)	mg/L	Monthly Avg	30	33	60 / 0	30	TOGS 1.3.3	-	See Dissolved Oxygen			-	703.3	-	WQBEL
		7 Day Avg	45	72	60 / 0	45						**20**			
	lbs/d	Monthly Avg	1300	1368	60 / 0	2000						-			
		7 Day Avg	1900	3414	60 / 0	3000						**1300**			
	% Rem	Minimum	70	45 Actual Min	60 / 0	**85**						-			TBEL
	See justification for Dissolved Oxygen.														
Total Suspended Solids (TSS)	mg/L	Monthly Avg	30	28	60 / 0	30	TOGS 1.3.3	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.			-	TOGS 1.3.1	-	ISEL
		7 Day Avg	45	57	60 / 0	45						**10**			
	lbs/d	Monthly Avg	1300	1029	60 / 0	2000						-			
		7 Day Avg	1900	2437	60 / 0	3000						**670**			
	% Rem	Minimum	80	60 Actual Min	60 / 0	**85**						-			TBEL
	Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Consistent with TOGS 1.3.1, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution.														

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage													
		Type of Treatment: Mechanical bar screen and grit removal, primary clarification, MBR treatment system, post aeration, chlorination/dechlorination													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[7]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Settleable Solids	mL/L	Daily Max	0.3	0.56	60 / 0	**0.1**	TOGS 1.3.3	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	TBEL
	Consistent with TOGS 1.3.3 the effluent limitation is equal to the TBEL of 0.1 mL/L for POTWs providing secondary treatment and filtration.														
Nitrogen, Ammonia (as N) June 1st – Oct. 31st	mg/L	Monthly Avg	14	15	8 / 0	-	-	0.082 mg/L	35.5 mg/L	1.2 mg/L	A(C)	**1.2**	703.5	-	WQBEL
	lb/d	Monthly Avg	Monitor	436	8 / 0							-			
	The WQBEL was calculated using the water quality standard, an assumed ambient upstream concentration of 82 µg/L and application of the HEW dilution ratio. The existing permit limit is greater than the calculated WQBEL and is being decreased to equal the WQBEL to protect water quality.														
Nitrogen, Ammonia (as N) Nov. 1st – May 31st	mg/L	Monthly Avg	20	21	39 / 1	-	-	0.082 mg/L	23.5 mg/L	1.9 mg/L	A(C)	**1.9**	703.5	-	WQBEL
	lb/d	Monthly Avg	Monitor	1829	39 / 1							-			
	The WQBEL was calculated using the water quality standard, an assumed ambient upstream concentration of 82 µg/L and application of the HEW dilution ratio. The existing permit limit is greater than the calculated WQBEL and is being decreased to equal the WQBEL to protect water quality.														
Total Mercury	ng/L	Daily Max	50	16.25	18 / 1	-	-	-	-	0.7	H(FC)	**50**	GLCA	-	DOW 1.3.10
		12 MRA	-	-	-	**16**	EEQ			0.7	H(FC)	12	-		
	See Mercury section of this factsheet.														
Coliform, Fecal	#/100 ml	30d Geo Mean	200	20.68	13 / 9	**200**	TOGS 1.3.3	-	Narrative: The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.				703.4	-	TBEL
		7d Geo Mean	400	960.38	22 / 1	**400**	TOGS 1.3.3								
	Consistent with TOGS 1.3.3, effluent disinfection is required seasonally from May 1st - October 31st, due to the class of the receiving waterbody. Fecal coliform limits equal to the TBEL are specified.														
Total Residual Chlorine (TRC)	mg/L	Daily Max	0.055	0.11	4 / 0	2.0	TOGS 1.3.3	-	0.09	0.005	A(C)	0.005	703.5	**0.03**	ML
	lb/d	Daily Max	Monitor	6.55	4 / 0	-	-	-	-	-	-	-	-	-	
	Effluent disinfection is currently required seasonally and will remain a permit requirement. Due to the low dilution, the calculated WQBEL is less than the TBEL and less than the minimum level of detection. Therefore, an effluent limitation equal to the minimum level of detection of 0.030 mg/L is appropriate.														

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage **Type of Treatment:** Mechanical bar screen and grit removal, primary clarification, MBR treatment system, post aeration, chlorination/dechlorination													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[7]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Lead	µg/L	Daily Max	44	14.9	31 / 29	-	-	-	8.32 µg/L	5.28 µg/L	A(C)	**13**	703.5	-	WQBEL
	lb/d	Daily Max	1.8	0.53	40 / 20	-	-					-			
	The WQBEL was calculated from the chronic water quality standard and through applying the chronic dilution ratio. A negligible upstream ambient concentration was assumed. A metals translator of 2.5 was applied to convert between the total and dissolved form in accordance with the TriBasin RIBS calculation. The existing permit limit is greater than the calculated WQBEL and is being decreased to equal the WQBEL to protect water quality.														
Bis(2-ethylhexyl) phthalate	µg/L	Daily Max	6.6	12.22	6 / 18	-	-	-	13 µg/L	0.6 µg/L	A(C)	0.6	703.5	**7.5**	ML
	lb/d	Daily Max	0.28	0.42	7 / 17	-	-					-		-	
	The WQBEL was calculated from the chronic water quality standard and through applying the chronic dilution ratio. A negligible upstream ambient concentration was assumed. Due to the low dilution, the calculated WQBEL is less than the current permit limit and less than the minimum level of detection. Therefore, an effluent limitation equal to the minimum level of detection of 7.5 µg/L is appropriate.														
Total Unchlorinated Phenols	µg/L	Monthly Avg	55	20.94	32 / 26	-	-	-	546 µg/L	5 µg/L	E(FS)	-	703.5	-	Discontinued
	lb/d	Monthly Avg	2.3	3.03	13 / 11	-	-					-			
	The WQBEL was calculated from the HEW water quality standard and through applying the HEW dilution ratio. A negligible upstream ambient concentration was assumed. The existing permit limit is greater than the calculated WQBEL. However, total chlorinated and unchlorinated phenols cannot be measured independently by any single test. In accordance with TOGS 1.3.1E, Phenolic Compounds will be permitted in place of Total Unchlorinated Phenols. See the Phenolic Compounds (total phenols) section of this Pollutant Summary Table for more information.														
Phenolic Compounds (total phenols)	µg/L	Monthly Average	-	-	-	-	-	-	546 µg/L	5 µg/L	E(WS)	**5.0**	TOGS 1.3.1E	-	WQBEL
	Phenolic compounds or total phenols are usually measured by the 4-aminoantipyrine (4AAP) test. The 4AAP does not detect all phenolic compounds, nor does it measure those it does detect with the same precision and accuracy. Total chlorinated and unchlorinated phenols cannot be measured independently by any single test. In accordance with TOGS 1.3.1E, Total Unchlorinated Phenols shall be limited as "total phenolics" by 4AAP and the ambient standard is 5.0 µg/L. Existing effluent data for Total Unchlorinated Phenols were used to calculate reasonable potential. The WQBEL was calculated from the HEW water quality standard and through applying the HEW dilution ratio. A negligible upstream ambient concentration was assumed. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL is specified for a Phenolic Compounds (total phenols) effluent limitation.														

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage													
		Type of Treatment: Mechanical bar screen and grit removal, primary clarification, MBR treatment system, post aeration, chlorination/dechlorination													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[7]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Copper	µg/L	Daily Max	Monitor Action Level	47.8	20 / 0	-	-	-	33.29 µg/L	11.65 µg/L	A(C)	**21**	703.5	-	WQBEL
	lb/d	Daily Max	3.6 Action Level	1.33	20 / 0	-	-					-			
	Total Copper is currently an Action Level in the permit. The projected instream concentration was calculated using the maximum (reported or measured) effluent concentration of 42.8 µg/L and a negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 1.4 was applied to the effluent to account for the number of samples. A metals translator of 1.8 was applied to convert between the total and dissolved form in accordance with the TriBasin RIBS calculation. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to a WQS violation and therefore a WQBEL is specified for a new Total Copper Permit Limit.														
Total Zinc	µg/L	Daily Max	Monitor Action Level	85.95	20 / 0	-	-	-	40.74 µg/L	107.31 µg/L	A(C)	No Reasonable Potential	703.5	-	Discontinued
	lb/d	Daily Max	7.5 Action Level	3.79	20 / 0	-	-								
	Total Zinc is currently an Action Level in the permit. The projected instream concentration was calculated using the maximum (reported or measured) effluent concentration of 58.2 µg/L and a negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 1.4 was applied to the effluent to account for the number of samples. A metals translator of 2 was applied to convert between the total and dissolved form in accordance with the TriBasin RIBS calculation. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified, and the Action Level is discontinued.														
Additional Pollutants Detected															
Arsenic	µg/L	Daily Max	-	4.0 NY-2A	1 / 2	-	-	-	12.06	50	H(WS)	No Reasonable Potential	703.5	-	No Limitation
	Arsenic was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using the maximum (reported or measured) effluent concentration of 4.0 µg/L and a negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 3 was applied to the projected effluent to account for the number of samples. A metals translator of 1 was applied to convert between the total and dissolved form in accordance with the TriBasin RIBS calculation. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														
Total Dissolved Solids (TDS)	mg/L	Monthly Average	-	604 NY-2A	3 / 0	-	-	-	1,812	Narrative: Shall be kept as low as practicable to maintain the best usage of waters but in no case shall it exceed 500 mg/L.		500	703.3	-	STHIM

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage **Type of Treatment:** Mechanical bar screen and grit removal, primary clarification, MBR treatment system, post aeration, chlorination/dechlorination													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[7]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
	TDS was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using the maximum (reported or measured) effluent concentration of 604 mg/L and a negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 3 was applied to the projected effluent 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. Very limited data is available to confirm the presence or absence of this parameter and evaluate reasonable potential to cause or contribute to a WQS violation. Consistent with TOGS 1.3.3, short-term high-intensity monitoring (STHIM) is being required for this parameter to generate the data necessary to perform a future reasonable potential analysis. See Special Conditions and the Schedule of Additional Submittals of the permit.														
Nitrate (as N)	mg/L	Daily Max	-	2.5 NY-2A	3 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	Nitrate was detected in the effluent as reported in the NY-2A application. A numeric water quality standard for Nitrate does not exist for Class C waterbodies. Therefore, no WQBEL is specified														
Nitrite (as N)	mg/L	Daily Max	-	0.95 NY-2A	3 / 0	-	-	-	2.85	0.1	A(C)	0.1	703.5	-	STHIM
	Nitrite was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using the maximum (reported or measured) effluent concentration of 0.95 mg/L and a negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 3 was applied to the projected effluent 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. Very limited data is available to confirm the presence or absence of this parameter and evaluate reasonable potential to cause or contribute to a WQS violation. Consistent with TOGS 1.3.3, short-term high-intensity monitoring (STHIM) is being required for this parameter to generate the data necessary to perform a future reasonable potential analysis. See Special Conditions and the Schedule of Additional Submittals of the permit.														
TKN	mg/L	Daily Max	-	16.2 NY-2A	3 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	TKN was detected in the effluent as reported in the NY-2A application. A numeric water quality standard for TKN does not exist for Class C waterbodies. Therefore, no WQBEL is specified														
Total Nitrogen	mg/L	Daily Max	-	19.65 NY-2A	3 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	Total Nitrogen was detected in the effluent as reported in the NY-2A application. A numeric water quality standard for Total Nitrogen does not exist for Class C waterbodies. Therefore, no WQBEL is specified														
Chloroform	µg/L	Daily Max	-	1.6 NY-2A	3 / 0	-	-	-	-	-	-	-	-	-	No Limitation
	Chloroform was detected in the effluent as reported in the NY-2A application. A numeric water quality standard for Chloroform does not exist for Class C waterbodies. Therefore, no WQBEL is specified														
Toluene	µg/L	Daily Max	-	2.25 NY-2A	3 / 0	-	-	-	6.75	6,000	H(FC)	No Reasonable Potential	703.5	-	No Limitation

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage **Type of Treatment:** Mechanical bar screen and grit removal, primary clarification, MBR treatment system, post aeration, chlorination/dechlorination													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[7]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
	Toluene was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using the maximum (reported or measured) effluent concentration of 2.25 µg/L and a negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 3 was applied to the projected effluent to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														
Heptachlor epoxide	µg/L	Monthly Average	-	0.0128 NY-2A	3 / 0	-	-	-	0.04	0.0003	H(FC)	0.0003	703.5	0.009	STHIM
	Heptachlor epoxide was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using the maximum (reported or measured) effluent concentration of 0.0128 µg/L and a negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 3 was applied to the projected effluent 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. Due to the low dilution, the calculated WQBEL is less than the minimum level of detection. Therefore, an effluent limitation equal to the minimum level of detection of 0.009 µg/L is appropriate. Very limited data is available to confirm the presence or absence of this parameter and evaluate reasonable potential to cause or contribute to a WQS violation. Consistent with TOGS 1.3.3, short-term high-intensity monitoring (STHIM) is being required for this parameter to generate the data necessary to perform a future reasonable potential analysis. See Special Conditions and the Schedule of Additional Submittals of the permit.														
Methoxychlor	µg/L	Daily Max	-	0.0138 NY-2A	1 / 2	-	-	-	0.04	0.03	A(C)	0.03	703.5	-	STHIM
	Methoxychlor was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using the maximum (reported or measured) effluent concentration of 0.0138 µg/L and a negligible ambient upstream concentration. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 3 was applied to the projected effluent 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. Very limited data is available to confirm the presence or absence of this parameter and evaluate reasonable potential to cause or contribute to a WQS violation. Consistent with TOGS 1.3.3, short-term high-intensity monitoring (STHIM) is being required for this parameter to generate the data necessary to perform a future reasonable potential analysis. See Special Conditions and the Schedule of Additional Submittals of the permit.														

Appendix: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

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

Outfall and Receiving Water Information

Impaired Waters

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

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

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, and/or in response to updated regulatory requirements. Pollutant monitoring data is also reviewed to determine the presence of additional contaminants that should be included in the permit based on a reasonable potential analysis to cause or contribute to a water quality standards violation.

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this factsheet. Consistent with current case law[9] and USEPA interpretation[10] 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.

Antidegradation Policy

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

Effluent Limitations

In developing a permit, the Department determines the technology-based effluent limitations (TBELs) and then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in the receiving water might result. If there is a reasonable potential for exceedances of water quality criteria to occur, water quality-based effluent limitations (WQBELs) are developed. A WQBEL is designed

[9] American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)
[10] 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)

to ensure that the water quality standards of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL.

Technology-based Effluent Limitations (TBELs)

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

Water Quality-Based Effluent Limitations (WQBELs)

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

Mixing Zone Analyses

In accordance with TOGS 1.3.1., the Department may perform additional analysis of the mixing condition between the effluent and the receiving waterbody. Mixing zone analyses using plume dispersion modeling are conducted in accordance with the following:
“EPA Technical Support Document for Water Quality-Based Toxics Control” (March 1991); EPA Region VIII’s “Mixing Zones and Dilution Policy” (December 1994); NYSDEC TOGS 1.3.1, “Total Maximum Daily Loads and Water Quality-Based Effluent Limitations” (July 1996); “CORMIX v11.0” (2019).

Critical Flows

In accordance with TOGS 1.2.1 and 1.3.1, WQBELs are developed using dilution ratios that relate the critical low flow condition of the receiving waterbody to the critical effluent flow. The critical low flow condition used in the dilution ratio will be different depending on whether the limitations are for aquatic or human health protection. For chronic aquatic protection, the critical low flow condition of the waterbody is typically represented by the 7Q10 flow and is calculated as the lowest average flow over a 7-day consecutive period within 10 years. For acute aquatic protection, the critical low flow condition is typically represented by the 1Q10 and is calculated as the lowest 1-day flow within 10 years. However, NYSDEC considers using 50% of the 7Q10 to be equivalent to the 1Q10 flow. For the protection of human health, the critical low flow condition is typically represented by the 30Q10 flow and is calculated as the lowest average flow over a 30-day consecutive period within 10 years. However, NYSDEC considers using 1.2 x 7Q10 to be equivalent to the 30Q10. The 7Q10 or 30Q10 flow is used with the critical effluent flow to calculate

the dilution ratio. The critical effluent flow can be the maximum daily flow reported on the permit application, the maximum of the monthly average flows from discharge monitoring reports for the past three years, or the facility design flow. When more than one applicable standard exists for aquatic or human health protection for a specific pollutant, a reasonable potential analysis is conducted for each applicable standard and corresponding critical flow to ensure effluent limitations are sufficiently stringent to ensure all applicable water quality standards are met as required by 40 CFR 122.44(d)(1)(i). For brevity, the pollutant summary table reports the results of the most conservative scenario.

Reasonable Potential Analysis (RPA)

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

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

2) identify water quality criteria applicable to these pollutants;

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

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

The Department uses modeling tools to estimate the expected concentrations of the pollutant in the receiving water and develop WQBELs. These tools were developed in part using the methodology referenced above. If the estimated concentration of the pollutant in the receiving water is expected to exceed the ambient water quality standard or guidance value (i.e. numeric interpretation of a narrative water quality standard), then there is a reasonable potential that the discharge may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. If a TMDL is in place, the facility's WLA for that pollutant is applied as the WQBEL.

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

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

Whole Effluent Toxicity (WET) Testing:

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

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

Minimum Level of Detection

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

Monitoring Requirements

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

Other Conditions

Mercury

The multiple discharge variance (MDV) for mercury was developed in accordance with 6 NYCRR 702.17(h) “to address widespread standard or guidance value attainment issues including the presence of a ubiquitous pollutant or naturally high levels of a pollutant in a watershed.” The first MDV was issued in October 2010, and subsequently revised and reissued in 2015; each subsequent iteration of the MDV is designed to build off the previous version, to make reasonable progress towards the water quality standard (WQS) of 0.7 ng/L dissolved

mercury. The MDV is necessary because human-caused conditions or sources of mercury prevent attainment of the WQS and cannot be remedied (i.e., mercury is ubiquitous in New York waters at levels above the WQS and compliance with a water quality based effluent limitation (WQBEL) for mercury cannot be achieved with demonstrated effluent treatment technologies). The Department has determined that the MDV is consistent with the protection of public health, safety, and welfare. During the effective period of this MDV, any increased risks to human health are mitigated by fish consumption advisories issued periodically by the NYSDOH.

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

Schedules of Compliance

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

Schedule(s) of Additional Submittals

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

Pollutant Minimization Programs

Pollutant Minimization Programs are included when a pollutant is being discharged from the facility at detectable levels and the ML for the most sensitive method is greater than the calculated WQBEL. These programs typically include an on-going potential source identification, evaluation, and prioritization program to demonstrate progress towards meeting the goal of the WQBEL. Pollutant Minimization Plan requirements are based on 40 CFR Part 132 Appendix F Procedure 8, 6 NYCRR 750-1.13(a) and 750-1.14(f), and TOGS 1.2.1.