



Department of
Environmental
Conservation

State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	2022, 2023, 2026	NAICS Code:	311513		SPDES Number:	NY0215775
Discharge Class (CL):	01		DEC Number:			6-2220-00008/00004
Toxic Class (TX):	N		Effective Date (EDP):			EDP
Major-Sub Drainage Basin:	03 - 03		Expiration Date (ExDP):			ExDP
Water Index Number:	Ont 44-Portion as Described	Item No.:	874 - 80		Modification Dates (EDPM):	
Compact Area:	IJC					

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

PERMITTEE NAME AND ADDRESS					
Name:	Great Lakes Cheese of New York, Inc.			Attention:	Nicholas Dnistrian, Plant Manager
Street:	23 Phelps Street				
City:	Adams			State:	NY Zip Code: 13605
Email:	nicholas.dnistrian@greatlakescheese.com			Phone:	(315) 232-5332

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL									
Name:	Great Lakes Cheese of New York, Inc.								
Address / Location:	23 Phelps Street					County:	Jefferson		
City:	Adams				State:	NY	Zip Code:	13605	
Facility Location:	Latitude:	43 °	48 '	37 " N	& Longitude:	76 °	1 '	46 " W	
Primary Outfall No.:	001	Latitude:	43 °	48 '	34 " N	& Longitude:	76 °	1 '	34 " W
Wastewater Description:	Treated Process Wastewater & Cooling Water	Receiving Water:	Sandy Creek		NAICS:	311513	Class:	C	Standard: C(T)

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

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

DISTRIBUTION:

BWP Permit Coordinator (permit.coordinator@dec.ny.gov)

BWP Permit Writer

RWE

RPA

EPA Region II (Region2_NPDES@epa.gov)

Permit Administrator:	Miranda Gilgore	
Address:	317 Washington St, Watertown, NY 13601	
Signature	Date	

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DEFINITIONS

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

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING ¹
001	Treated Process Wastewater and Cooling Water	Sandy Creek	EDP	ExDP or Upon New Production Operation Startup ¹

OUTFALL 001 EXISTING PRODUCTION PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	0.40	MGD	-		Continuous	Recorder		X	
	Daily Maximum	0.50	MGD	-		Continuous	Recorder		X	
pH	Daily Minimum	6.5	SU	-		1/day	Grab		X	
	Daily Maximum	8.5	SU	-					X	
Temperature	Daily Minimum	Monitor	°F	-		Continuous	Continuous		X	2
	Daily Maximum	70	°F	-		Continuous	Continuous		X	2
Biochemical Oxygen Demand (BOD ₅)	Monthly Average	18	mg/L	75	lbs/d	1/week	24-hr. Composite		X	3
	Daily Maximum	46	mg/L	190	lbs/d	1/week	24-hr. Composite		X	3
Chemical Oxygen Demand (COD)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/week	24-hr. Composite		X	3
	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/week	24-hr. Composite		X	3
Ultimate Oxygen Demand (UOD)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/week	24-hr. Composite		X	3,4
	7-Day Average	Monitor	mg/L	170	lbs/d	1/week	24-hr. Composite		X	3,4
Total Suspended Solids (TSS)	Monthly Average	26	mg/L	110	lbs/d	1/week	24-hr. Composite		X	3
	Daily Maximum	67	mg/L	280	lbs/d	1/week	24-hr. Composite		X	3
Settleable Solids	Daily Maximum	0.1	mL/L	-		1/day	Grab		X	
Dissolved Oxygen	Daily Minimum	6.0	mg/L	-		1/day	Grab		X	
	Monthly Average	Monitor	mg/L	-		1/day	Grab		X	
Ammonia (as N)	Monthly Average	1.2	mg/L	5.2	lbs/d	1/week	24-hr. Composite		X	3
	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/week	24-hr. Composite		X	3
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/week	24-hr. Composite		X	3
	Daily Maximum	1.9	mg/L	8.0	lbs/d	1/week	24-hr. Composite		X	3

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OUTFALL 001 EXISTING PRODUCTION PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Total Dissolved Solids (TDS)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/week	24-hr. Composite		X	3
	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/week	24-hr. Composite		X	3
Total Residual Chlorine (TRC)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/week	Grab		X	5,6
	Daily Maximum	0.02	mg/L	0.12	lbs/d	1/week	Grab		X	5,6

WHOLE EFFLUENT TOXICITY (WET) TESTING	Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote	-	0.3	TUa	Quarterly	See footnote		X	7,8
WET - Acute Vertebrate	See footnote	-	0.3	TUa	Quarterly	See footnote		X	7,8
WET - Chronic Invertebrate	See footnote	4.7	-	TUc	Quarterly	See footnote		X	7,8
WET - Chronic Vertebrate	See footnote	4.7	-	TUc	Quarterly	See footnote		X	7,8

FOOTNOTES FOR EXISTING PRODUCTION:

- Existing effluent limitations for Outfall 001 are no longer effective at DEC Acceptance of New Production Operation Startup or the expiration date of the permit, whichever is sooner (see [Schedule of Additional Submittals](#))
- Due to the possible attraction of fish to the warmed water near the permittee's thermal outfall, and the possibility of inducing cold shock to these fish in the event of a rapid shutdown during the period from December 1 through March 31, the following operational requirements shall be instituted relative to normal plant operation and plant shut down:
 - The permittee shall conduct a gradual shutdown of the discharge over a 24-hour period;
 - The permittee shall contact DEC Region 6 at least 48 hours prior to any planned or anticipated shut down of the thermal discharge;
 - By October 15 of each year, the permittee will submit to Region 6 Bureau of Fisheries the schedule for all outages for the coming period. If no outages are planned, the permittee will so state.
- All 24-hour composite samples must be flow proportional.
- Ultimate Oxygen Demand (UOD) shall be determined using a BOD₂₈ test (biochemical oxygen demand test with a twenty-eight-day incubation period).
- This is a Compliance Level for total residual chlorine. The calculated WQBEL is 0.005 mg/L.
- Sampling and reporting for total residual chlorine is only necessary if chlorine is used for disinfection, elsewhere in the treatment process, or the facility otherwise has reasonable potential to discharge chlorine. Otherwise, the permittee shall report NODI-9 on the DMR.
- Quarterly samples shall be collected in calendar quarters (Q1 – January 1st to March 31st; Q2 – April 1st to June 30th; Q3 – July 1st to September 30th; Q4 – October 1st to December 31st).

Footnotes Continued on Next Page

FOOTNOTES FOR EXISTING PRODUCTION (CONTINUED)**8. Whole Effluent Toxicity (WET) Testing:**

Testing Requirements – Chronic WET testing is required, but report both the acute and chronic results. The permittee shall perform testing in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the DEC. The test species shall be *Ceriodaphnia dubia* (water flea - invertebrate) and *Pimephales promelas* (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 1.6:1 for acute, and 3.7:1 for chronic.

Monitoring Period – The permittee shall perform WET testing quarterly (calendar quarters) on a continuous basis.

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

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

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

PERMIT LIMITS, LEVELS AND MONITORING- Proposed Production

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE ¹	EXPIRING
001	Treated Process Wastewater and Cooling Water	Sandy Creek	Upon New Production Operation Startup ¹	ExDP

OUTFALL 001 PROPOSED PRODUCTION PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	0.46	MGD	-		Continuous	Recorder		X	
	Daily Maximum	0.55	MGD	-		Continuous	Recorder		X	
pH	Daily Minimum	6.5	SU	-		1/Day	Grab		X	
	Daily Maximum	8.5	SU	-						
Temperature	Daily Minimum	Monitor	°F	-		Continuous	Continuous		X	2
	Daily Maximum	70	°F	-		Continuous	Continuous		X	2
5-day Biochemical Oxygen Demand (BOD ₅)	Monthly Average	32	mg/L	125	lbs/d	1/Week	24-hr. Composite		X	3
	Daily Maximum	68	mg/L	311	lbs/d	1/Week	24-hr. Composite		X	3
Chemical Oxygen Demand (COD)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/Week	24-hr. Composite		X	3
	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/Week	24-hr. Composite		X	3
Ultimate Oxygen Demand (UOD)	7-Day Average	Monitor	mg/L	170	lbs/d	1/Week	24-hr. Composite		X	3,4
Dissolved Oxygen (DO)	Monthly Average	Monitor	mg/L	-		1/Day	Grab		X	
	Daily Minimum	6.0	mg/L	-		1/Day	Grab		X	
Total Suspended Solids (TSS)	Monthly Average	49	mg/L	187	lbs/d	1/Week	24-hr. Composite		X	3
	Daily Maximum	101	mg/L	464	lbs/d	1/Week	24-hr. Composite		X	3
Settleable Solids	Daily Maximum	0.1	mL/L	-		1/Day	Grab		X	
Ammonia (as N)	Monthly Average	1.6	mg/L	6.1	lbs/d	1/Week	24-hr. Composite		X	3
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	1/Week	24-hr. Composite		X	3
	Daily Maximum	1.7	mg/L	8.0	lbs/d	1/Week	24-hr. Composite		X	3
Total Residual Chlorine (TRC)	Daily Maximum	0.02	mg/L	0.092	lbs/d	1/Week	Grab		X	5
Total Dissolved Solids (TDS)	Daily Maximum	1,600	mg/L	-		1/Week	24-hr. Composite		X	3,6

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote	-		1.3	TUa	Quarterly	See footnote		X	7,8
WET - Acute Vertebrate	See footnote	-		1.3	TUa	Quarterly	See footnote		X	7,8
WET - Chronic Invertebrate	See footnote	4.8	TUc	-		Quarterly	See footnote		X	7,8
WET - Chronic Vertebrate	See footnote	4.8	TUc	-		Quarterly	See footnote		X	7,8

FOOTNOTES FOR PROPOSED PRODUCTION:

1. The permit limits table for the proposed facility becomes effective at DEC Acceptance of New Production Operation Startup (see [Schedule of Additional Submittals](#)).
2. Due to the possible attraction of fish to the warmed water near the permittee's thermal outfall, and the possibility of inducing cold shock to these fish in the event of a rapid shutdown during the period from December 1 through March 31, the following operational requirements shall be instituted relative to normal plant operation and plant shut down:
 - a. The permittee shall conduct a gradual shutdown of the discharge over a 24-hour period;
 - b. The permittee shall contact DEC Region 6 at least 48 hours prior to any planned or anticipated shut down of the thermal discharge;
 - c. By October 15 of each year, the permittee will submit to Region 6 Bureau of Fisheries the schedule for all outages for the coming period. If no outages are planned, the permittee will so state.
3. All 24-hour composite samples must be flow proportional.
4. Ultimate Oxygen Demand (UOD) shall be determined using a BOD₂₈ test (biochemical oxygen demand test with a twenty-eight-day incubation period).
5. Sampling and reporting for total residual chlorine is only necessary if chlorine is used for disinfection, elsewhere in the treatment process, or the facility otherwise has reasonable potential to discharge chlorine. Otherwise, the permittee shall report NODI-9 on the DMR.
6. This is a final effluent limitation. See [Schedule of Compliance](#) for any applicable interim effluent limitations.
7. Quarterly samples shall be collected in calendar quarters (Q1 – January 1st to March 31st; Q2 – April 1st to June 30th; Q3 – July 1st to September 30th; Q4 – October 1st to December 31st).

Footnotes Continued on Next Page

FOOTNOTES FOR PROPOSED PRODUCTION (CONTINUED)**8. Whole Effluent Toxicity (WET) Testing:**

Testing Requirements – Chronic WET testing is required, but report both the acute and chronic results. The permittee shall perform testing in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the DEC. The test species shall be *Ceriodaphnia dubia* (water flea - invertebrate) and *Pimephales promelas* (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 4.2:1 for acute, and 4.8:1 for chronic.

Monitoring Period – The permittee shall perform WET testing quarterly (calendar quarters) on a continuous basis.

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

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

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

TDS MINIMIZATION PROGRAM FOR INDUSTRIAL FACILITIES

1. **General**—The permittee shall develop, maintain, and implement a Total Dissolved Solids Minimization Program (TDSMP) for Outfall 001 for Total Dissolved Solids (TDS). The TDSMP is required because the Water Quality Standard for TDS as promulgated in 6 NYCRR 703.3 requires that, for Class C(T) waters, total dissolved solids “Shall be kept as low as practicable to maintain the best usage of waters but in no case shall it exceed 500mg/L”. The objective of this TDSMP is to meet the permit limits when the new production line starts up.
2. **TDSMP Elements**— This TDSMP plan shall be documented in narrative form and shall include any relevant plot plans, drawings, or maps. Other documents already prepared for the facility, such as a Best Management Practices Plan, may be used as part of the plan and may be incorporated by reference. At a minimum, the TDSMP plan shall include:
 - a. **Background concentrations of TDS and hardness outside the plant:** This shall include, at a minimum, collecting samples upstream and downstream of the effluent discharge point within the facility and sampling the drinking water supply. The permittee shall determine whether water softeners are used prior to distribution of drinking water. Instream samples shall be collected at a rate of 2/month.
 - b. **Sources of TDS within the plant:** The permittee shall track down potential contributors to TDS concentrations. These shall include, at a minimum, identification of any pre- treatment activities (e.g. private water softeners), identifying internal contributors of TDS (i.e. salts or additional additives used during plant operations), and identifying water treatment chemicals (WTCs) that could be a source of TDS. This sampling shall also include a characterization of TDS (e.g. sodium, chloride, potassium, etc.). Sampling shall be done on an ongoing basis until a subsequent permit is developed which replaces these requirements.
 - i. **Hotspot Identification:** The Permittee shall rank sources of TDS to the facility by order of magnitude relative to the TDS loading contribution in the influent.
 - c. **Best Management Practices (BMPs):** The permittee shall identify and assess the feasibility of implementing actions that may be taken to reduce effluent TDS. These may include, but are not limited to, implementing new housekeeping practices, minimizing the addition of salts, etc. The permittee should also identify current BMPs.

TDSMP Modification— The TDSMP plan shall be modified whenever: (a) changes at the facility increase the potential for discharge of the pollutant, (b) actual discharges indicate the plan is inadequate, or (c) a letter from DEC identifies inadequacies in the TDSMP plan

TDSMP Completion – Upon such a time that the WQBEL stated above has been met at this facility in accordance with the Schedule of Compliance contained within this permit, this minimization plan shall be considered complete, and the permittee may cease submission of any reports required by this TDSMP.

BEST MANAGEMENT PRACTICES (BMPs) FOR INDUSTRIAL FACILITIES

Note that for some facilities, especially those with few employees or limited industrial activities, some of the below 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.

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 DEC as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized DEC representatives upon request.
2. **Compliance Deadlines** – The permittee shall submit a BMP plan in accordance with the Schedule of Submittals. Annually, the permittee **shall review** and modify the BMP plan 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 DEC identifies inadequacies in the plan. The permittee shall certify that the annual review has been completed in accordance with the Schedule of Submittals. 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 permittee shall consider relative toxicity of the pollutant in determining the significance of potential releases. The review shall address all substances present at the facility that are identified in the SPDES application Form NY-2C (available at [SPDES Application Procedures and Forms - NYSDEC](#)) 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.

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

BMPs FOR INDUSTRIAL FACILITIES (continued)

5. **Stormwater Discharges from Construction Activity to Surface Waters** – Pursuant to Section 402 of the Clean Water Act (CWA), and 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), stormwater discharges from certain construction activities (including discharges through a municipal separate storm sewer system) are unlawful unless they are authorized by a SPDES permit. Prior to initiating such construction associated with this facility, the permittee must obtain coverage under the current version of the SPDES General Permit for Stormwater Discharges from Construction Activity (CGP) or a separate individual stormwater construction SPDES permit, if not eligible for the CGP.
6. **Required Sampling For “Hot Spot” Identification** – The permittee’s development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutant “hot spot” identification. The economic achievability of effluent limits will not be considered until plant site “hot spot” sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology. For the purposes of this permit condition a “hot spot” is a segment of an industrial facility (including but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem pollutants to the wastewater or stormwater collection system of that facility. For the purposes of this definition, problem pollutants are substances for which treatment to meet a water quality or technology requirement may, considering the results of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at the compliance monitoring location so as to allow for an economically justifiable removal, isolation, or B.A.T. treatment of wastewaters emanating from the segment.

MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

On 12/22/2025, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.E. of DOW 1.3.10.

1. General - To reduce mercury effluent levels with the goal of achieving the water quality standard of 0.7 ng/L, the permittee must develop, implement, and maintain a written MMP plan, which includes the elements set forth below.
2. Conditional Exclusion Certification – A certification (Appendix C of DOW 1.3.10), signed in accordance with 6 NYCRR 750-1.8, must be submitted once every 5 years for Outfall 001 to the Regional Water Engineer and to the Bureau of Water Permits, certifying that the facility is neither a mercury source nor receives flows from a mercury source. Criteria to determine if a facility has a mercury source are as follows:
 - The facility is, or receives flow from, a Combined Sewer System (CSS) or sanitary sewer system with Type II Sanitary Sewer Overflows (SSO¹);
 - One or more effluent samples 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 SPDES permit application, or other information, indicates that mercury is handled on-site and could be discharged through outfalls;
 - Existence of outfalls that contain legacy mercury contamination;
 - The facility's collection system receives discharges from a dental and/or Categorical Industrial User (CIU²) that may discharge mercury;
 - The facility accepts hauled wastes; OR,
 - 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 individual SPDES permit.
3. Control Strategy – develop and implement with the following minimum elements:
 - a. 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.
 - b. Bulk Chemical Evaluation – for chemicals used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain:
 - i. A manufacturer's certificate of analysis;
 - ii. A chemical analysis performed by a certified laboratory; OR,
 - iii. A notarized affidavit that describes the substances' mercury concentration and the detection limit achieved.

Where practicable, the permittee must only use bulk chemicals in the wastewater treatment process which contain <10 parts per billion (ppb) of mercury.

¹ These are Overflow Retention Facilities (ORFs) and are included under the 05 and 07 permit classifications.

² CIUs include those listed under Federal Regulation in 40 CFR Parts 405–471.

MERCURY MINIMIZATION PROGRAM (MMP) – Type IV (Continued)

4. Status Report – An **annual** status report must be developed, in accordance with the [Schedule of Additional Submittals](#), summarizing:
- Review of criteria to determine if the facility has a potential mercury source;
 - All actions undertaken, pursuant to the control strategy, during the previous year; and
 - Actions planned, pursuant to the control strategy, for the upcoming year.

The first status report is due in accordance with the Schedule of Additional Submittals. The permittee must maintain a file on-site with all MMP documentation.

5. MMP Modification – the permittee must submit a permittee-initiated modification request to DEC whenever:
- Changes at the facility, or within the collection system, increase the potential for mercury discharges; OR,
 - A letter from DEC identifies inadequacies in the MMP.

The permittee may use information in the status reports, as applicable in accordance with item 3 of this MMP, as a basis for the permittee-initiated modification.

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 REQUIREMENTS

- (a) The permittee shall install and maintain identification signs at all outfalls to surface waters listed in this permit, unless the Permittee has obtained a waiver in accordance with the Discharge Notification Act (DNA). Such signs shall be installed before initiation of any new discharge location.
- (b) Subsequent modifications to or renewal of this permit does not reset or revise the deadline set forth in (a) above, unless a new deadline is set explicitly by such permit modification or renewal.
- (c) The Discharge Notification Requirements described herein do not apply to outfalls from which the discharge is composed exclusively of storm water, or discharges to ground water.
- (d) The sign(s) shall be conspicuous, legible and in as close proximity to the point of discharge as is reasonably possible while ensuring the maximum visibility from the surface water and shore. The signs shall be installed in such a manner to pose minimal hazard to navigation, bathing or other water related activities. If the public has access to the water from the land in the vicinity of the outfall, an identical sign shall be posted to be visible from the direction approaching the surface water.

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

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. : _____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

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

OR:

NYSDEC Division of Water Regional Office Address:

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

- (e) The permittee shall provide for public review at the business office repository of the permittee or at the off-premises location of its choice, provided the custodian of the off-premise location grants written permission, (such off-premise location shall be the village, town, city or county clerk's office, local library or other location accessible by the public) all the Discharge Monitoring Reports (DMR) prepared by the permittee to demonstrate compliance with the SPDES permit conditions. A copy of each DMR shall be placed on file at such location at the same time it is sent to the department, or within 60 days of preparation for DMRs not required to be submitted to the Department. 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 ³
001	<u>TDS MINIMIZATION PLAN UPDATE</u> The permittee shall submit an updated total dissolved solids (TDS) minimization plan in accordance with the TDSMP elements identified in this permit.	EDP + 6 months
001	<u>INTERIM REPORT</u> The permittee shall submit a brief report summarizing actions taken since the time of initiation of the plan updates and progress towards developing the TDS Analysis Report	EDP + 12 months
001	<u>TDS ANALYSIS REPORT</u> The permittee shall submit an approvable ⁴ analysis report assessing facility performance and recommending improvements for the treatment of Total Dissolved Solids (TDS) at the facility. Include in the assessment: <ol style="list-style-type: none"> 1. An evaluation of the current facility's TDS performance 2. A comparison of TDS and specific conductance samples taken at the facility 3. Recommendations for short term or BMP changes to improve TDS removal performance of the current facility 4. Recommendations for long term operational or management changes with the goal of compliance with the final TDS limit 5. For all recommendations, provide a proposed schedule* for implementation as appropriate *Should the permittee identify modification of the facility as an appropriate measure, the permittee shall include in the schedule submission to DEC of approvable ⁴ documentation as required in 6 NYCRR 750-2.10.	EDP+18 months
001	<u>INTERIM REPORT</u> The permittee shall submit a brief report summarizing actions taken since the time of initiation of the plan updates or last report. The interim reports shall contain: <ol style="list-style-type: none"> 1. Summary of TDS monitoring data 2. List of known or potential TDS sources 3. Measures implemented since the time of last report 4. Measures to be completed during next reporting period 5. Document progress toward achieving the effluent limitation 	EDP 24 months and every 6 months thereafter until the date of compliance with TDS limit
001	<u>ACHIEVE FINAL COMPLIANCE WITH TDS LIMIT</u> The permittee shall achieve compliance with the TDS limit as stated in the above permit limits tables. At this time, the TDS minimization plan shall be considered complete and any reports required by the TDS minimization plan or this Schedule of Compliance may cease.	EDP + 60 months
Unless noted otherwise, the above actions are one-time requirements.		

³ 6 NYCRR 750-1.14 (a)

⁴ 6 NYCRR 750-1.2 (a) (8)

Outfall(s)	Compliance Action	Compliance Date ³
See next page for Interim Effluent Limits.		

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SCHEDULE OF COMPLIANCE – Interim Effluent Limits

OUTFALL	EXPIRING
001	See Note 1

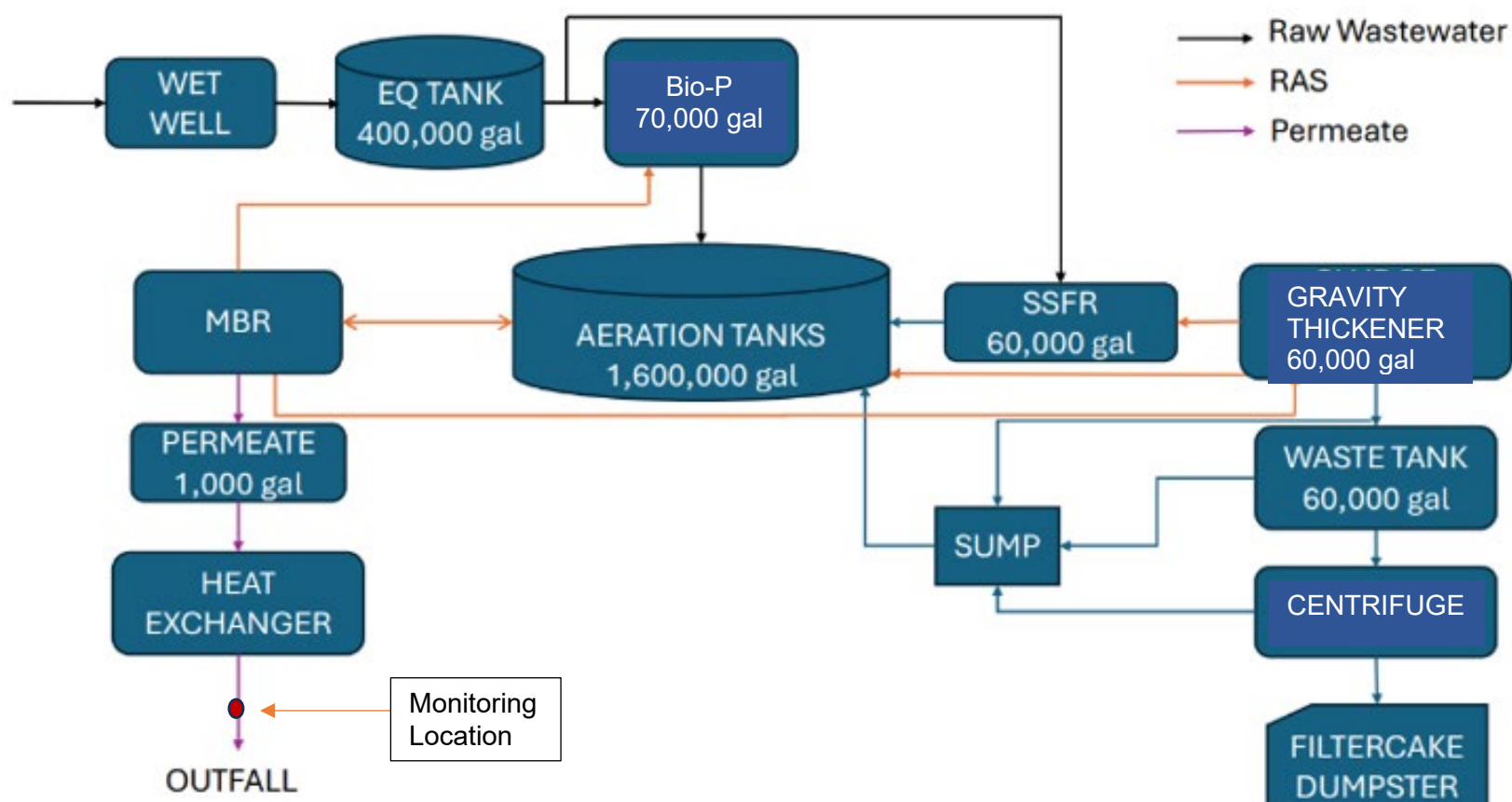
PARAMETER	INTERIM EFFLUENT LIMIT					MONITORING REQUIREMENTS				Notes
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Total Dissolved Solids (TDS)	Daily Maximum	2,000	mg/L	Monitor	lbs/d	1/week	24-hour composite	-	X	1,3
Notes:										
1. Expires EDP+60 months										
2. All 24-hour composite samples must be flow proportional.										

- b) The permittee shall submit a [Report of Non-compliance Event](#) form with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All notifications shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:
1. A short description of the non-compliance;
 2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
 3. Any details which tend to explain or mitigate an instance of non-compliance; and
 4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.
- c) The permittee shall submit copies of any document required by the above schedule of compliance to the DEC Regional Water Engineer and to the Bureau of Water Permits.

MONITORING LOCATIONS

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

Effluent is monitored after the heat exchanger and prior to discharge out through Outfall 001



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)(98) & 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 series.
- G. SPDES Permit Program Fee
- The permittee shall pay to the DEC an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the DEC, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.
- H. Water Treatment Chemicals (WTCs)
- New or increased use and discharge of a WTC requires prior DEC review and authorization. At a minimum, the permittee must notify the DEC in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The DEC will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed under the current permit. The use and discharge of a WTC shall not proceed without prior authorization from the DEC. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.
- | |
|--|
| 1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized by the DEC. |
| 2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure 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 <i>WTC Notification Form</i> and <i>WTC Annual Report Form</i> are available from the DEC's website at: SPDES Permitting of Water Treatment Chemicals . |

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- A. The permittee shall retain the monitoring information required by this permit for a period of at least five years from the date of the sampling.
- B. Discharge Monitoring Reports (DMRs): The permittee shall submit completed DMR forms for each 1 month reporting period in accordance with the DMR Manual available on DEC's website.

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

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

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

Department of Environmental Conservation
Division of Water, Bureau of Water Permits
625 Broadway, Albany, New York 12233-3505

Phone: (518) 402-8111

Department of Environmental Conservation
Regional Water Engineer, Region 6
State Office Building, Watertown, New York, 13601-3787 Phone: (315) 785-2513

- 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:

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
001	<p><u>ANNUAL BMP PLAN REVIEW</u> The permittee shall submit the BMP plan to the Regional Water Engineer.</p> <p>The permittee shall annually review the BMP plan submitted to this DEC on January 28, 2027. The BMP plan shall be modified consistent with the BMPs FOR INDUSTRIAL FACILITIES section above. All BMP plan revisions must be submitted to the Regional Water Engineer within 30 days. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed.</p>	<p>January 28, 2027</p> <p>Annually on January 28th</p>
001	<p><u>WHOLE EFFLUENT TOXICITY (WET) TESTING</u> The toxicity test report including all information requested of this permit shall be attached to your WET DMRs and sent to the WET@dec.ny.gov email address.</p>	<p>Within 60 days following the end of each monitoring period</p>
001	<p><u>WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM</u> The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.</p>	<p>Annually with December DMR</p>

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
001	<u>MERCURY MINIMIZATION PLAN</u> The permittee must complete and maintain onsite a mercury minimization plan and subsequent annual mercury minimization status reports in accordance with MMP item 2.c above.	Maintained Onsite EDP + 12 months, annually thereafter
001	<u>MERCURY - CONDITIONAL EXCLUSION CERTIFICATION</u> The permittee must submit a mercury conditional exclusion certification every five years in order to maintain MMP Type IV status.	12/22/2030 and every 5 years thereafter
001	<u>NEW PRODUCTION OPERATION STARTUP</u> The permittee shall not begin use of the new production line at the facility until the permittee has submitted a Notice of New Production Operation Startup for the new production line and received DEC acceptance of the notice. The permittee shall submit the Notice o to DEC (send to the Regional Water Engineer and NetDMR@dec.ny.gov) that the process upgrades have been fully completed.	Upon Construction Completion

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

Great Lakes Cheese of New York, Inc.

NY0215775



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Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) full technical review, along with modifications requested by the permittee, has been drafted for the Great Lakes Cheese of New York, Inc. facility located in Adams, NY. The changes to the permit are summarized below:

- Updated permit format, definitions, and general conditions
- Added a new permit section for Best Management Practices
- Updated facility contact name and contact information
- Added a second Limits Table for the proposed facility
- Added Special Condition requiring DEC acceptance of a Notice of Completion prior to discharge commencement from the proposed facility
- Added requirements for the implementation of Mercury Minimization Plan (MMP) Type IV
- Outfall 001: Existing Production
 - Removed dissolved oxygen (DO) daily maximum monitoring
 - Adjusted ultimate oxygen demand (UOD) Daily Maximum to 7-Day Average
 - Changed Chronic WET action levels to limits
 - Increased WET sampling frequency from quarterly every 5 years to quarterly on a continuous basis
- Outfall 001: Proposed Production
 - Increased monthly average and daily maximum flow limits from 0.4 and 0.5 MGD, to 0.46 and 0.55 MGD, respectively
 - Increased biochemical oxygen demand (BOD₅) limits:
 - Monthly average concentration from 18 mg/L to 32 mg/L
 - Monthly average load from 75 lbs/d to 125 lbs/d
 - Daily maximum concentration from 46 mg/L to 68 mg/L
 - Daily maximum load from 190 lbs/d to 311 lbs/d
 - Discontinued UOD daily max and monthly average monitoring (load limit continues as 7-day average)
 - Increased total suspended solids (TSS) limits:
 - Monthly average concentration from 26 mg/L to 49 mg/L
 - Monthly average load from 110 lbs/L to 187 lbs/d
 - Daily maximum concentration from 67 mg/L to 101 mg/L
 - Daily maximum load from 280 lbs/d to 464 lbs/d
 - Increased monthly average ammonia limits:
 - Monthly average concentration from 1.2 mg/L to 1.6 mg/L
 - Monthly average load from 5.2 lbs/d to 6.1 lbs/d
 - Increased daily maximum total residual chlorine (TRC) limits:
 - Daily maximum load from 0.012 lbs/d to 0.092 lbs/d
 - Added Total Dissolved Solids (TDS) daily maximum limit of 1,600 mg/L and associated Schedule of Compliance items
 - Decreased Total Phosphorus concentration limit from 1.9 mg/L to 1.7 mg/L
 - Increased Acute WET action levels from 0.3 TUa to 1.3 TUa
 - Increased Chronic WET limits from 4.7 to 4.8 TUc
- Added a Schedule of Compliance
 - Added a requirement to update the TDS Minimization Plan
 - Added a requirement for submission of an Analysis Report to assess facility performance for treatment of TDS
 - Added a requirement for submission of interim reports
 - Added a requirement to achieve compliance with final TDS limit

- Added an interim limits table with an interim limit of 2,000 mg/L for TDS concentration and load monitoring
- Schedule of Additional Submittals
 - Added a requirement to submit, then annually review, the Best Management Plan
 - Added a requirement for development of a MMP and subsequent annual status report submission
 - Added a requirement for submission of the Mercury Conditional Exclusion Certification every 5 years
 - Added a requirement for submission of a Notice of Completion

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

Administrative History

- 2/1/2017 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 1/31/2022. The 2017 permit has formed the basis of this permit.
- 2/1/2022 The permit was administratively renewed, and the current permit administrative renewal is effective until 1/31/2027.
- 1/28/2026 Great Lakes Cheese of New York, Inc. submitted a request to modify the permit to allow for the increase in the permitted flow of the facility and the addition of production of sweet cream. The submission included a NY-2C application, Supplement H form, Simple Mixing Zone form, and a Conditional Exclusion Certification form.

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

Facility Information

This is a class 01 State Significant industrial facility (SIC codes 2022, 2023, and 2026) that produces natural and processed cheese, whey powder, and whey cream. The facility is subject to categorical effluent limit guidelines (ELGs) promulgated in Title 40 of the Code of Federal Regulations Part 405 (40 CFR Part 405) for the Dairy Products Processing Point Source Category (see [summary table](#) at the end of this factsheet). Effluent consists of treated process wastewater and cooling water. Cooling water for the facility is drawn from both the Village of Adams and reclaimed water from facility processes. The current treatment system was constructed in the late 1980's to provide equalization and secondary treatment. The plant was upgraded in 2009 to expand design capacity and construct an additional secondary clarifier and again in 2018 to include biological phosphorus treatment.

The following treatment units make up the current treatment system (see Figure 1, below):

- Equalization tank
- Anaerobic reactor (Bio-P tank)
- Side Stream RAS Fermentation (SSRF)
- Aeration basins

- Membrane bioreactor (MBR)
- Heat exchanger

Sludge is gravity thickened and either returned to the SSRF for ongoing use in the wastewater treatment process or sent to the sludge waste tank before being centrifuged, collected in a dumpster, and hauled to the Rodman Landfill. The Outfall 001 consists of a submerged 10-inch pipe that extends 35 feet from the north bank into Sandy Creek before discharging. There is no diffuser on the end of the outfall pipe.

The facility has requested this permit modification, and resulting full technical review, for the addition of a new sweet cream production process to the plant which will result in the recalculation of ELG limits. As part of this new process, the facility is also requesting an additional 0.05 MGD daily maximum and 0.06 MGD monthly average flow. The facility has confirmed that all wastewater treatment processes have the capability to treat the proposed new facility flow but may not be able to meet all new WQBELs and so a schedule of compliance is being included for improvements to be made at the wastewater treatment plant.

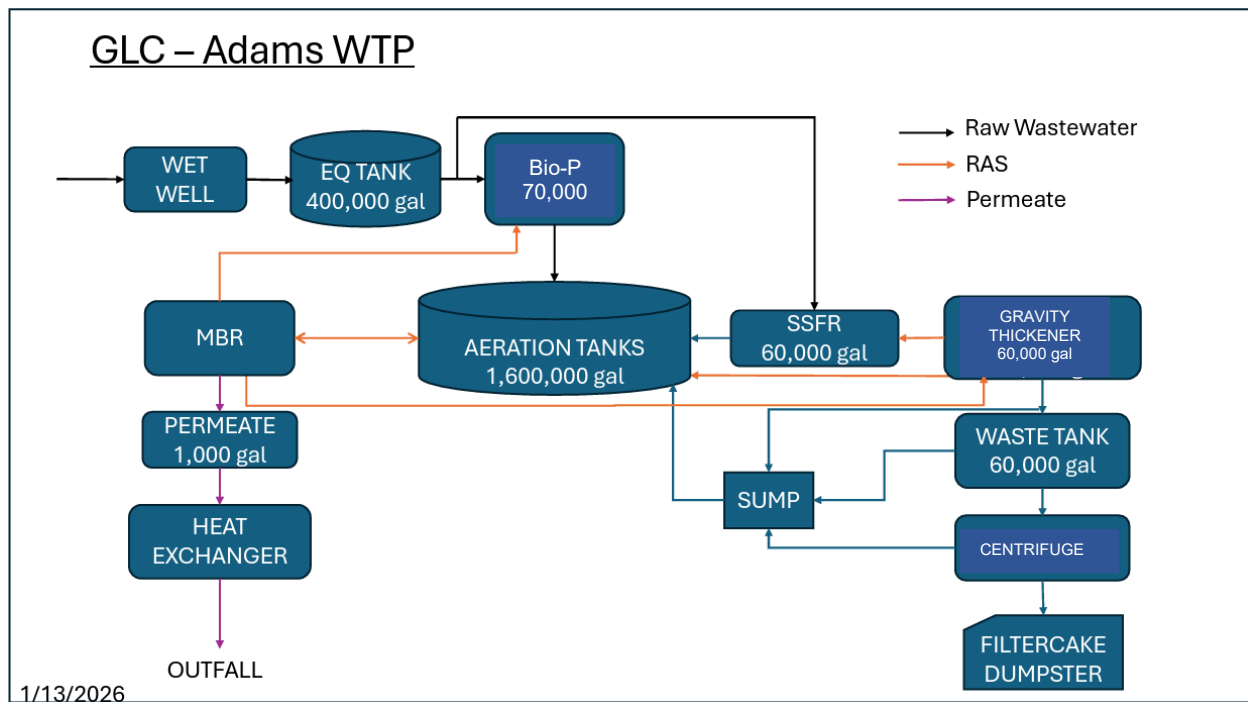


Figure 1. Great Lakes Cheese Adams wastewater treatment plant treatment line diagram provided as part of the 2026 application.

Site Overview



Figure 2. Overhead view of the Great Lakes Cheese facility, including the process facility, wastewater treatment plant, and approximate location of Outfall 001 in Sandy Creek (WIN: ONT-44 portion as described).

Enforcement History

Starting on May 27, 2021, Order on Consent R6-20191223-36 established interim limits for daily maximum total phosphorus load of 68.5 lb/d and concentration of 20.0 mg/L as well as an interim limit for daily maximum TRC of 0.09 mg/L. The Order contained a requirement to meet the permit effluent limits or submit a corrective action plan to the Department no later than 6 months from the date of the Consent Order. In an amendment to the Order (R6-20191223-36-A) dated January 26, 2022, the interim limits for both pollutants were extended until June 1, 2022. These dates have passed, and the Order is complete. However, the interim limits were effective during the 5 years evaluated as part of this permit review and affected development of existing effluent quality (EEQ).

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 2020 to 2025. [Appendix Link](#)

Receiving Water Information

The facility discharges via the following Outfall:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	2022, 2023, 2026	Treated process wastewater and cooling water	Sandy Creek Class C(T)

Additional Outfalls at the facility authorized under the Multi Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP):

Outfall No.	Wastewater and Permit Number	Receiving Water
001, 002, 003, 004, 005, 006, 007, 008	Stormwater Discharge Authorized under MSGP NYR00B115	Sandy Creek Class C(T)

See the [Outfall and Receiving Water Summary Table](#), [Stormwater Pollution Prevention Requirements](#), and [Appendix](#) for additional information on Outfalls covered by this permit.

Impaired Waterbody Information

The Sandy Creek segment (PWL No. 0303-0020) is not listed on the 2020/2022 [New York State Section 303\(d\) List](#) of Impaired/TMDL Waters.

Critical Receiving Water Data & Dilution Ratios

Reach Description: Great Lakes Cheese discharges to the segment of Sandy Creek (WIN: ONT-44 portion as described) classified as C(T). While there are no permitted dischargers upstream from the Great Lakes Cheese facility, Outfall 001 for the Village of Adams (SPDES NY0034771) is located approximately 0.25 miles downstream. An additional approximate 0.25 miles downstream from the Village's outfall the classification of Sandy Creek changes from

Class C(T) to Class C before continuing to flow downstream for approximately 14 miles until it enters Lake Ontario (WIN: ONT portion as described).



Figure 3. Map showing the length of Sandy Creek (WIN: ONT-44 portion as described) modeled as part of the permit review including notable influences on water quality.

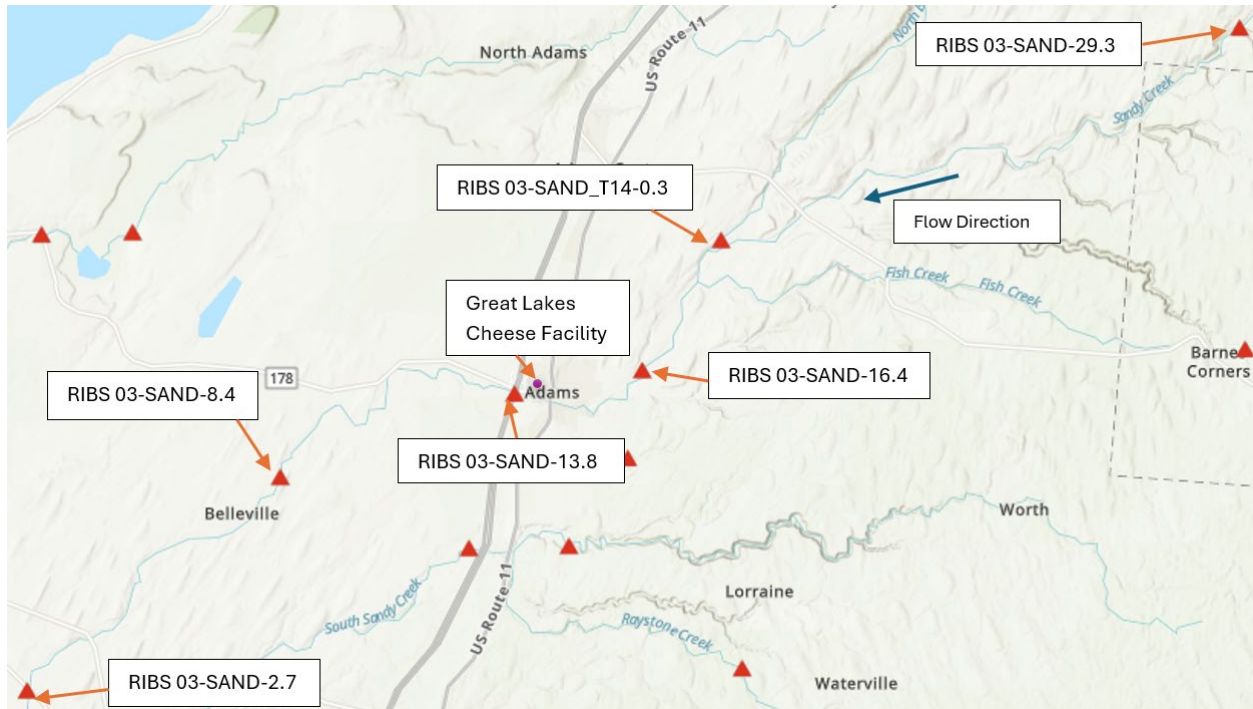


Figure 4. Map showing the length of Sandy Creek (WIN: ONT-44 portion as described) including RIBS stations with available ambient chemistry data. RIBS stations 03-SAND-29.3 and 03-SAND-2.7 were used in development of permit limits (see [Pollutant Summary Table](#) below). Other RIBS stations located on Sandy Creek did not have sufficient ambient data for calculations. RIBS station 03-SAND_T14.0.3 has been included on the map due to proximity of its location to Sandy Creek, however it is located on the North Branch of Sandy Creek.

The United States Geological Survey (USGS) gage station ID 04250750, Sandy Creek near Adams, has available flow data for Sandy Creek and is located approximately three miles downstream from the facility. See Figure 3 for the approximate location of the USGS gage.

The low flow condition for Sandy Creek at the facility was obtained from a drainage basin ratio analysis using flow data from the Sandy Creek Adams gage. The initial 7Q10 and 30Q10 flows at the gage were determined using the USGS/DEC publication [Low-Flow Statistics for Selected Streams in New York, Excluding Long Island, 2024](#). The initial 1Q10 was determined using the USGS Hydrologic Toolbox software and the same period of record used by the 2024 document for calculation of 7Q10 and 30Q10. To correct for the inclusion of facility flow at the downstream gage location, the average flows from both Great Lakes Cheese Adams and the Village of Adams were obtained from Discharge Monitoring Report (DMR) data submitted between 2020 and 2025 and subtracted from the initial calculated low flows at the gage location prior to the drainage basin ratio analysis. See Figure 6 for calculations.

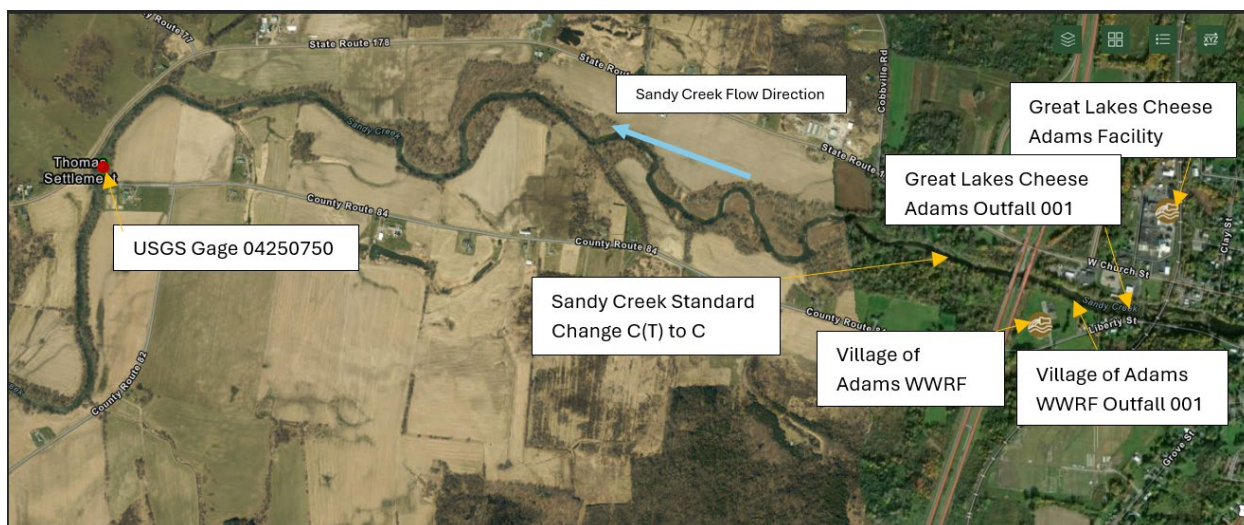


Figure 5. Overhead satellite imagery of the Adams, NY area showing approximate locations for the Great Lakes Cheese Adams Facility and Outfall 001 and Village of Adams WWRF facility (SPDES ID NY0034771) and Outfall 001 in relation to the USGS Gage 04250650, Sandy Creek Near Adams NY used for calculating low flow values.

DRAINAGE BASIN RATIO Facility	1Q10	7Q10	30Q10
Gage Name	Sandy Creek Near Adams, NY		
Gage ID Number	USGS Gage 04250750		
Initial Low Flow at Gage (cfs)	3.78	4.33	6.57
Average Flow from GLC Adams (2020-2025) (cfs)	0.57	0.57	0.57
Average Flow from Village of Adams (2020-2025)(cfs)	0.15	0.15	0.15
Corrected Low Flow at Gage (cfs)	3.06	3.61	5.85
Drainage Area at Gage (mi ²)	137	137	137
Drainage Area at Facility (mi ²)	122	122	122
Drainage Basin Ratio (facility / gage)	0.9	0.9	0.9
Calculated Flow at Facility (cfs)	2.72	3.21	5.21
Calculated Flow at Facility (MGD)	1.76	2.08	3.37

Figure 6. Calculations for low flow values at Great Lakes Cheese Adams Outfall 001 discharge location using a drainage basin ratio analysis and adjusted to account for the additional flow from the Great Lakes Cheese Adams facility and the Village of Adams WWRF.

Using the formula Dilution Ratio = (Facility Flow + Low Flow) / Facility Flow, the permittee's proposed maximum flow from the submitted NY-2C application of 0.55MGD, and the 1Q10, 7Q10, and 30Q10 flows from Figure 6 above (for acute, chronic, and human, aesthetic, wildlife (HEW) dilutions respectively), DEC calculated the dilution ratios shown in Table 1, below.

Acute and HEW dilution ratios included in this permit have increased from the previous permit due to the calculation of 1Q10 and 30Q10 low flows from gage data rather than estimation.

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001	4.2:1	4.8:1	7.1:1	TOGS 1.3.1, Page 7

Table 1. Critical receiving water data are listed in the [Pollutant Summary Table](#) at the end of this fact sheet. [Appendix Link](#)

Permit Requirements

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

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 industries¹. The applicable effluent guidelines and limits are listed at the end of the Pollutant Summary Table in the [USEPA ELG Calculation Table](#). [Appendix Link](#)

Whole Effluent Toxicity (WET) Testing

Based on the previous WET testing results, the facility will continue to have WET requirements (see factors #2, #3, and #6 in the [Appendix](#)). The 2022 WET results for Outfall 001 are summarized in table 2 below. Additionally, Great Lakes Cheese submitted WET test results as required as part of a conditional authorization for use of new water treatment chemicals (WTC) from August through October 2025. Those WET results are summarized in table 3 below.

Consistent with TOGS 1.3.2, DEC performed a reasonable potential analysis using both WET test submissions and determined that there is reasonable potential for the effluent to exceed the chronic toxicity action level due to effluent variability.

Therefore, for the facility with the existing production, the chronic WET action levels have been changed to limits with the limit maintained at 4.7 TUc, while the acute WET action levels have been continued as action levels at 0.3 TUa.

For the facility with proposed production, the chronic WET limits will be increased from 4.7 TUc to 4.8 TUc. Acute WET action levels will be increased from 0.3 TUa to 1.3 TUa. Both changes reflect the revised acute and chronic dilution ratios, with the acute action levels calculated as the acute dilution multiplied by 0.3 and the chronic limit represents the chronic dilution ratio.

Samples for both the existing and proposed facility will continue to be collected quarterly but will now be required on a continuous basis due to the reasonable potential for toxicity, WTC use at the facility, process addition at the production facility, and need to assess compliance with the updated action levels and limits at the proposed facility.

Table 2. Quarterly Tier 2 Chronic Toxicity testing for March through December 2022.

Test Date	¹ MSS 48H LC50 (%Effluent)	² MSS TUa	³ TUa Action Level	⁴ MSS Survival 100% Effluent	⁵ Acute Test Result	⁶ MSS RPD TUa	⁷ Acute WET Limit Required	⁸ MSS 7D NOEC/IC25 (%Effluent)	⁹ MSS NOEC/IC25 TUc	¹⁰ TUc Action Level	¹¹ Chronic Test Result NOEC/IC25	¹² MSS RPD IC25 TUc	¹³ Chronic WET Limit Required
03/22	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.8	**No	21.6% (I)/29.4% (I)	4.6 (I)/3.4 (I)	4.7	Pass/Pass	8.8	Yes
06/22	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.8	**No	60% (I)/47.5% (I)	1.7 (I)/2.1 (I)	4.7	Pass/Pass	5.5	Yes
09/22	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.8	**No	^36% (I)/50.1% (I)	2.8 (I)/2.0 (I)	4.7	Pass/Pass	5.2	Yes
12/22	>100% (FI)	<0.3 (FI)	0.3	90% (I)	Pass	<0.8	**No	60% (I)/63.3% (I)	1.7 (I)/1.6 (I)	4.7	Pass/Pass	4.2	No

¹ As promulgated under 40 CFR Parts 405 - 471

^AThe lab correctly reported the reproductive NOEC as 60% or 1.7 TUC, however the test PMSD of 41% is elevated and approaching the upper bound. As a result, the NOEC is likely underestimated and closer to 36% or 2.8 TUC with 16.0, 13.6, 14.8, 21.7, 9.5 (41% effect), and 0.6 (96% effect) young produced.

Table 3. Monthly Toxicity testing for August through October 2025

Test Date	¹ MSS 48H LC50 (%Effluent)	² MSS TUa	³ TUa Action Level	⁴ MSS Survival 100% Effluent	⁵ Acute Test Result	⁶ MSS RPD TUa	⁷ Acute WET Limit Required	⁸ MSS 7D NOEC/IC25 (%Effluent)	⁹ MSS NOEC/IC25 TUC	¹⁰ TUC Action Level	¹¹ Chronic Test Result NOEC/IC25	¹² MSS RPD IC25 TUC	¹³ Chronic WET Limit Required
^A 08/25	>100% (FI)	<0.3 (FI)	0.3	80% (I)	Pass	<0.9	**No	50% (I)/71.6% (I)	2.0 (I)/1.4 (I)	4.7	Pass/Pass	4.2	No
09/25	>100% (FI)	<0.3 (FI)	0.3	100% (FI)	Pass	<0.9	**No	50% (I)/63.0% (I)	2.0 (I)/1.6 (I)	4.7	Pass/Pass	4.8	Yes
10/25	>100% (FI)	<0.3 (FI)	0.3	90% (I)	Pass	<0.9	**No	50% (I)/60.8% (I)	2.0 (I)/1.6 (I)	4.7	Pass/Pass	4.8	Yes

^AThe reported 08/25 invertebrate NOEC reproductive result of >100% or <1.0 TUC is likely underestimated based on the elevated Percent Minimum Significant Difference (PMSD) of 57%, which exceeds the upper bound meaning the test has low sensitivity. Comparing the Control vs. 100% effluent, there is a 35% reproductive effect with an average of 16.2, 21.6, 26.9, 25.4, 21.7, and 10.6 young produced in the Control, 6.25%, 12.5%, 25%, 50%, and 100% effluent respectively. Therefore, the NOEC result is considered to be 50% or 2.0 TUC, which is more in line with the generated IC25.

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

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

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

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

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

⁶Most Sensitive Species Reasonable Potential Determination Toxic Units Acute: is calculated as $(\text{MSS TUa} \times 3.0)$, the Reasonable Potential Multiplier when three tests have been completed, taking into account the statistical potential for effluent variability to occur causing an exceedance of the Acute Action Level, triggering the need for Acute Limits.

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

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

⁹Most Sensitive Species Toxic Units Chronic: is calculated as $(100 / \text{MSS 7D NOEC})$ or $(100 / \text{MSS 7D IC25})$.

¹⁰Toxic Unit Chronic Action Level/Limit: is calculated as $[\text{Chronic Dilution Factor} \times 1.0 \text{ TUC}]$ representing the maximum allowable effluent TUC at the edge of the Chronic mixing zone ensuring Chronic protection of the receiving water.

¹¹Chronic Test Result: $\text{MSS NOEC/IC25 TUC} \leq \text{TUC Action Level/Limit}$ for passing effluent test result and $\text{MSS NOEC/IC25 TUC} > \text{TUC Action Level/Limit}$ for a failing effluent test result.

¹²Most Sensitive Species Reasonable Potential Determination Toxic Units Chronic: is calculated as $(\text{MSS IC25 TUC} \times 3.0)$, the Reasonable Potential Multiplier when three tests have been completed, taking into account the statistical potential for effluent variability to occur causing an exceedance of the toxicity-based Action Level, triggering the need for Chronic Limits.

¹³Chronic Whole Effluent Toxicity Limit Required: $\text{MSS RPD IC25 TUC} \leq \text{TUC Action Level}$, then a Chronic Limit is not required, and the Action Level remains in place. If $\text{MSS RPD IC25 TUC} > \text{TUC Action Level}$, then a Chronic Limit is required, and the Action Level becomes the Limit. ***In low dilution situations, the application of the Reasonable Potential Multiplier the Chronic results often mathematically suggests the need for Chronic Limits even when there is no toxicity evident in 100% effluent (i.e. a non-detect). Therefore, this data cannot be used to implement a Chronic Limit.

Anti-backsliding

Flow: Consistent with 6 NYCRR 750-1.10(c)(1), the increase in both the monthly average and daily maximum flow limits are allowable instances of backsliding. As part of this permit application, the permittee has proposed the addition of a new production process that will result in additional flow at Outfall 001. 6 NYCRR 750-1.10 allows for application of a less stringent

effluent limitation for a substantial alteration or addition to a permitted facility, therefore the increases in flow limitations are allowable and have been included in this permit.

Biochemical Oxygen Demand (BOD₅) and Total Suspended Solids (TSS): Consistent with 6 NYCRR 750-1.10(c)(1), increases in monthly average and daily maximum concentration and load limits are allowable instances of backsliding. As part of this permit application, the permittee has proposed the addition of new equipment for a new process to the facility which constitutes a material and substantial addition and requires re-calculation of the ELGs applicable to the facility and is therefore a justifiable reason for a less stringent permit limitation under 6 NYCRR 750-1.10(c)(1).

Ammonia: Consistent with 6 NYCRR 750-1.10(1), the increases in the monthly average load and concentration limits are allowable instance of backsliding as there has been an alteration to the facility's process resulting in an increase in permitted flow through the facility and recalculated dilution ratio. 6 NYCRR 750-1.10 allows for application of a less stringent effluent limitation for a substantial alteration or addition to a permitted facility. Therefore, as the WQBEL calculation utilizes the revised dilution ratio, the increase in ammonia concentration limit is an instance of allowable backsliding.

WET Testing: Consistent with 6 NYCRR 750-1.10(1), the increase in the chronic WET limit is an allowable instance of backsliding as there has been an alteration to the facility's process resulting in an increase in permitted flow through the facility and recalculated dilution ratio. 6 NYCRR 750-1.10 allows for application of a less stringent effluent limitation for a substantial alteration or addition to a permitted facility. Therefore, as the WQBEL calculation utilizes the revised dilution ratio, the increase in the chronic WET limit is an instance of allowable backsliding.

[Appendix Link](#)

[Antidegradation](#)

The permit contains effluent limitations which ensure that the best usages of the receiving waters will be maintained. The Notice of Complete Application published in the Environmental Notice Bulletin contains information on the State Environmental Quality Review (SEQR)² determination.

[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 has been continued from the previous permit.

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

[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 develop and implement 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. [Appendix Link](#)

² As prescribed by 6 NYCRR Part 617

Stormwater Pollution Prevention Requirements

This facility discharges stormwater associated with industrial activity and requires SPDES permit coverage under 40 CFR 122.26(a)(6). The facility has obtained coverage for its stormwater discharges under the Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) GP-0-23-001 with an ID of NYR00B115 and submitted a MSGP No Exposure Certification on 9/30/2024. See [Receiving Water Information](#) section above for a full list of stormwater Outfalls covered under the MSGP. See [Multi-Sector General Permit \(MSGP\) - NYSDEC](#) for the full MSGP permit, factsheet, and requirements of permit coverage.

Mercury

The DOW 1.3.10 Mercury – Multiple Discharge Variance (MDV), dated December 31, 2025, provides the framework for DEC to require mercury monitoring and mercury minimization programs (MMPs), through SPDES permitting. All of the following permit conditions are consistent with the MDV. [Appendix Link](#)

The facility is located within the Great Lakes Basin and is a SPDES Class 01. The permittee submitted a Conditional Exclusion Form dated 12/22/2025, certifying the facility does not have a mercury source as listed in Part III.E. of the MDV. Therefore, consistent with the MDV, the permit includes requirements for the implementation of MMP Type IV. The [Schedule of Additional Submittals](#) includes a mercury minimization plan annual status report (maintained onsite), and re-certification of the exclusion every five years. This requirement is new.

Total Dissolved Solids Minimization Program (TDSMP)

Pursuant to 6 NYCRR 750-1.14(f), the permit requires continued implementation of a TDSMP based on the data submitted by the permittee (see [Pollutant Summary Table](#)), the variable nature of the pollutant, and difficulty of treating wastewater for TDS.

The TDS MP includes the identification of the constituents of TDS present in the discharge; evaluation of reducing potential sources; and the implementation of best management practices to reduce effluent TDS with the objective of compliance with the WQBEL of 1,600 mg/L. See [Pollutant Summary Table](#) for WQBEL calculation [Appendix Link](#)

Schedule of Compliance

A Schedule of Compliance has been included³ for the TDS permit limit of 1,600 mg/L at Outfall 001. This is a new effluent limitation, and the permittee cannot immediately comply with the calculated WQBEL. Therefore, pursuant to 40 CFR 132 Appendix F, Procedure 9 and TOGS 1.2.1, page 35, interim monitoring is also included in the permit. Due to the permittee's current performance, shown in the [Pollutant Summary Table](#) below, and the difficulty in treating TDS, the permit includes the full 5-year permit term for compliance with the new TDS WQBEL.

- Consistent with 6 NYCRR 750-1.14(b), interim reports are required every 6 months.
- Consistent with 6 NYCRR 750-2.10, should the permittee identify the need to modify the facility as a part of these requirements, approvable documentation shall be submitted consistent with regulations in this section.

Emerging Contaminant Monitoring

Based on the available data and knowledge of this industry, no additional monitoring for perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), or 1,4-dioxane (1,4-D) is required at this time. Additionally, consistent with TOGS 1.3.13, the industry SIC codes of 2022,

³ Pursuant to 6 NYCRR 750-1.14

2023, and 2026 are not identified as potential primary sources of PFOA, PFOS, and 1,4-D. See the [Pollutant Summary Table](#) below for more information. [Appendix Link](#)

Schedule of Additional Submittals

WTC Annual Report

In accordance with 6 NYCRR 750-2.1(i), to determine compliance with effluent limitations and water quality standards, the permit requires submission of an annual report each year that the permittee uses and discharges WTCs. The permittee must summarize all WTC use for the prior calendar year, January 1 through December 31, and attach it to the December DMR required by the permit. More information is located on the DEC's website under [SPDES Permitting of Water Treatment Chemicals](#)

Mercury Conditional Exclusion Certification

Please see [above discussion](#) of mercury. Consistent with DOW 1.3.10, the permittee must submit the [form](#), signed in accordance with 6 NYCRR 750-1.18, every five years certifying that the facility is neither a mercury source nor receives flow from a mercury source.

Mercury Minimization Plan (MMP) and Status Report

Please see [above discussion](#) of MMP and Status Report.

Notice of Completion

Please see [special conditions](#) section below for discussion of the Notice of Completion

BMP Plan Review

Please see [above discussion](#) of Best Management Practice plans.

Whole Effluent Toxicity (WET) testing

Please see above discussion of WET testing. In accordance with 6 NYCRR 750-2.5(a)(1) the permittee must submit toxicity testing results to DEC within 60 days following the end of each monitoring period.

New Production Operation Startup

The permittee shall submit notice of new production operation startup to DEC upon completion of the construction of the new production line and receive DEC acceptance of the notice prior to addition of wastewater from the new production line.

Permittee: Great Lakes Cheese of New York, Inc.
 Facility: Great Lakes Cheese of New York, Inc.
 SPDES Number: NY0215775
 USEPA Non-Major/Class 01 Industrial

Date: September 16, 2026 v.1.37
 Permit Writer: Emily Kosinski
 Water Quality Reviewer: Emily Kosinski
 Full Technical Review

OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/L)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001 (existing production)	43° 48' 34" N	76° 1' 34" W	Sandy Creek	C(T)	Ont 44 portion as described PWL: 0303-0020	03/03	169 ⁴	1.76	2.08	3.37	0.50	*	*	*
001 (proposed production)											0.55	4.2	4.8	7.1
*New dilution ratios at existing facility flow were not calculated as part of this permit review. Existing permit limitations at the facility will remain in effect until DEC acceptance of completion of the upgraded facility.														

POLLUTANT SUMMARY TABLE

Outfall 001 Proposed Production

Outfall #	001 (Proposed)	Description of Wastewater: Treated Process Wastewater & Cooling Water													
		Type of Treatment: Equalization, Biological Phosphorus Removal, Aeration, Membrane Bioreactors, Heat Exchange													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
General Notes: Great Lakes Cheese is proposing to modify their facility to increase flow and add the production of sweet cream. Due to the intent of the permittee to begin construction as soon as possible, existing permit limitations have been continued in the new permit until such time as construction of the new production line has been completed. The table below includes limits calculated based on the addition of the new production line that have been included in the permit and will be effective upon DEC receipt of the New Production Operation Startup notice.															
Existing discharge data from November 2020 to October 2025 was obtained from Discharge Monitoring Reports and the application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	MGD	Daily Maximum	0.50	0.50 Max	60	0.55	Design Flow	No alterations that will impair the waters for their best usages.				703.2	-	Design Flow	
	MGD	Monthly Average	0.40	0.37 Avg	60	0.46	Design Flow							Design Flow	

⁴ Upstream Rotating Integrated Basin Studies (RIBS) Stations did not have sufficient data to calculate ambient hardness, therefore ambient hardness was established from a 2023 analysis of median watershed specific data collected by DEC through the Rotating Integrated Basin Studies (RIBS) program from 2012-2022. This data is available through the [RIBS Data Portal](#).

⁵ Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Permittee: Great Lakes Cheese of New York, Inc.
 Facility: Great Lakes Cheese of New York, Inc.
 SPDES Number: NY0215775
 USEPA Non-Major/Class 01 Industrial

Date: September 16, 2026 v.1.37
 Permit Writer: Emily Kosinski
 Water Quality Reviewer: Emily Kosinski
 Full Technical Review

Outfall #	001 (Proposed)	Description of Wastewater: Treated Process Wastewater & Cooling Water													
		Type of Treatment: Equalization, Biological Phosphorus Removal, Aeration, Membrane Bioreactors, Heat Exchange													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Per the 2016 permit fact sheet, the previous permitted flow limit was determined from information provided to DEC in a letter dated April 14, 2015, but does not reflect the actual design capability of the treatment system. In the submitted NY-2C application, the permittee has proposed increased flows to account for the new processes to be added at the facility. These are within the existing capability of the treatment plant. See Antibacksliding section for discussion of limit increase.															
pH	SU	Minimum	6.5	6.8 Actual Min	60 / 0	6.0	40 CFR 405	7.8 ⁶	-	6.5 – 8.5	Range	-	703.3	-	Continued
		Maximum	8.5	8.3 Actual Max	60 / 0	9.0									
To prevent backsliding under 750-1.10(c), an effluent limitation equal to the water quality standard has been continued in this permit.															
Temperature	°F	Minimum	Monitor	51 Actual Min	60 / 0	-	-	70*	No discharge at a temperature over 70F (21C) shall be permitted at any time to streams classified for trout			704.2	-	Monitor 750-1.13(b)	
	°F	Maximum	70	98 Actual Max	60 / 0	-	-							WQBEL	
	The existing limit is consistent with thermal water quality standards specified in 6 NYCRR 704.1 and the criteria laid out in 6 NYCRR 704.2 (b)(2). Therefore, the maximum effluent temperature limit of 70 °F has been continued in this permit. Consistent with 750 1.13(b)(2)(ii), minimum temperature monitoring will remain in the permit to provide additional information for this parameter. The permittee has reported 5 exceedances of the maximum temperature in the stated reporting period, with Report of Noncompliance Event forms submitted for each month of exceedance citing issues that caused interruptions in the heat exchanger operation leading to the exceedance reported. Each form included corrective and preventative actions that the facility implemented in response to the event. Based on this information it is expected that the permittee will be able to continue to meet the WQBEL for temperature that has been continued in this permit. *Ambient temperature calculated as an average using data from RIBs station 03-SAND-16.4, located ~2.5 miles upstream, using 4 samples collected from 1997 to 2012.														
Dissolved Oxygen (DO)	mg/L	Monthly Average	Monitor	8.1	60 / 0	-	-	-	5.4 Critical Point	For trout waters (T), the minimum daily average shall not be less than 6.0 mg/L, and at no time shall		-	703.3	-	Monitor
	mg/L	Minimum	6.0	6.3 Actual Min	60 / 0	-	-	-				5.0			Antibacksliding

⁶ Ambient pH calculated as an average using data from RIBs station 03-SAND-2.7, located ~12 miles downstream from the facility, using 19 samples collected from 1996 - 2025. While there are RIBS stations upstream of the facility, none have sufficient pH data to calculate an ambient pH value. All referenced RIBS data is available through the [RIBS Data Portal](#).

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 Water Quality Reviewer: Emily Kosinski
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Outfall #	001 (Proposed)	Description of Wastewater: Treated Process Wastewater & Cooling Water																		
		Type of Treatment: Equalization, Biological Phosphorus Removal, Aeration, Membrane Bioreactors, Heat Exchange																		
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement					
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis							
	mg/L	Maximum	Monitor	10.5	60 / 0	-	-	-	the concentration be less than 5.0 mg/L			-		Discontinued						
The downstream DO concentration was modeled using the Streeter-Phelps equations and the following assumptions: Effluent DO = 6 mg/l (previous permitted minimum DO limit), Effluent UOD = 37 mg/L (Current permitted UOD load limit converted to concentration using the proposed facility flow).																				
Reach Description: The model included the estimated proposed discharge from the Great Lakes Cheese facility, the discharge from the Village of Adams Wastewater Recovery Facility (WWRF) (SPDES ID# NY0034771) located approximately 0.25 miles downstream, and the change in waterbody standard of Sandy Creek from C(T) to (C) an additional approximately 0.25 miles downstream before continuing approximately 14.5 miles downstream and terminating in Lake Ontario.																				
The model showed that WQBELs for DO and UOD remain necessary for the maintenance of downstream water quality. Therefore, and consistent with antibacksliding regulations in 6 NYCRR 750-1.10(c), the previous DO limit has been continued in the permit. The daily minimum limit is protective of the daily average standard and monthly average monitoring will remain in the permit to inform future permitting decisions. Daily maximum DO monitoring has been discontinued as the daily minimum limitation is protective of the water quality standard.																				
5-day Biochemical Oxygen Demand (BOD ₅)	mg/L	Monthly Average	18	7.0	60 / 0	32	Calculated		See Dissolved Oxygen for Surrogate Standard			703.3	-	TBEL						
		Daily Maximum	46	22	60 / 0	68	Calculated	TBEL												
	lbs/d	Monthly Average	75	20	60 / 0	125	40 CFR Part 405	TBEL												
		Daily Maximum	190	62	60 / 0	311	40 CFR Part 405	TBEL												
	Consistent with 40 CFR part 405, load TBELs represent the degree of effluent treatment attainable through application of the best conventional pollutant control technology (BCT). TBEL values were calculated using the production values provided by the facility on the submitted Supplement H form. Calculations are shown below in the ELG calculations table.																			
	Concentration TBELs have been calculated using the formula load (lbs/d) = flow (MGD) * concentration (mg/L) * 8.34 where load is the value calculated from the ELGs at 40 CFR part 405, flow is the proposed increased monthly average or daily maximum flow, and 8.34 is the constant for the weight of water.																			
See Antibacksliding section for discussion of increased limits.																				
Chemical Oxygen Demand (COD)	mg/L	Monthly Average	Monitor	22 Min 5/ Max 46	60 / 0	-	-		See Dissolved Oxygen for Surrogate Standard			703.3	-	Monitor 750-1.13(b)(2)(i)						
		Daily Maximum	Monitor	61 Min 5/ Max 51	60 / 0	-	-	Monitor 750-1.13(b)(2)(i)												

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Outfall #	001 (Proposed)	Description of Wastewater: Treated Process Wastewater & Cooling Water													
		Type of Treatment: Equalization, Biological Phosphorus Removal, Aeration, Membrane Bioreactors, Heat Exchange													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
	lbs/d	Monthly Average	Monitor	70 Min 13/ Max 150	60 / 0	-	-								Monitor 750-1.13(b)(2)(i)
		Daily Maximum	Monitor	197 Min 14/ Max 190	60 / 0	-	-								Monitor 750-1.13(b)(2)(i)
	COD sampling provides for a more rapid understanding of the oxygen demand in the effluent than either the BOD ₅ or UOD tests required by this permit. The data submitted by the permittee on their DMRs shows high variability in effluent COD concentration and load. Therefore, and consistent with 6 NYCRR 750-1.13(b)(2)(i), monthly average and daily maximum monitoring for COD load and concentration is continued.														
Ultimate Oxygen Demand (UOD)	mg/L	Monthly Average	Monitor	14	60 / 0	-	-	-	See Dissolved Oxygen for Surrogate Standard		703.3	-		Discontinued	
		Daily Maximum	Monitor	41	60 / 0	-	-							Discontinued	
		7-Day Average	-	-	-	-	-							Monitor 750-1.13(b)(2)(i)	
	lbs/d	Monthly Average	Monitor	40	60 / 0	-	-							Discontinued	
		7-Day Average	170	115	60 / 0	-	-							WQBEL	
		Dissolved oxygen modeling (see DO above) indicates that this UOD limit remains necessary to be protective of the dissolved oxygen WQS and therefore the UOD load limit is continued.													
This will continue to be applied in the permit as a 7-day average loading limit measured using a BOD ₂₈ test method. Consistent with 6 NYCRR 750-1.13(b)(2)(i), monitoring has been continued in this permit, updated to a 7-day average concentration to reflect the same averaging period as the load limit. The daily maximum concentration monitoring has been discontinued.															
Monthly average monitoring has been discontinued as the 7-day average averaging period has been specified as the appropriate timeframe by the original waste assimilative capacity (WAC) analysis.															
Total Suspended Solids (TSS)	mg/L	Monthly Average	26	2.5	60 / 0	49	Calculated	-	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.		703.2	-		TBEL	
		Daily Maximum	67	4.4	60 / 0	101	Calculated							TBEL	
	lbs/d	Monthly Average	110	7.8	60 / 0	187	40 CFR Part 405							TBEL	
		Daily Maximum	280	15	60 / 0	464	40 CFR Part 405							TBEL	

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Outfall #	001 (Proposed)	Description of Wastewater: Treated Process Wastewater & Cooling Water																
		Type of Treatment: Equalization, Biological Phosphorus Removal, Aeration, Membrane Bioreactors, Heat Exchange																
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement			
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis					
<p>Consistent with 40 CFR Part 405, TBELs represent the degree of effluent treatment attainable through application of BCT. TBEL values were calculated using the production values provided by the facility on the submitted Supplement H form. Calculations are shown below in the ELG calculations table.</p> <p>Concentration TBELs have been calculated using the formula load (lbs/d) = flow (MGD) * concentration (mg/L) * 8.34 where load is the value calculated from the ELGs at 40 CFR part 405, flow is the proposed increased monthly average or daily maximum flow, and 8.34 is the constant for the weight of water.</p> <p>See Antibacksliding section for discussion of increased limits.</p>																		
Settleable Solids	mL/L	Daily Maximum	0.1	<0.1	0 / 60	0.1	TOGS 1.2.1	-	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages			703.2	-	TBEL				
	Consistent with TOGS 1.2.1 Attachment C, the existing limitation is reflective of the treatment technology and will reasonably protect the classified water use and assure compliance with applicable water quality standards.																	
Nitrogen, Ammonia (as N)	mg/L	Monthly Average	1.2	0.32	60 / 0	-	-	0.01*	-	0.2	A(C)	1.6	703.5	-	WQBEL			
		Daily Maximum	Monitor	2.3	60 / 0	-	-	-	-	-	-	-			Discontinued			
	lb/d	Monthly Average	5.2	0.94	60 / 0	-	-	-	-	-	-	6.1			WQBEL			
		Daily Maximum	Monitor	7.2	60 / 0	-	-	-	-	-	-	-			Discontinued			
	<p>The WQS for Ammonia was determined from TOGS 1.1.1 from a pH of 8.4** and a summer temperature of 25°C. The temperature of the receiving waterbody was an assumed value and consistent with TOGS 1.3.1E.</p> <p>The WQBEL was calculated from the chronic water quality standard, HEW dilution ratio, and the upstream ambient concentration. The existing permit limit is less than the calculated WQBEL, however the new WQBEL has been included in the permit. See Antibacksliding section for discussion.</p> <p>The revised load limit was calculated using the formula load (lbs/d) = flow (MGD) * concentration (mg/L) * 8.34 where concentration is the calculated WQBEL, flow is the proposed increased daily maximum flow, and 8.34 is the constant for the weight of water. As the load limit has been calculated from the new WQBEL, it is an allowable instance of backsliding under 6 NYCRR 750-1.10 for the same reason.</p> <p>Daily maximum monitoring has been discontinued as monthly average effluent limitations are protective of the water quality standard.</p> <p>*Ambient ammonia was calculated as an average of 5 data points collected in 2016 at RIBS station 03-SAND-29.3 located approximately 25 miles upstream.</p> <p>** In accordance with TOGS 1.3 1. E, page 3 for ammonia, pH was calculated as the 75th percentile of 19 data points collected between 1996-2025 at RIBS station 03-SAND-2.7 located approximately 19 miles downstream.</p>																	

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Outfall #	001 (Proposed)	Description of Wastewater: Treated Process Wastewater & Cooling Water													
		Type of Treatment: Equalization, Biological Phosphorus Removal, Aeration, Membrane Bioreactors, Heat Exchange													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Total Phosphorus	mg/L	Monthly Average	Monitor	4.9	54 / 0	-	-	-	None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.				703.2	-	Monitor 750-1.13(b)(2)(i)
		Daily Maximum	1.9	19	60/0	1.7	Calculation	-							WQBEL
	lbs/d	Monthly Average	Monitor	14	54 / 0	-	-	-							Monitor 750-1.13(b)(2)(i)
		Daily Maximum	8.0	55	60/0	-	-	-							Antibacksliding
	EEQ values for daily maximum total phosphorus concentration and load represented above are calculated with months during which interim limitations applied under Consent Order R6-20191223. Since the completion of Consent Order R6-20191223-36-A in June 2022, the facility has exceeded the total phosphorus load limit 3 of the 20 months and the concentration limit 4 of 20 months through the end of the data period evaluated during this permit review.														
	The previous permit included a phosphorus load limit of 8.0 lbs/d in accordance with the stated goal of the Great Lakes Water Quality Agreement to regulate the phosphorus inputs from industrial discharges to the maximum extent possible. In accordance with anitbacksliding regulations in 6 NYCRR 750 1.10 (c), this load limit has been continued in this permit.														
	A revised concentration limit has been calculated and applied in the permit for the facility after the new production line is operational using the formula load (lbs/d) = flow(MGD) * concentration(mg/L) * 8.34 where load is the continued permit load limit, flow is the proposed increased daily maximum flow, and 8.34 is the constant for the weight of water. The facility has measured effluent values that greater than the new proposed concentration limit during 23 of the 60 months evaluated or 5 of the 20 months since they completed the requirements of the Consent Order. Based on this data, it is expected that the facility will be able to meet the new limit and a Schedule of Compliance has not been included in the permit.														
Total Residual Chlorine (TRC)	mg/L	Monthly Average	Monitor	0.021	60/0	-	-	-	-	-	-	-	703.5	-	Discontinued
		Daily Maximum	0.020*	0.070	60/0	2.0	TOGS 1.3.3	-	-	0.005	A(C)	0.02			WQBEL
	lbs/d	Monthly Average	Monitor	0.058	60/0	-	-	-	-	-	-	-			Discontinued
		Daily Maximum	0.012	0.15	60/0	-	-	-	-	-	-	0.092			WQBEL

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Outfall #	001 (Proposed)	Description of Wastewater: Treated Process Wastewater & Cooling Water													
		Type of Treatment: Equalization, Biological Phosphorus Removal, Aeration, Membrane Bioreactors, Heat Exchange													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
*0.020 mg/L is the existing compliance level for TRC in the permit. 0.005 mg/L is the existing WQBEL for TRC in the permit.															
EEQ values for daily maximum TRC concentration represented above are calculated with months during which interim limitations applied. Since the completion of Consent Order R6-20191223-36-A in June 2022, the facility has exceeded the TRC concentration limit 1 of the 20 months through the end of the data period evaluated during this permit review.															
The existing permit limit is equal to the calculated WQBEL and therefore the WQBEL has been continued in this permit.															
Consistent with TOGS 1.3.1, page 5, the WQBEL is applied as a daily maximum limit due to the WQS being for the protection of aquatic life. Monthly average monitoring has been discontinued as the daily maximum limit is more protective of the water body.															
Total Dissolved Solids (TDS)	mg/L	Monthly Average	Monitor	1,647	60 / 0	-	-	-	-	-	-	-	703.3	-	Discontinued
		Daily Maximum	Monitor	1,956	60 / 0	-	-	200*	598	500	A(C)	1,600			WQBEL
	lbs/d	Monthly Average	Monitor	5,351	60 / 0	-	-	-	-	-	-	-			Discontinued
		Daily Maximum	Monitor	7,029	60 / 0	-	-	-	-	-	-	-			Discontinued
	The projected instream concentration was calculated using the maximum reported effluent concentration of 2,100 mg/L, a multiplier of 1, the chronic dilution ratio, and an upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates a reasonable potential to cause or contribute to an exceedance of the WQS and therefore a WQBEL is necessary and has been included in the permit.														
	In accordance with the 40 CFR 122.45 (f)(1)(ii) requirement for pollutants to be limited in the permit using the same units as the water quality standard is expressed in, the WQBEL has been included in the permit as a concentration limit and the daily maximum load and all monthly average monitoring has been discontinued in the permit as the new daily maximum concentration limit is more protective.														
	The permit includes a Schedule of Compliance item, interim limit for TDS, and continues to include a TDS minimization plan. In accordance with TOGS 1.2.1 page 36, the daily maximum TDS interim limit was determined by calculating the 99 th percentile of existing discharge data. This calculation ensures that an achievable interim limit is included in the permit as the permittee continues to work to achieving the final effluent limit included in the table above.														
	*Ambient upstream concentration was calculated as the average of the reported upstream samples taken and submitted by Great Lakes Cheese, Inc as part of their TDS minimization plan annual report, using 112 samples taken from 2020-2025.														
Additional Pollutants Detected															
Total Mercury	ng/L	Daily Max	-	0.43	1	-	-	-	-	0.7	H(FC)	-	703.5	-	DOW 1.3.10
See Mercury section of this fact sheet.															

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Outfall #	001 (Proposed)	Description of Wastewater: Treated Process Wastewater & Cooling Water													
		Type of Treatment: Equalization, Biological Phosphorus Removal, Aeration, Membrane Bioreactors, Heat Exchange													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Total Organic Carbon (TOC)	mg/L	Daily Maximum	-	2.4	1	-	-	-	-	-	-	-	-	-	No Limits or Monitoring
Consistent with 6 NYCRR 703.5 and TOGS 1.1.1, there are no numeric WQS or GV for Class C(T) waters for Total Organic Carbon, nor is there a numeric interpretation of the narrative standards in 6 NYCRR 703.2; therefore, no limits or monitoring have been included in the permit.															

Outfall 001 Proposed Production Emerging Contaminants

Emerging Contaminants: Outfall # 001 (Proposed)															
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		
Notes: See Emerging Contaminant Monitoring section above. Effluent samples were analyzed for the 40 PFAS compounds and 1,4-Dioxane. All 40 sampled PFAS compounds were reported non-detect on the submitted application and this facility is not a primary source of PFOA or PFOS as listed in TOGS 1.3.13, page 4. Therefore, PFAS compounds have not been included in this table.															
1,4-Dioxane	µg/L	Daily Max	-	1.2	1	-	-	-	1.6	18,000	A(C)	No Reasonable Potential	TOGS 1.1.1 February 2023 Addendum	-	No Limitation or Monitoring
	The projected instream concentration was calculated using the maximum reported effluent concentration of 1.2 µg/L, a multiplier of 6.2, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA’s Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to an exceedance of the WQS. Therefore, no WQBEL is necessary and neither a limit nor monitoring has been added to the permit.														

⁷ Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

USEPA EFFLUENT LIMITATION GUIDELINE (ELG) CALCULATIONS

[Appendix Link](#)

For the applicable categorical limitations under 40 CFR Part 405, the following basis was used to determine the TBEL:

Outfall	001	001	001	001
40 CFR Part/Subpart	§405.27 Subpart B	§405.25 Subpart B	§405.67 Subpart F	§405.127 Subpart L
Subpart Name	Fluid Products Subcategory	Fluid Products Subcategory	Natural and Processed Cheese Subcategory	Dry Whey Subcategory

ELG Pollutant	Daily Max Multiplier	Monthly Avg. Multiplier	BOD ₅ input (lbs/d)	Daily Max TBEL (lbs/d)	Monthly Avg. TBEL (lbs/d)
40 CFR Part 405.27 Subpart B – ELGs for Best Conventional Pollutant Control Technology (BCT)					
BOD ₅ (lbs/100lbs BOD ₅ input)	0.338	0.135	7,100	24	10
TSS (lbs/100lbs BOD ₅ input)	0.551	0.203	7,100	39	14
pH	Within the range 6.0 to 9.0		-	Within the range 6.0 to 9.0	
40 CFR Part 405.25 Subpart B – ELGs for New Source Performance Standards (NSPS)					
BOD ₅ (lbs/100lbs BOD ₅ input)	0.338	0.135	19,868	15	7
TSS (lbs/100lbs BOD ₅ input)	0.551	0.203	19,868	18	9
pH	Within the range 6.0 to 9.0		-	Within the range 6.0 to 9.0	
40 CFR Part 405.67 Subpart F – ELGs for Best Conventional Pollutant Control Technology (BCT)					
BOD ₅ (lbs/100lbs BOD ₅ input)	0.073	0.029	259,093	189	75
TSS (lbs/100lbs BOD ₅ input)	0.109	0.044	259,093	282	114
pH	Within the range 6.0 to 9.0		-	Within the range 6.0 to 9.0	

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40 CFR Part 405.127 Subpart L – ELGs for Best Conventional Pollutant Control Technology (BCT)					
BOD ₅ (lbs/100lbs BOD ₅ input)	0.100	0.040	82,834	83	33
TSS (lbs/100lbs BOD ₅ input)	0.150	0.060	82,834	124	50
pH	Within the range 6.0 to 9.0		-	Within the range 6.0 to 9.0	
40 CFR Part 405 – Final Calculated ELG Limits					
BOD ₅	-	-	-	311	125
TSS	-	-	-	464	187
pH	Within the range 6.0 to 9.0		-	Within the range 6.0 to 9.0	
Note: The permittee submitted a completed NY-2C form indicating in section 5 for production that ELGs promulgated by USEPA are applicable to the facility and further specifying Dairy Products as the applicable ELG category. Additionally, the permittee submitted a completed Supplement H form for Dairy Products Processing with information related to the specific ELG subparts applicable to the facility and the required production information.					
Historic record shows the production facility for Great Lakes Cheese, Inc. was constructed prior to 1974, at which time the process wastewater was sent to the Village of Adams Wastewater Treatment Plant. In 1988, the facility ceased discharging to the municipal treatment plant and instead built a treatment plant to discharge directly to Sandy Creek. Regulations at 40 CFR part 405 were promulgated May 28, 1974, and therefore Best Conventional Pollutant Control Technology (BCT) regulations are applicable to the discharge.					
The facility is proposing to add a new production line for sweet cream which will include the addition of new equipment. 40 CFR part 401.11(e) defines new source as “any building.... or installation from which there is or may be the discharge of pollutants, the construction of which is commenced after the publication of proposed regulations prescribing a standard of performance...” In an EPA memo dated September 28, 2006 EPA further elucidated that construction applies to both the construction of a building and to the installation of equipment. Therefore, the addition of new equipment for the sweet cream production line requires application of New Source Performance Standards (NSPS) to new production line discharges.					
All flows are discharged through the same outfall (Outfall 001) and therefore individual ELG limits for each production line have been summed to calculate final ELG limits for the facility and the limits applied at Outfall 001.					

Appendix: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

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

Outfall and Receiving Water Information

Impaired Waters

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

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

Existing Effluent Quality

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

Permit Requirements

Basis for Effluent Limitations

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

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

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(l) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law⁸ and USEPA interpretation⁹ anti-backsliding requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

Antidegradation Policy

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

Effluent Limitations

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

⁸ American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)

⁹ U.S. EPA, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; 65 Fed. Reg. 31682, 31704 (May 18, 2000); Proposed Water Quality Guidance for the Great Lakes System, 58 Fed. Reg. 20802, 20837 & 20981 (April 16, 1993)

to ensure that the water quality standards of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL. In accordance with 40 CFR 122.45 (f)(1)(ii), pollutants limited in permits shall be expressed in mass except when the applicable water quality standards are expressed in other units of measurement.

[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 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 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](#).

[Water Quality-Based Effluent Limitations \(WQBELs\)](#)

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

[Mixing Zone Analyses](#)

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

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

[Critical Flows](#)

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

consecutive period within 10 years. However, NYSDEC considers using 1.2 x 7Q10 to be equivalent to the 30Q10. The 7Q10 or 30Q10 flow is used with the critical effluent flow to calculate the dilution ratio. The critical effluent flow can be the maximum daily flow reported on the permit application, the maximum of the monthly average flows from discharge monitoring reports for the past three years, or the facility design flow. When more than one applicable standard exists for aquatic or human health protection for a specific pollutant, a reasonable potential analysis is conducted for each applicable standard and corresponding critical flow to ensure effluent limitations are sufficiently stringent to ensure all applicable water quality standards are met as required by 40 CFR 122.44(d)(1)(i). For brevity, the pollutant summary table reports the results of the most conservative scenario.

Reasonable Potential Analysis (RPA)

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

- 1) identify the pollutants present in the discharge(s) based upon existing data, sampling data collected by the permittee as part of the permit application or a short-term high intensity monitoring program, or data gathered by the DEC;
- 2) identify water quality criteria applicable to these pollutants;
- 3) determine if WQBELs are necessary (i.e. reasonable potential analysis (RPA)). The RPA will utilize the procedure outlined in Chapter 3.3.2 of EPA's Technical Support Document (TSD). As outlined in the TSD, for parameters with limited effluent data the RPA may include multipliers to account for effluent variability; and,
- 4) calculate WQBELs (if necessary). Factors considered in calculating WQBELs include available dilution of effluent in the receiving water, receiving water chemistry, and other pollutant sources.

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

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

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

discharges of conservative toxic pollutants to ensure water quality standards are met in downstream segments.

Whole Effluent Toxicity (WET) Testing:

WET tests use small vertebrate and invertebrate species to measure the aggregate toxicity of an effluent. There are two different durations of toxicity tests: acute and chronic. Acute toxicity tests measure survival over a 96-hour test exposure period. Chronic toxicity tests measure reductions in survival, growth, and reproduction over a 7-day exposure. TOGS 1.3.1 includes guidance for determining when aquatic toxicity testing should be included in SPDES permits. The authority to require toxicity testing is in 6 NYCRR 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 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 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, 2020 and 2025; 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 DEC determined that the MDV is consistent with the protection of public health, safety, and welfare. During the effective period of the 2025 MDV, any increased risks to human health are mitigated by fish consumption advisories issued periodically by the NYSDOH.

DOW 1.3.10 explains which surface water permittees are eligible for the MDV.

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 122.44(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.