State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**3322**	NAICS Code:	**333511**	SPDES Number:	**NY 0232491**
Discharge Class (CL):	**01**			DEC Number:	**7 3132 00008**
Toxic Class (TX):	**N**			Effective Date (EDP):	**EDPM**
Major-Sub Drainage Basin:	**07 - 02**			Expiration Date (ExDP):	**EDPM +5 years**
Water Index Number:	**N/A**	Item No.:	**-**	Modification Dates (EDPM):	**08/31/2020 11/21/2022**
Compact Area:	**IJC**				

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

PERMITTEE NAME AND ADDRESS					
Name:	**Frazer and Jones, LLC**	Attention:	**Plant Superintendent**		
Street:	**PO Box 4955**				
City:	**Syracuse**	State:	**NY**	Zip Code:	**13221**
Email:	**sbrkanovic@frazerandjones.com**	Phone:	**(315) 468-6251**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL														
Name:	**Frazer and Jones Company**													
Address / Location:	**3000 Milton Avenue**									County:	**Onondaga**			
City:	**Solvay**						State:	**NY**		Zip Code:	**13221**			
Facility Location:		Latitude:	**43**	°	**3**	’	**42.8**	” N	& Longitude:	**-76**	°	**13**	’	**37.6**	” W
Primary Outfall No.:	**001**	Latitude:	**43**	°	**3**	’	**42.8**	” N	& Longitude:	**-76**	°	**13**	’	**37.3**	” W
Wastewater Description:	**Non-Contact cooling; condensate from Nitrogen generator boiler; SW**	Receiving Water:	**Unnamed Tributary of SYW Wetland 15**				NAICS:	**333511**	Class:	**C**		Standard:		**C(T)**

and the additional outfalls listed in this permit, in accordance with: effluent limitations; monitoring and reporting requirements; other provisions and conditions set forth in this permit; and 6 NYCRR Part 750-1 and 750-2.

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

DISTRIBUTION:
CO BWP - Permit Coordinator
R7 – Valarie Ellis
CO BWC - SCIS
RWE
RPA
EPA Region II

Permit Administrator:			
Address:	5786 Widewaters Parkway Syracuse, NY 13214		
Signature:		Date:	/ /

SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
002	Stormwater	**333511**	**43** ° **3** ' **36.6** " N	**-76** ° **13** ' **43.8** " W
Receiving Water:	**Unnamed Tributary to Geddes Brook**		Class:	
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
003	Stormwater	**333511**	**43** ° **3** ' **41.6** " N	**-76** ° **13** ' **36.9** " W
Receiving Water:	**Unnamed Tributary to SYW Wetland 15**		Class:	
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
004	Stormwater	**333511**	**43** ° **3** ' **42.9** " N	**-76** ° **13** ' **37.4** " W
Receiving Water:	**Unnamed Tributary to SYW Wetland 15**		Class:	

DEFINITIONS

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

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
001	**Non-Contact cooling; condensate from Nitrogen generator boiler; SW**	**Unnamed Tributary of SYW Wetland 15**	EDPM	10/31/2027

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Daily Maximum	Monitor	GPD			Monthly	Instantaneous		X	1
pH	Daily Minimum	6.5	SU			Monthly	Grab		X	1
	Daily Maximum	8.5	SU							1
Temperature	Daily Maximum	70	ºF			Monthly	Grab		X	1
Chemical Oxygen Demand	Daily Maximum	Monitor	mg/L			Monthly	Grab		X	1
Total Suspended Solids (TSS)	Daily Maximum	10	mg/L			Monthly	Grab		X	1
Total Dissolved Solids	Daily Maximum	500	mg/L			Monthly	Grab		X	1
Mercury	Daily Maximum	12	ng/L			1/year	Grab		X	1,2
Oil and Grease	Daily Maximum	15	mg/L			Monthly	Grab		X	1
Total Iron	Daily Maximum	0.6	mg/L			Monthly	Grab		X	1
Total Zinc	Daily Maximum	0.24	mg/L			Monthly	Grab		X	1
Total Copper	Daily Maximum	0.03	mg/L			Monthly	Grab		X	1
Total Aluminum	Daily Maximum	Monitor	mg/L			Monthly	Grab		X	1

See footnotes on page 7.

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
002	**Stormwater, groundwater**	**Unnamed Tributary to Geddes Brook**	EDPM	10/31/2027

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Daily Maximum	Monitor	GPD			Monthly	Instantaneous		X	1
pH	Daily Minimum	6.5	SU			Monthly	Grab		X	1
	Daily Maximum	8.5	SU							1
Temperature	Daily Maximum	70	ºF			Monthly	Grab		X	1
Total Suspended Solids (TSS)	Daily Maximum	10	mg/L			Monthly	Grab		X	1
Total Dissolved Solids	Daily Maximum	500	mg/L			Monthly	Grab		X	1,4
Mercury	Daily Maximum	12	ng/L			1/year	Grab		X	1,2
Oil and Grease	Daily Maximum	15	mg/L			Monthly	Grab		X	1
Total Iron	Daily Maximum	0.6	mg/L			Monthly	Grab		X	1
Total Zinc	Daily Maximum	0.24	mg/L			Monthly	Grab		X	1
Total Copper	Daily Maximum	0.03	mg/L			Monthly	Grab		X	1
Total Aluminum	Daily Maximum	Monitor	mg/L			Monthly	Grab		X	1

See footnotes on page 7.

OUTFALLS	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
003	**Stormwater, groundwater**	**Unnamed Tributary of SYW Wetland 15**	EDPM	10/31/2027

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Daily Maximum	Monitor	GPD			Monthly	Instantaneous		X	1
pH	Daily Minimum	6.5	SU			Monthly	Grab		X	1
	Daily Maximum	8.5	SU							1
Temperature	Daily Maximum	70	ºF			Monthly	Grab		X	1
Total Suspended Solids (TSS)	Daily Maximum	10	mg/L			Monthly	Grab		X	1
Total Dissolved Solids	Daily Maximum	500	mg/L			Monthly	Grab		X	1,4
Mercury	Daily Maximum	12	ng/L			1/year	Grab		X	1,2
Oil and Grease	Daily Maximum	15	mg/L			Monthly	Grab		X	1
Total Iron	Daily Maximum	0.6	mg/L			Monthly	Grab		X	1
Total Zinc	Daily Maximum	0.24	mg/L			Monthly	Grab		X	1
Total Copper	Daily Maximum	0.03	mg/L			Monthly	Grab		X	1
Total Aluminum	Daily Maximum	Monitor	mg/L			Monthly	Grab		X	1

See footnotes on page 7.

OUTFALLS	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
004	**Stormwater**	**Unnamed Tributary of SYW Wetland 15**	EDPM	10/31/2027

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Daily Maximum	Monitor	GPD			Monthly	Instantaneous		X	1
pH	Daily Minimum	6.5	SU			Monthly	Grab		X	1
	Daily Maximum	8.5	SU							1
Temperature	Daily Maximum	70	ºF			Monthly	Grab		X	1
Total Suspended Solids (TSS)	Daily Maximum	10	mg/L			Monthly	Grab		X	1
Total Dissolved Solids	Daily Maximum	500	mg/L			Monthly	Grab		X	1,4
Total Mercury	Daily Maximum	50	ng/L			Monthly	Grab		X	1,2
Total Mercury	12 MRA	12	ng/L			Monthly	Calculated		X	3
Oil and Grease	Daily Maximum	15	mg/L			Monthly	Grab		X	1
Total Iron	Daily Maximum	0.6	mg/L			Monthly	Grab		X	1
Total Zinc	Daily Maximum	0.24	mg/L			Monthly	Grab		X	1
Total Copper	Daily Maximum	0.03	mg/L			Monthly	Grab		X	1
Total Aluminum	Daily Maximum	Monitor	mg/L			Monthly	Grab		X	1

FOOTNOTES:

1. Stormwater Sampling
   All stormwater sampling shall be in accordance with the New York State Department of Environmental Conservation SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity Permit Number GP-0-17-004, which states:

   A minimum of one grab sample must be taken from the *stormwater discharge associated with industrial activity* resulting from a storm event with at least 0.1 inch of precipitation (defined as a "measurable" event), providing the interval from the preceding measurable storm is at least 72 hours. The 72-hour storm interval is waived if the preceding measurable storm did not result in a stormwater *discharge* (e.g., a storm event in excess of 0.1 inches may not result in a stormwater *discharge* at some facilities), or if the *owner or operator* is able to document that less than a 72-hour interval is representative for local storm events during the sampling period.

   The grab sample must be taken during the first 30 minutes (or as soon thereafter as practical, but not to exceed one [1] hour) of the *discharge*. If the sampled *discharge* commingles with non-stormwater water, the *owner or operator* must attempt to sample the stormwater *discharge* before it mixes. Additional sampling guidelines and exceptions have been detailed and authorized by the Department, within the storm water sampling plan, dated July 15, 2016.

2. The permittee shall monitor this discharge for Mercury using USEPA laboratory Method 1631. The laboratory shall make all reasonable attempts to achieve an MDL of 0.5 ng/L.

3. 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.

4. See Schedule of Compliance, page 15-16.

SPECIAL CONDITIONS – INDUSTRY BEST MANAGEMENT PRACTICES

1. **General** - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage. The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the Department as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Department representatives upon request.

2. **Compliance Deadlines** - The initial completed BMP plan shall was submitted on April 15, 2014 to the Regional Water Engineer and revised at the Department's request on March 9, 2018. The BMP plan **shall be reviewed annually** and shall be modified whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions (with the exception of SWPPPs - see item (5.) below) must be submitted to the Regional Water Engineer within 30 days. Note that the permittee is not required to obtain Department approval of the BMP plan (or of any SWPPPs) unless notified otherwise. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.

3. **Facility Review** - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases. The review shall address all substances present at the facility that are identified in Tables 6-10 of SPDES application Form NY-2C (available at http://www.dec.ny.gov/docs/permits_ej_operations_pdf/form2c.pdf) or that are required to be monitored for by the SPDES permit.

4. **13 Minimum BMPs:** Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in *Developing Your Stormwater Pollution Prevention Plan A Guide for Industrial Operators*, February 2009, EPA 833-B-09-002. As a minimum, the plan shall include the following BMPs:

   1. BMP Pollution Prevention Team
   2. Reporting of BMP Incidents
   3. Risk Identification & Assessment
   4. Employee Training
   5. Inspections and Records
   6. Security
   7. Preventive Maintenance
   8. Good Housekeeping
   9. Materials/Waste Handling, Storage, & Compatibility
   10. Spill Prevention & Response
   11. Erosion & Sediment Control
   12. Management of Runoff
   13. Street Sweeping

   Note that for some facilities, especially those with few employees, some of the above BMPs may not be applicable. It is acceptable in these cases to indicate "Not Applicable" for the portion(s) of the BMP Plan that do not apply to your facility, along with an explanation.

SPECIAL CONDITIONS – INDUSTRY BEST MANAGEMENT PRACTICES (continued)

5. **Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater From Construction Activity to Surface Waters** - As part of BMP #11, a SWPPP shall be developed prior to the initiation of any site disturbance of one acre or more of uncontaminated area. Uncontaminated area means soils or groundwater which are free of contamination by any toxic or non-conventional pollutants identified in Tables 6-10 of SPDES application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated stormwater is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Engineer; nor is such discharge authorized by any SPDES general permit for stormwater discharges. SWPPPs are not required for discharges of stormwater from construction activity to groundwater. The SWPPP shall conform to the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Stormwater Management Design Manual,* unless a variance has been obtained from the Regional Water Engineer, and to any local requirements. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity **at least 30 days prior to soil disturbance**. The SWPPP shall also be submitted to the Regional Water Engineer if contamination, as defined above, is involved and the permittee must obtain a determination of any SPDES permit modifications and/or additional treatment which may be required prior to soil disturbance. Otherwise, the SWPPP shall be submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at www.dec.ny.gov/chemical/43133.html) prior to soil disturbance. Note that submission of a NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges, nor are any additional permit fees incurred. SWPPPs must be developed and submitted for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly implemented.

6. **Facilities with Petroleum and/or Chemical Bulk Storage (PBS and CBS) Areas** - Compliance must be maintained with all applicable regulations including those involving releases, registration, handling and storage (6NYCRR 595-599 and 612-614). Stormwater discharges from handling and storage areas should be eliminated where practical.

   A. Spill Cleanup - All spilled or leaked substances must be removed from secondary containment systems as soon as practical and for CBS storage areas within 24 hours, unless written authorization is received from the Department. The containment system must be thoroughly cleaned to remove any residual contamination which could cause contamination of stormwater and the resulting discharge of pollutants to waters of the State. Following spill cleanup the affected area must be completely flushed with clean water three times and the water removed after each flushing for proper disposal in an on-site or off-site wastewater treatment plant designed to treat such water and permitted to discharge such wastewater. Alternately, the permittee may test the first batch of stormwater following the spill cleanup to determine discharge acceptability. If the water contains no pollutants at concentrations above the applicable effluent limits or Action Levels it may be discharged. Otherwise it must be disposed of as noted above. See *Discharge Monitoring* below for the list of parameters to be sampled for.

   B. Discharge Operation - Stormwater must be removed before it compromises the required containment system capacity. Each discharge may only proceed with the prior approval of the permittee staff person responsible for ensuring SPDES permit compliance. Bulk storage secondary containment drainage systems must be locked in a closed position except when the operator is in the process of draining accumulated stormwater. Transfer area secondary containment drainage systems must be locked in a closed position during all transfers to or from these systems and must not be reopened unless the transfer area is clean of contaminants. Stormwater discharges from secondary containment systems should be avoided during periods of precipitation. A logbook shall be maintained on site noting the date, time and personnel supervising each discharge.

   C. Discharge Screening - Prior to each discharge from a secondary containment system the stormwater must be screened for contamination*. All stormwater must be inspected for visible evidence of contamination. Additional screening methods shall be developed by the permittee as part of the overall BMP Plan, e.g. the use of volatile gas meters to detect the presence of gross levels of gasoline or volatile organic compounds. If the screening indicates contamination, the permittee must collect and analyze a representative sample** of the stormwater. If the water contains no pollutants at concentrations above the applicable effluent limits or Action Levels it may be discharged. Otherwise it must either be disposed of in an onsite or off site wastewater treatment plant designed to treat and permitted to discharge such wastewater or the Regional Water Engineer can be contacted to determine if it may be discharged without treatment.

D. Discharge Monitoring - Unless the discharge from any bulk storage containment system outlet is identified in the SPDES permit as an outfall with explicit effluent and monitoring requirements, the permittee shall monitor the outlet as follows:

(i) *Bulk Storage Secondary Containment Systems:*

(a) The volume of each discharge from each outlet must be monitored. Discharge volume may be calculated by measuring the depth of water within the containment area times the wetted area converted to gallons or by other suitable methods. A representative sample shall be collected of the first discharge* following any cleaned up spill or leak. The sample must be analyzed for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present**.

(b) Every fourth discharge* from each outlet must be sampled for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present**.

(ii) *Transfer Area Secondary Containment Systems:*

The first discharge* following any spill or leak must be sampled for flow, pH, the substance(s) transferred in that area and any other pollutants the permittee knows or has reason to believe are present**.

E. Discharge Reporting - Any results of monitoring required above, excluding screening data, must be submitted to the Department by appending them to the corresponding DMR. Failure to perform the required discharge monitoring and reporting shall constitute a violation of the terms of the SPDES permit.

F. Prohibited Discharges - **In all cases, any discharge which contains a visible sheen, foam, or odor, or may cause or contribute to a violation of water quality is prohibited.** The following discharges are prohibited unless specifically authorized elsewhere in this SPDES permit: spills or leaks, tank bottoms, maintenance wastewaters, wash waters where detergents or other chemicals have been used, tank hydrotest and ballast waters, contained firefighting runoff, fire training water contaminated by contact with pollutants or containing foam or fire retardant additives, and unnecessary discharges of water or wastewater into secondary containment systems.

* Discharge includes stormwater discharges and snow and ice removal. If applicable, a representative sample of snow and/or ice should be collected and allowed to melt prior to assessment.

** If the stored substance is gasoline or aviation fuel then sample for oil & grease, benzene, ethylbenzene, naphthalene, toluene and total xylenes (EPA method 602). If the stored substance is kerosene, diesel fuel, fuel oil, or lubricating oil then sample for oil & grease and polynuclear aromatic hydrocarbons (PAHs, EPA method 610). If the substance(s) are listed in Tables 6-8 of SPDES application form NY-2C then sampling is required. If the substance(s) are listed in NY-2C Tables 9-10 sampling for appropriate indicator parameters may be required, e.g. BOD5 or toxicity testing. Contact the facility inspector for further guidance. In all cases flow and pH monitoring is required.

MERCURY MINIMIZATION PROGRAM (MMP) - Type III

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 004, 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. 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 annually. See section 2.a.iii below.

      iii. 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 semi-annually, in lieu of monitoring within the collection system, such as at *key locations*; and
            b) Conduct effluent compliance sampling semi-annually.
         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 an annual status report, as applicable in accordance with 2.c of this MMP, to determine if any waste streams have changed.

   b. Control Strategy - The control strategy must contain the following minimum elements:

      i. Monitoring and Inventory/Inspections for Outfall 004 -
         1) Monitoring shall be performed as described in 2.a above. As mercury sources are found, the permittee must track down and minimize these sources.
         2) A file shall be maintained containing documentation demonstrating compliance. This file shall be available for review by the Department representatives and copies shall be provided upon request.

      ii. 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.

      iii. 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 004 for the previous reporting period;

      ii. A list of known and *potential mercury sources* for Outfall 004
         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;

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

iv. Actions planned, pursuant to the control strategy, for the upcoming reporting period; and
v. Progress towards achieving a dissolved mercury concentration of 0.70 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation and/or installation/modification of a treatment system).

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

3. MMP Modification - The MMP must be modified whenever:
   a. Changes at the facility 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.

MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

On September 16, 2022, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10.

1. General - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below.
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[2] as described in detail below:

   a. Conditional Exclusion Certification - A certification (Appendix D of *DOW 1.3.10*), signed in accordance with 750-1.8 Signature of SPDES forms, must be submitted once every five (5) years for Outfall(s) 001, 002, and 003 to the Regional Water Engineer and to the Bureau of Water Permits certifying that these outfalls are neither a mercury source nor receive flows from a mercury source. Criteria to determine if a facility has a mercury source are as follows:

      - The facility is or receives discharge from 1) individually permitted combined sewer overflow (CSOs)[3] communities and/or 2) Type II sanitary sewer overflow (SSO)[4] facilities;
      - One or more effluent samples which exceed 12 ng/L, including samples taken as a result of the SPDES application process;
      - Internal or tributary waste stream samples exceed the GLCA effluent limitation **AND** the final effluent samples are less than the GLCA due primarily to dilution by uncontaminated or less contaminated waste streams. Both components of this criterion may include samples taken as a result of the SPDES application process;
      - A permit application or other information indicates that mercury is handled on site and could be discharged through outfalls;
      - Outfalls which contain legacy mercury contamination;
      - The facility's collection system receives discharges from a dental and/or categorical industrial user (CIU)[5] that may discharge mercury;
      - The facility accepts hauled wastes; or,

[2]Neither monitoring nor outreach is required for facilities meeting the criteria for MMP Type IV, but monitoring and/or outreach can be included in the permittee's control strategy.
[3] CSO permits are included under the 05 and 07 permit classifications.
[4] These are overflow retention facilities (ORFs) and are included under the 05 and 07 permit classifications.
[5] CIUs include those listed under Federal Regulation in 40 CFR Part 400.

- The facility is defined as a categorical industry that may discharge mercury. This may also include dentists, universities, hospitals, or laboratories which have their own SPDES permit.

b. Control Strategy - The control strategy must contain the following minimum elements:
   i. 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.
   ii. 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. Review of criteria to determine if the facility has a potential mercury source;
      a. If the permittee no longer meets the criteria for MMP Type IV, the permittee must notify the Department for a permittee-initiated permit modification;
   ii. All actions undertaken, pursuant to the control strategy, during the previous year; and
   iii. Actions planned, pursuant to the control strategy, for the upcoming year.

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

3. MMP Modification - The MMP must be modified whenever:
   a. Changes at the facility, or within the collection system, increase the potential for mercury discharges;
   b. A letter from the Department identifies inadequacies in the MMP.

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

DEFINITIONS:

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 REQUIREMENT

(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.

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date
002,003, & 004	TDS BACKGROUND STUDY (TDS STUDY) The permittee shall conduct a four-year background study to determine the applicable monitoring requirements or effluent limitations for Total Dissolved Solids (TDS) consistent with the applicable standards adopted by the State under 6 NYCRR 703.3 (Dissolved solids standards). The TDS Study must evaluate the stormwater effluent from outfalls 002, 003, and 004 and the ambient receiving waters with the NYSDEC Dissolved Solids standards. Sampling events shall be under normal dry-weather operating conditions (i.e. no measurable rainfall in the 48 hours preceding) and wet weather conditions. a) TDS STUDY WORKPLAN (WORKPLAN) The permittee shall submit an approvable Workplan for conducting the TDS Study which includes both a sampling plan and a quality assurance project plan (QAPP) for the TDS Study. The Workplan must identify the sampling parameters, sampling location(s), frequency, and procedure for evaluating compliance with the Dissolved Solids standards and must include an evaluation of TDS source tracking, with accompanying schedule for implementation. Once approved by the Department, permittee shall implement the Workplan per schedule. b) TDS STUDY PROGRESS REPORTS (REPORT) The permittee shall provide a semi-annual status update in the form of a progress report for the TDS Study. The assessment shall discuss the suitability of upstream and downstream control sampling points which are reflective of TDS concentrations both off-site and on-site sources. The Progress reports shall also discuss any proposed changes necessary to refine the sampling program which are subject to NYSDEC review and approval.	a) EDPM +6 months b) Every year beginning January 28, 2023 and July 28, 2023
002,003, & 004	a) TDS STUDY REPORT The permittee shall submit an approvable TDS Study Report which includes the results of the TDS Study and an assessment of attainment of the 500 mg/L Dissolved Solids standard in the receiving water at the sampling locations.. Upon review and approval of the Report, NYSDEC will notify the permittee in writing whether the Dissolved Solids standard is met based upon the reported sampling and TDS source tracking data. In the same notification: i. If the Dissolved Solids standard is met, NYSDEC will also provide the applicable monitoring requirements or effluent limitations. NYSDEC will propose a modification of the permit to include the applicable monitoring requirements or effluent limitations. ii. If the 500 mg/L is not achieved, permittee shall make recommendations in the Study Report on additional corrective measures to be implemented to become compliant with the standard. This report with recommendations shall also be submitted with the permit renewal. b) NY-2C application submission	c) EDPM +4.5 years d) EDPM +4.5 years

Unless noted otherwise, the above actions are one-time requirements. The permittee shall comply with the compliance actions above to the Department's satisfaction once. When this permit is administratively renewed by NYSDEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT," the permittee is not required to repeat the submission(s) noted above. The due dates in the table above are independent from the effective date of the permit stated in the "SPDES NOTICE/RENEWAL APPLICATION/PERMIT" letter.

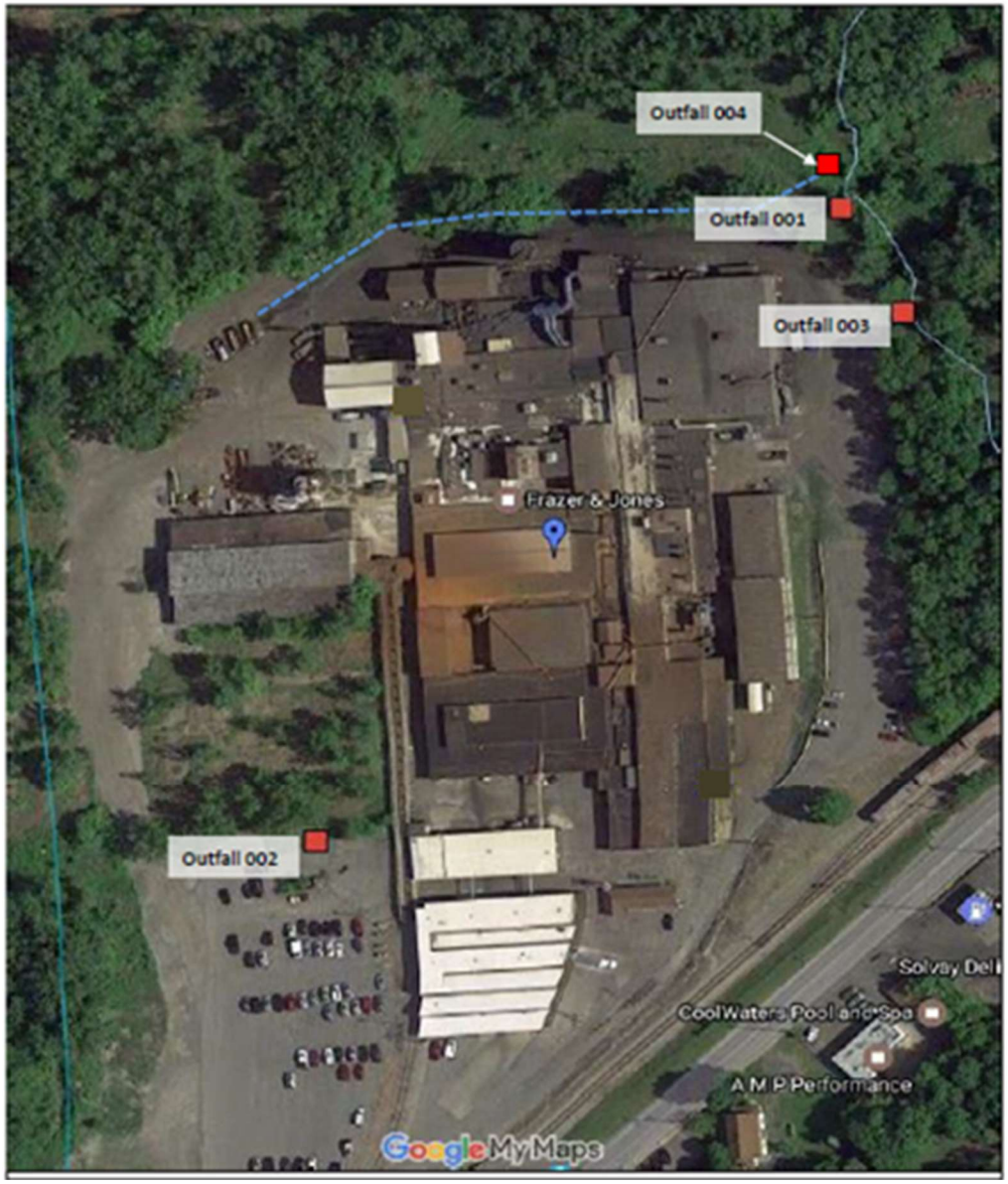
OUTFALL	PARAMETER	INTERIM EFFLUENT LIMIT				MONITORING REQUIREMENTS				Notes
								Location		
		Type	Limit	Units	Limits Apply	Sample Frequency	Sample Type	Inf.	Eff.	
002, 003, & 004	Total Dissolved Solids	Daily Max	Monitor	mg/L	Year Round	1/Month	Grab	-	X	1
Notes:	1. Interim limits expire: Upon modification of permit.									

b. The permittee shall submit a written notice of non-compliance with each of the above schedule dates as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All notifications non-compliance 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.

MONITORING LOCATIONS

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



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 H 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 for non-POTWs	6 NYCRR 750-2.5, 2.6, 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)

F. Sludge Management

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

G. 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.

H. 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 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 excessive levels of WTCs are not used.
3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The *WTC Notification Form and WTC Annual Report Form* are available from the Department's website at: http://www.dec.ny.gov/permits/93245.html

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

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

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by NYSDEC. Instructions on the use of NetDMR can be found at https://www.dec.ny.gov/chemical/103774.html. **Hardcopy paper DMRs will only be received at the address listed below, directed to the Bureau of Water Compliance, if a waiver from the electronic submittal requirements has been granted by DEC to the facility.**

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

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

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

Department of Environmental Conservation
Regional Water Engineer, Region 7
615 Erie Boulevard West, Syracuse, New York, 13204-2400 Phone: (315) 426-7500

D. 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 - Required Action	**Due Date**
All	BMP PLAN The permittee shall annually review the completed BMP plan, approved by this Department on 03/09/18, on an annual basis. The BMP plan shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions must be submitted to the Regional Water Engineer within 30 days.	EDP + 6 Months, Annually thereafter on January 28th
001, 002, 003	MERCURY - CONDITIONAL EXCLUSION CERTIFICATION Permittee must submit a mercury conditional exclusion certification every five years in order to maintain MMP Type IV status.	01/28/2024 and every 5 years thereafter
004	MERCURY – ANNUAL STATUS REPORT The permittee must complete and maintain onsite annual mercury minimization program status reports. The report shall follow the guidelines detailed in this permit.	01/28/2024 and every year thereafter

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
002, 003, & 004	TDS SEMI-ANNUAL REPORTS Permittee must submit a semi-annual progress report after commencement of the approved TDS Workplan describing sampling activities performed over the previous 6 months in compliance with this permit.	Every year beginning January 28, 2024 and July 28, 2024

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

E. 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.

F. 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.

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

H. 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.

I. 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
Frazer and Jones, LLC

NY0232491

Contents

Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) permit has been drafted for Frazer and Jones, LLC. The changes to the permit are summarized below:

- Updated permit format, definitions, and general conditions
- Updated MMP to Type IV based on 31 consecutive sampling points demonstrating that mercury discharge is below 12 ng/L.
- Updated MMP to Type III based on 4 sampling points demonstrating that mercury discharge is below 50 ng/L from outfall 004.

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

3/21/2022	The facility received permit coverage under an Order on Consent issued by the Division of Air Resources.
10/31/2021	No response was received to the RFI. Therefore, the current permit could not be extended pursuant to SAPA[1] and has expired.
1/25/2021	The Bureau of Water Permits sent a request for information to the permittee on January 25, 2021 in order to administratively renew the permit on or before October 31, 2021.
8/31/2020	The last full technical review was performed and the SPDES permit became effective with an expiration date of 10/31/2021. The 2020 permit has formed the basis of this permit.
8/31/2020	Permit was modified to include the addition of a new stormwater outfall; correct receiving water source for outfall 002; removed outfalls 01A and 03A; removed groundwater as a wastewater source to outfall 001; adjusted pH range of limits; decreased TSS limits for all outfalls; included discharge limits for zinc and copper.
7/15/2020	The Department published a notice of complete application in the Environmental Notice Bulletin (ENB).
3/8/2019	The Frazer and Jones, LLC submitted a request to modify the permit to add a stormwater outfall from its closed landfill located on-site.
3/8/2019	The Frazer and Jones, LLC submitted a NY-2C permit application.

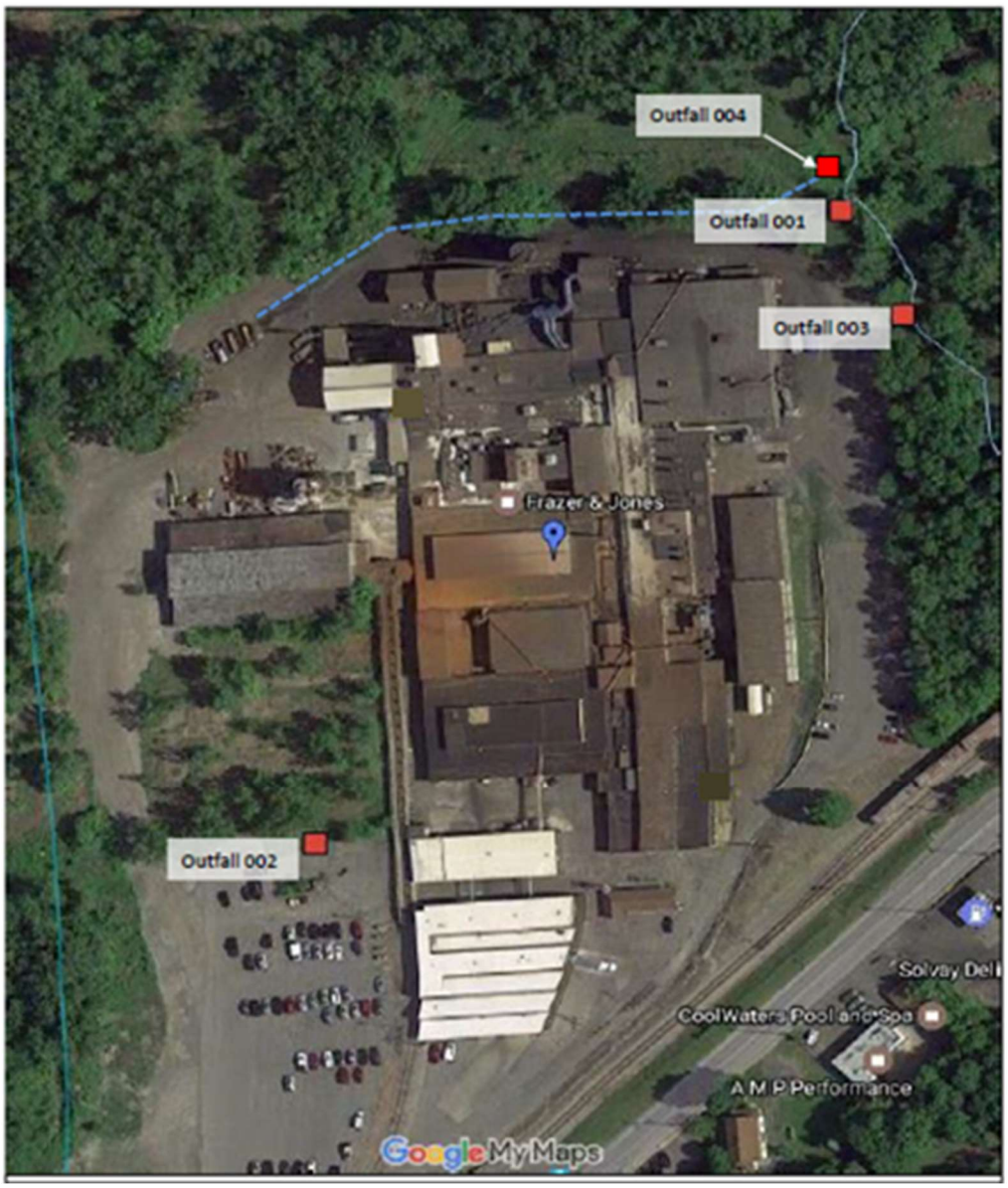
The Notice of Complete Application, published in the Environmental Notice Bulletin and newspapers, contains information on the public notice process.

Facility Information

This is an industrial facility (SIC code(s) 3322) that produces metal castings and is subject to categorical effluent limit guidelines (ELG) (see summary table at the end of this factsheet). Effluent consists of non-contact cooler

waster and discharge of stormwater from the site. Air control treatment system was modified in 2021 to improve capabilities to reduce dust and metals, in accordance with an Order on Consent described below.

Site Overview



Enforcement History

The facility is operating under Order on Consent R7-20211213-45 issued by the Division of Air Resources dated July 2021. The Order requires the following compliance actions:

- Air emissions control upgrades
- Replacement of spent-sand loading and transport system in spent-sand storage shed to achieve compliance with the Stormwater Best Management Plan and 6 NYCRR Part 750-2.8(a)(2)
- Completion of NY-2C for coverage under a SPDES permit

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

Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports and the application submitted by the permittee for the period 1/1/2020 to 8/22/2022.

Interstate Water Pollution Control Agencies

Outfall(s) 001, 002, 003, and 004 are located within the Great Lakes watershed and International Joint Commission (IJC) compact area which places additional requirements in the SPDES permit. Appendix Link

Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	3322	Non-contact cooling water, stormwater	Unnamed Tributary of SYW Wetland 15, Class C
002	3322	Stormwater, groundwater	Unnamed Tributary to Geddes Brook, Class C(T)
003, 004	3322	Stormwater, groundwater	Unnamed Tributary of SYW Wetland 15, Class C

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

Impaired Waterbody Information

This waterbody segment is not listed on the 2017 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 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.

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

Best Practicable Control Technology Currently Available (BPT), Best Conventional Pollutant Control Technology (BCT), Best Available Technology Economically Achievable (BAT), and New Source Performance Standards (NSPS) limitations are based on Effluent Limitation Guidelines developed by USEPA for specific industries[1]. For this facility there are no promulgated effluent guidelines. Appendix Link

Whole Effluent Toxicity (WET) Testing

None of the seven criteria that are indicative of potential toxicity are applicable to this facility; therefore, WET testing is not included in the permit. Appendix Link

Anti-backsliding

The limitations contained in the permit are at least as stringent as the previous permit limits and there are no instances of backsliding. Anti-backsliding requirements do not apply to the revision to the final effluent limitation for TDS if that revision is being made before the scheduled date of compliance for the final effluent limitation. 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.

Best Management Practices (BMPs) for Industrial Facilities

In accordance with 6 NYCRR 750-1.14(f) and 40 CFR 122.44(k), the permittee is required to continue implementation of a BMP plan that prevents, or minimizes the potential for, the release of toxic or hazardous pollutants to state waters. The BMP plan requires annual review by the permittee.

Stormwater Pollution Prevention Requirements

The facility discharges stormwater associated with industrial activity and requires SPDES permit coverage under 40 CFR 122.26(a)(6).

Stormwater discharges at this facility cannot obtain coverage under the current Multi-Sector General Permit (MSGP) (GP-0-17-004). However, the permit includes select requirements consistent with the MSGP. This requirement is being continued from the previous permit.

[1] As promulgated under 40 CFR Parts 405 - 471
[2] As prescribed by 6 NYCRR Part 617

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 located within the Great Lakes Basin. Therefore, the permit also includes a 12-month rolling average total mercury effluent limitation equal to the EEQ. The calculated average existing effluent quality (EEQ) is 1.2 ng/L. The calculated 95th percentile value from the daily maximum sampling results reported to the Department is 4.4 ng/L. This is below 12 ng/L, which is below the expected contribution of mercury due to natural atmospheric deposition. Therefore, MMP Type IV is protective of water quality.

Mercury[4]

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 classified a significant surface water minor industrial (01). On September 16 2022, the permittee submitted a Conditional Exclusion Certification, certifying that outfalls 001, 002, and 003 do not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10 and the effluent measured <12 ng/L. Therefore, consistent with DOW 1.3.10, the permit includes requirements for the implementation of MMP Type IV and will continue to have mercury effluent limitations to satisfy anti-backsliding. The daily max effluent limitation will decrease from 50 ng/L to 12 ng/L (sampled yearly). The Schedule of Additional Submittals includes a mercury minimization plan annual status report (maintained onsite), and re-certification of the exclusion every five years. As part of the re-certification, the effluent must be sampled and continue to measure <12 ng/L. This requirement is updated from the previous permit.

Outfall 004 does not meet the requirements for MMP Type IV. Therefore, the permit includes requirements for the implementation of MMP Type III.

The facility is expected to meet the general level currently achievable (GLCA) of 50 ng/L which is based on 3 data point(s) of 29.9, 16.7 and 46.4 ng/L collected as part of the application. Monthly sampling will remain in the permit. This limit represents the general level currently achievable (GLCA). The data collected will be used to establish an additional 12-month rolling average effluent limit during the next permit review.

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

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

Schedule of Compliance

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

Total Dissolved Solids (TDS)

A schedule has been included in the permit to allow the permittee a reasonable and realistic timeframe to assess the background concentrations of TDS in the receiving waterbodies and for the Department to determine final effluent limitations. Under the proposed schedule, the permittee will conduct a TDS Background Study which

[3] In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.
[4] In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.
[5] Pursuant to 6 NYCRR 750-1.14

consists of data collection and assessment, along with TDS source tracking. The TDS Background Study will assist the Department in developing the applicable monitoring requirements or effluent limitations for TDS consistent with the water quality standards for Dissolved Solids adopted by the State under 6 NYCRR Part 703.3. The permittee will also submit a TDS Background Study report to the Department, including sampling and TDS source tracking data to detail the findings of the TDS Background Study.

Should the TDS Study find that TDS standards are not met under normal operations, the permittee shall propose recommendation in the TDS Study Report of potential mitigating alternatives necessary to comply with the applicable stormwater effluent limitations. With a limited data set of TDS background data, the Department, at this time, cannot conclusively determine that the permittee's compliance with the TDS water quality standards have been achieved. Therefore, the Department is deferring the finalization of stormwater effluent limitation until the results of the TDS Study have been received and the TDS Study Report has been approved by the Department.

Schedule(s) of Additional Submittals

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

- Updated BMP Plan
- Mercury Minimization Program Annual Status Report
- Mercury Conditional Exclusion Certification
- TDS Semi-Annual Report

OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	43° 3'42' 8" N	-76° 13'37 34" W	Tributary of SYW Wetland 15	C(T)	Ont.66-12-12 P154-6-2	07 / 02	350[6]	Intermittent Stream < 0.1 cfs			0.03	1:1		
002	43° 3'36 6" N	-76° 13'43 8" W	Tributary to Geddes Brook	C(T)	Ont.66-12-12 P154-6-2	07 / 02		Intermittent Stream < 0.1 cfs			0.01	1:1		
003	43° 3'41.56 N	-76°13'36.86"	Tributary of SYW Wetland 15	C(T)	Ont.66-12-12 P154-6-2	07 / 02		Intermittent Stream < 0.1 cfs			0.02	1:1		
004	43°3'42.85	-76°13'37.43	Tributary of SYW Wetland 15	C(T)	Ont.66-12-12 P154-6-2	07 / 02		Intermittent Stream < 0.1 cfs			0.06	1:1		

POLLUTANT SUMMARY TABLE - Outfall 001

Outfall #	001	**Description of Wastewater:** Untreated non-contact cooling water, stormwater **Type of Treatment: None**													
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 01/2020 to 07/2022 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	GPD	30 Day Avg	Monitor	31229 Actual Average	30	Monitor	TOGS 1.2.1	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Monitor
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	6.5	7.6	3	6.5	TOGS 1.3.3	-	6.5 – 8.5	6.5 – 8.5	Range	6.5 – 8.5	703.3	-	WQBEL
		Maximum	8.5	8.4	4	8.5									
	Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given that adequate dilution is not available, an effluent limitation equal to the WQS is appropriate.														

[6] Ambient hardness data obtained from previous permit.

[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)

Outfall #	001	**Description of Wastewater:** Untreated non-contact cooling water, stormwater **Type of Treatment: None**													
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		
Temperature	°F	Daily Max	70	64.4	7	70	TOGS 1.2.1	-	Narrative: No discharge at a temperature over 70F (21C) shall be permitted at any time classified for trout.				704.2	-	WQBEL
	.														
Oil & Grease	mg/L	Daily Max	15	4	30	N/A	TOGS 1.2.1	-	No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film not globules of grease.				703.2		WQBEL
Chemical Oxygen Demand	mg/L	Monthly Avg	Monitor	8.10	23/0	N/A	TOGS 1.2.1	-	NO WQ Std/Guidance Value.				-	-	
	lbs/d	Monthly Avg	Daily Max	2.23	23/0	N/A	TOGS 1.2.1								
Total Suspended Solids	mg/L	Select	10	1.2	23 /0	10	TOGS 1.2.1	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages. (703.2)				10.0 (DM)	TOGS 1.3.1	-	ISEL
	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.														
Total Dissolved Solids	mg/L	Monthly Avg	500	230	30/0	500	TOGS 1.3.3	-	500.0	500.0	-	500.0 (DM)	703.3	-	WQBEL
	Due to the intermittent nature of the stream and lack of dilution, an effluent limit equal to the water quality standard is suggested.														
Additional Pollutants Detected															
Total Copper	mg/L	Daily Max	0.03	0.01	23	0.03	TOGS 1.2.1	-	0.0261	0.0261	Chronic	0.0272 (DM)	703.5		Select
	The WQBEL is developed by multiplying the WQ standard and a translator of 1.042. A translator of (converts dissolved form of a pollutant to the total form of the same.														
Total Iron	mg/L	Daily Max	0.6	0.01	23	0.06	TOGS 1.2.1	-	1.0	1.0	Chronic	1.0 (DM)	703.5		TBEL
	Due to the intermittent nature of the stream and lack of dilution, an effluent limit equal to the water quality standard/guidance value is suggested.														

Outfall #	001	**Description of Wastewater:** Untreated non-contact cooling water, stormwater **Type of Treatment: None**													
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 Zinc	mg/L	Daily Max	0.24	0.03	23	0.24	TOGS 1.2.1	-	0.2397	0.2397	Chronic	0.2431 (DM)	703.5		WQBEL
	The WQBEL is developed by multiplying the WQ standard and a translator of 1.014. A translator converts dissolved form of a pollutant to the total form of the same.														
Total Aluminum	mg/L	Daily Max	Monitor	0.1	30	N/A	TOGS 1.3.1E	-	-	Apply TBEL per TOGS 1.3.1.E					TBEL
Mercury mMercury g/L	ng/L	Daily Max	50	4.4	30	12	TOGS 1.3.1E	-	-	Apply TBEL per TOGS 1.3.1.E					TBEL
	TOGS 1.3.10 MMP Type IV														

POLLUTANT SUMMARY TABLE - Outfall 002

Outfall #	002	**Description of Wastewater:** stormwater														
		Type of Treatment:														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[8]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 10/2016 to 09/2019 was obtained from Discharge Monitoring Reports provided by the permittee.															
Temperature	°F	Annual Avg	70	58	30	70	TOGS 1.2.1	Narrative: No discharge at a temperature over 70F (21C) shall be permitted at any time classified for trout.					703.4	-	WQBEL
Flow Rate	GPD	30 Day Avg	Monitor	6570	30	Monitor	TOGS 1.2.1	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Monitor
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	6	7.3	23	6.5	TOGS 1.2.1	-	6.5 – 8.5	6.5 – 8.5	Range	6.5 – 8.5	703.3	-	WQBEL
		Maximum	9	7.7	23	8.5									
	Due to the intermittent nature of the stream and lack of dilution, an effluent limit equal to WQS is appropriate.														
Oil & Grease	mg/L	Annual Avg	15	4	30	15	TOGS 1.2.1	-	No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease. (703.2)				703.2		
Total Suspended Solids	mg/L	Monthly Avg	10	5.3	23	10	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.			10.0 (DM)	TOGS 1.3.1	-	ISEL
	Due to the intermittent nature of the stream and lack of dilution, an effluent limit equal to ISEL level is suggested per TOGS1.3.1.														
Total Dissolved Solids	mg/L	Monthly Avg	500	2673	30	500	TOGS 1.3.3	TBD	TBD	500	C(T)	500 (DM)	703.3	-	WQBEL

[8] 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)

Outfall #	002	**Description of Wastewater:** stormwater **Type of Treatment:**													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[8]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Basis for Permit Requirement
	A schedule has been included in the permit to allow the permittee a reasonable and realistic timeframe to assess the background concentrations of TDS in the receiving waterbodies and for the Department to determine final effluent limitations. Under the proposed schedule, the permittee will conduct a TDS Background Study which consists of data collection and assessment, along with TDS source tracking.														
Iron	mg/L	Daily Max	0.6	0.77	35	0.6	TOGS 1.2.1	-	1.0	1.0	Chronic	1.0 (DM)	703.5	-	TBEL
	lb/d	Daily Max	N/A		1										
	Due to the intermittent nature of the stream and lack of dilution, an effluent limit equal to the water quality standard/guidance value is suggested.														
Copper	mg/L	Daily Max	Monitor	0.01	30	0.03	TOGS 1.2.1	-	0.0261	0.0261	Chronic	0.0272 (DM)	**703.5**	-	
	The WQBEL is developed by multiplying the WQ standard and a translator of 1.042. A translator converts dissolved form of a pollutant to the total form of the same.														
Zinc	mg/L	Daily Max	0.24	0.17	30	0.24	TOGS 1.2.1	-	0.2397	0.2397	Chronic	0.2431 (DM)	703.5	-	
	The WQBEL is developed by multiplying the WQ standard and a translator of 1.014. A translator converts dissolved form of a pollutant to the total form of the same.														
Aluminum	mg/L	Daily Max	Monitor	0.28	30	NA	TOGS 1.3.1 E	-	-	Apply TBEL per TOGS 1.3.1.E				-	TBEL
Mercury mMercury g/L	ng/L	Daily Max	50	5.5	30	12	TOGS 1.3.1E	-	-	Apply TBEL per TOGS 1.3.1.E				-	TBEL
	TOGS 1.3.10 MMP Type IV														

POLLUTANT SUMMARY TABLE - Outfall 003

Outfall #	003	**Description of Wastewater:** stormwater													
		Type of Treatment:													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Limit
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 10/2016 to 09/2019 was obtained from Discharge Monitoring Reports provided by the permittee.															
Flow Rate	GPD	30 Day Avg	Monitor	11,830	30	Monitor	TOGS 1.2.1	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Monitor
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	6.5	7.7	23	6.5	TOGS 1.2.1	-	6.5-8.5	6.5 – 8.5	Range	6.5-8.5	703.2	-	WQBEL
		Maximum	8.5	8.1	23	8.5									
	Due to the intermittent nature of the stream and lack of dilution, an effluent limit equal to the WQS is appropriate.														
Temperature	°F	Annual Avg	70	56	23	70	TOGS 1.2.1	-	Narrative (Trout): No discharge at a temperature over 70F (21C) shall be permitted at any time to streams classified for trout				704.2	-	WQBEL
Total Suspended Solids	mg/L	Monthly Avg	10	9	23	10	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.			10.0 (Daily Max)	ISEL TOGS 1.3.1	-	ISEL
	Due to the intermittent nature of the stream and lack of dilution, an effluent limit equal to ISEL level is suggested per TOGS1.3.1.														
Total Dissolved Solids	mg/L	Monthly Avg	500	2,200	30	500	TOGS 1.3.3	TBD	TBD	500	C(T) .	500 (DM)	703.3	-	WQBEL

[9] 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)

Outfall #	003	**Description of Wastewater:** stormwater **Type of Treatment:**														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Limit
			Permit Limit	Existing Effluent Quality[9]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
	A schedule has been included in the permit to allow the permittee a reasonable and realistic timeframe to assess the background concentrations of TDS in the receiving waterbodies and for the Department to determine final effluent limitations. Under the proposed schedule, the permittee will conduct a TDS Background Study which consists of data collection and assessment, along with TDS source tracking.														
Iron	mg/L	Daily Max	0.6	0.4	30	0.6	TOGS 1.2.1	-	1.0	1.0	Chronic	1.0 (DM)	703.5	-	TBEL
	lb/d	Daily Max	N/A												
	Due to the intermittent nature of the stream and lack of dilution, an effluent limit equal to the water quality standard/guidance value is suggested.														
Copper	mg/L	Daily Max	Monitor	0.01	30	0.03	TOGS 1.2.1	-	0.0261	0.0261	Chronic	0.0272 (DM)	703.5	-	
	The WQBEL is developed by multiplying the WQ standard and a translator of 1.042. A translator converts dissolved form of a pollutant to the total form of the same.														
Zinc	mg/L	Daily Max	Monitor	.03	30	0.24		-	0.2397	0.2397	Chronic	0.2431 (DM)	703.5	-	
	The WQBEL is developed by multiplying the WQ standard and a translator of 1.014. A translator converts dissolved form of a pollutant to the total form of the same.														
Aluminum	mg/L	Daily Max	Monitor	0.1	30	NA	TOGS 1.3.1 E	-	-	Apply TBEL per TOGS 1.3.1.E				-	TBEL
Mercury (mMercury g/L)	ng/L	Daily Max	50	5.5	30	12	TOGS 1.3.1E	-	-	Apply TBEL per TOGS 1.3.1.E				-	TBEL
	TOGS 1.3.10 MMP Type IV														

POLLUTANT SUMMARY TABLE - Outfall 004

Outfall #	004	**Description of Wastewater:** stormwater **Type of Treatment:**														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Limit
			Permit Limit	Existing Effluent Quality [10]	# 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: Proposed discharge was obtained from estimates provided by the permittee.															
Flow Rate	GPD	30 Day Avg	Monitor	Est. 18150	3	Monitor	TOGS 1.2.1	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Monitor
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	6.5	8.0	4	6.5	TOGS 1.2.1	-	6.5 – 8.5	6.5 – 8.5	Range	6.5 – 8.5	703.3	-	WQBEL
		Maximum	8.5	8.0	4	8.5									
	Due to the intermittent nature of the stream and lack of dilution, an effluent limit equal to the WQS is appropriate.														
Temperature	°F	Annual Avg	70	54	5	70	TOGS 1.2.1	-	Narrative (Trout): No discharge at a temperature over 70F (21C) shall be permitted at any time to streams classified for trout				704.2	-	WQBEL
Total Suspended Solids	mg/L	Monthly Avg	10	259	4	10	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.			10.0 Daily Max	TOGS 1.3.1	-	ISEL
	Due to the intermittent nature of the stream and lack of dilution, an effluent limit equal to ISEL level is suggested per TOGS1.3.1.														
Total Dissolved Solids	mg/L	Monthly Avg	500	183	3	500	TOGS 1.3.3	TBD	TBD	500	C(T)	500 Daily Max	703.2	-	WQBEL
	A schedule has been included in the permit to allow the permittee a reasonable and realistic timeframe to assess the background concentrations of TDS in the receiving waterbodies and for the Department to determine final effluent limitations. Under the proposed schedule, the permittee will conduct a TDS Background Study which consists of data collection and assessment, along with TDS source tracking.														
Mercury	ng/L	Daily Max	50	45	3	12	TOGS 1.3.10	-	-	0.7	H(FC)	0.7 (MA)	703.5	-	MDV

[10] 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)

Outfall #	004	**Description of Wastewater:** stormwater														
		Type of Treatment:														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Limit
			Permit Limit	Existing Effluent Quality [10]	# 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		
Mercury	ng/L	12 MRA	-	-	-	45	EEQ	-	-	0.7	H(FC)	12	-	-	DOW 1.3.10
	As per TOGS 1.3.10, the draft permit has included a daily maximum effluent limit of 50 ng/l. MMP Type III. See Mercury section of this factsheet.														
Iron	mg/L	Daily Max	0.6	12.8	3	0.6	TOGS 1.2.1	-	1.0	1.0	Chronic	1.0 (DM)	703.5	-	TBEL
	Due to the intermittent nature of the stream and lack of dilution, an effluent limit equal to the water quality standard/guidance value is suggested.														
Copper	mg/L	Daily Max	0.03	0.155	3	0.03	TOGS 1.2.1	-	0.0261	0.0261	Chronic	0.0272 (DM)	703.5	-	
	The WQBEL is developed by multiplying the WQ standard and a translator of 1.042. A translator converts dissolved form of a pollutant to the total form of the same.														
Zinc	mg/L	Daily Max	0.24	0.143	3	0.24		-	-	Apply TBEL per TOGS 1.3.1.E				-	
	The WQBEL is developed by multiplying the WQ standard and a translator of 1.014. A translator converts dissolved form of a pollutant to the total form of the same.														

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.

Interstate Water Pollution Control Agencies

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

Existing Effluent Quality

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

Permit Requirements

Basis for Effluent Limitations

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

When conducting a full technical review of an existing permit, the previous effluent limitations form the basis for the next permit. Existing effluent quality is evaluated against the existing effluent limitations to determine if these should be continued, revised, or deleted. Generally, existing limitations are continued unless there are changed conditions at the facility, the facility demonstrates an ability to meet more stringent limitations, 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[11] and USEPA interpretation[12] 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.

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

Antidegradation Policy

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

Effluent Limitations

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

Technology-based Effluent Limitations (TBELs) for Industrial Facilities

A TBEL requires a minimum level of treatment for industrial point sources based on currently available treatment technologies and/or Best Management Practices (BMPs). CWA sections 301(b) and 402, ECL sections 17-0509, 17-0809 and 17-0811, and 6 NYCRR 750-1.11 require technology-based controls on effluents. TBELs are set based upon an evaluation of New Source Performance Standards (NSPS), Best Available Technology Economically Achievable (BAT), Best Conventional Pollutant Control Technology (BCT), Best Practicable Technology Currently Available (BPT), and/or Best Professional Judgment (BPJ).

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

In many cases, BPT, BCT, BAT and NSPS limitations are based on effluent guidelines developed by USEPA for specific industries, as promulgated under 40 CFR Parts 405-471. Applicable guidelines, pollutants regulated by these guidelines, and the effluent limitation derivation for facilities subject to these guidelines is in the USEPA Effluent Limitation Guideline Calculations Table.

Best Professional Judgement (BPJ)

For substances that are not explicitly limited by regulations, the permit writer is authorized to use BPJ in developing TBELs. Consistent with section 402(a)(1) of the CWA, and NYS ECL section 17-0811, the Department is authorized to issue a permit containing "any further limitations necessary to ensure compliance with water quality standards adopted pursuant to state law". BPJ limitations may be set on a case-by-case basis using any reasonable method that takes into consideration the criteria set forth in 40 CFR 125.3. Applicable state regulations include 6 NYCRR 750-1.11. The BPJ limitation considers the existing technology present at the facility, the statistically calculated existing effluent quality for that parameter, and any unique or site-specific factors relating to the facility. Technology limitations generally achievable for various treatment technologies are included in TOGS 1.2.1, Attachment C. These limitations may be used for the listed parameters when the technology employed at the facility is listed.

Technology-based Effluent Limitations (TBELS) for Discharges to Groundwater

TBELS aim to prevent pollution by requiring a minimum level of effluent quality that is attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the United States. ECL section 17-0509, and 6 NYCRR 750-1.11 require technology-based controls for POTWs discharging to surface waters, known as secondary treatment. The applicable regulations are specified in 40 CFR 133.102 and 6 NYCRR 750-1.11. These and other requirements are summarized in TOGS 1.3.3 and below:

- Secondary treatment requirements of 40 CFR Part 133 will typically not be included unless the facility discharges to a surface water prior to entering the groundwater or if, in the permit writer's judgement, limitations are necessary to prevent nuisance conditions or enhance plant operation.
- Since nitrogen is a component of all domestic wastewater, permits for facilities discharging 30,000 GPD or greater include effluent limitations for Nitrate of 20 mg/L (as N). Groundwater discharges in Nassau and Suffolk Counties are required to achieve an effluent standard for Total Nitrogen of 10 mg/L (as N).
- Disinfection will typically not be required for discharges to groundwater unless local public health concerns exist due to exposure or contact with effluent. When this occurs, disinfection requirements and effluent limitations for chlorine residual are developed in accordance with TOGS 1.3.3.

Technology-based Effluent Limitations (TBELS) for Industrial Facilities to Groundwater

TBELS aim to prevent pollution by requiring a minimum level of effluent quality that is attainable using demonstrated technologies for reducing discharges of pollutants or pollution into the waters of the United States. Requirements for discharges from industrial facilities to groundwater are summarized in TOGS 1.2.1. In accordance with TOGS 1.2.1, for facilities discharging to groundwater:

- Discharges will typically be limited to the more stringent of the groundwater effluent standards in 6 NYCRR 703.6 or the applicable treatment technology listed in TOGS 1.2.1 Attachment (C).
- Discharges from industrial facilities which contain nitrogen or nitrogen compounds include effluent limitations for Nitrate of 20 mg/L (as N). Groundwater discharges in Nassau and Suffolk Counties are required to achieve an effluent standard for Total Nitrogen of 10 mg/L (as N).
- Disinfection will typically not be required for discharges to groundwater unless local public health concerns exist due to exposure or contact with effluent.

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.

Water Quality-Based Effluent Limitations (WQBELs) for Discharges to Groundwater

The procedure for developing WQBELs includes identifying the pollutants present in the discharge(s), identifying water quality criteria applicable to these pollutants, determining if WQBELs are necessary (reasonable potential), and calculating the WQBELs. For groundwater discharges, if the expected concentration of the pollutant of concern in the receiving water may exceed the ambient groundwater quality standard or guidance value, then there is reasonable potential that the discharge may cause or contribute to a violation of the water quality, and a WQBEL for the pollutant is required.

WQBELs for groundwater discharges are based on the groundwater effluent limits set forth in 6 NYCRR Part 703 (Surface Water and Groundwater Quality Standards and Groundwater Effluent Limitations) except as noted in 6 NYCRR 702.21. TOGS 1.1.1 provides a listing of groundwater effluent limitations for substances having an ambient water quality standard or guidance value. Groundwater effluent limitations are applied at the point of discharge to the groundwater distribution system.

For land treatment systems with no accessible final sampling points, such as constructed wetland treatment systems or buried sand filters, permit limitations for groundwater discharges are typically based on ambient groundwater quality standards or guidance values applied at representative down gradient monitoring well(s). Limitations at the downgradient sampling point are set at the Class GA ambient groundwater standards, rather than at the groundwater effluent limits promulgated under 6 NYCRR 703.6, as compliance is determined based upon the concentrations present in the downgradient groundwater monitoring well at the groundwater interface.

Class GA standards are established for the protection of sources of drinking water designated as Health (Water Source) or H(WS) in TOGS 1.1.1. As such, effluent limitations based on aquatic life criteria and WET testing requirements are not applicable to groundwater discharges.

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.

There have been a number of changes to DOW 1.3.10, December 2020 (e.g., the criteria for mercury sources, the MMP Decision tree, and the MMPs themselves) which could result in less stringent effluent limitations. There are now criteria to determine if a facility has sources of mercury. Additionally, the types of MMPs have been restructured. MMP Type IV is appropriate for facilities that are not sources of mercury. A similar MMP type was not included in the 2010 or 2015 versions of DOW 1.3.10. DOW 1.3.10, Figure 1, is a decision tree, which includes the criteria used to determine if a facility has source of mercury and which MMP is appropriate for a facility.

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.

Best Management Practices (BMP) for Industrial Facilities

BMP plans are authorized for inclusion in NPDES permits pursuant to Sections 304(e) and 402 (a)(1) of the Clean Water Act, and 6 NYCRR 750-1.14(f). The regulations pertaining to BMPs are promulgated under 40 CFR Part 125, Subpart K. These regulations specifically address surface water discharges.

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.

Mini Industrial Pretreatment Program

Pretreatment requirements are intended to protect a WWTP from receiving pollutants that cause pass through or interference to the operations of the POTW receiving such wastes. When necessary, the Department, in accordance with TOGS 1.3.3. and through issued SPDES permits, requires WWTPs to develop and implement mini or partial pretreatment programs. These requirements are consistent with regulations in 6 NYCRR §750-2.9(b)(1), ECL 17-0811, ECL 17-0825, and 40 CFR §403.5.

As part of the mini pretreatment program, a WWTP must identify industrial users; determine whether legal authority controls (e.g. sewer use laws) are adequate; require, issue, and enforce industrial user permits; and, implement the program.