

# State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code: <b>2026</b>	NAICS Code:	311511		SPDES Number:	NY0002763		
Discharge Class (CL):	01			DEC Number:	6-4048-00001		
Toxic Class (TX):	N			Effective Date (EDP):	EDP		
Major-Sub Drainage Basin:	09 - 02			Expiration Date (ExDP):	EXDP		
Water Index Number:	SLC-32-6	Item No.:	910 – 222.1	Madification Dates (EDDM):			
Compact Area:	-			Modification Dates (EDPM):			

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:	North Country Dairy, LLC	Attention:	ion: Beter Childe						
Street:	22 County Route 52		Peter Childs			Peter Childs			
City:	North Lawrence	State:	NY Zip Code: 12967		12967				
Email:	pchilds@uncdairy.com	Phone:	(315) 38	9-5111					

is authorized to discharge from the facility described below:

FACILITY NAME, A	FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL																	
Name:	North	Country	Dairy, LL	С														
Address / Location:	22 Co	county Route 52 County: St. Lawrence																
City:	North	orth Lawrence State: NY						NY		Zip Code:			12967					
Facility Location: Latitude: 44 ° 48		,	17	" N	& Longitude:		74	l °		40	,	30	" W					
Primary Outfall No.:	001	Latitude	:	44	0	48	,	16	" N	& Longitud	e:	74	l °		40	,	3	5 " W
Wastewater Description:	Process Wastew Non-Co Cooling and Art Well ov	vater, entact g Water, esian	Receiving Water:	De	er	Rive	r		NAICS	311511	Cla	ass:	С	5	Star	ıda	ard:	В

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

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

#### **DISTRIBUTION:**

BWP Permit Coordinator (<u>permit.coordinator@dec.ny.gov</u>)
BWP Permit Writer

**RWE** 

RPA

EPA Region II (Region2 NPDES@epa.gov)

Permit Administrator:		
Address:	Dulles State Office Bo	uilding
Address.	317 Washington St. Watertown, New York	k, 13601-3787
Signature		Date

## Contents

SUMMARY OF ADDITIONAL OUTFALLS	3
DEFINITIONS	4
PERMIT LIMITS, LEVELS AND MONITORING – OUTFALL 001	5
PERMIT LIMITS, LEVELS AND MONITORING – OUTFALL 01A	7
PERMIT LIMITS, LEVELS AND MONITORING – OUTFALL 002	
SPECIAL CONDITIONS	9
BEST MANAGEMENT PRACTICES (BMPs) FOR INDUSTRIAL FACILITIES	10
MERCURY MINIMIZATION PROGRAM (MMP) - Type IV	12
DISCHARGE NOTIFICATION REQUIREMENTS	14
SCHEDULE OF COMPLIANCE	15
MONITORING LOCATIONS	16
GENERAL REQUIREMENTS	17
RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS	18
D. Schedule of Additional Submittals:	18

SPDES Number: **NY0002763**Page 3 of 19 v.1.26

## SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewa	ter Description	NAICS Code	Outfall Latitu	Outfall	Outfall Longitude				
01A	Process Wastewater – Internal to 001		311511	44 ° 4	18 ' 16 "	N 74 °	40 '	35 " W		
Receivi	Receiving Water: Deer River Class: C									
Outfall	Wastewa	ter Description	NAICS Code	Outfall Latitu	Outfall	Outfall Longitude				
002	Stormwater		-	44 ° 4	18 ' 13 "	N 74 °	40 '	34 " W		
	Receiving Water: Deer River Class: C									



SPDES Number: **NY0002763**Page 4 of 19 v.1.26

## **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 – OUTFALL 001

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Process Wastewater, Non-Contact Cooling Water, and Artesian Well overflow	Deer River	EDP	ExDP

	EFF	LUENT L	IMITATIO	ON		MONITO	RING REQUIRE	EMEN	TS			
PARAMETER							0	Loca	ation	FN		
	Туре	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.			
	Monthly Average	1.0	MGD			Continuous	Recorder		Х			
Flow	Daily Maximum	1.85	MGD			Continuous	Recorder		Х			
	Daily Minimum	6.5	SU			D ::	D ::	Delle			,	
pH	Daily Maximum	8.5	SU			Daily	Grab		Х			
Temperature	Daily Maximum	90	٩F			Daily	Grab		Χ			
5-Day Biochemical Oxygen	Monthly Average	Monitor	mg/L	Monitor	lbs/d	Weekly	24-hr. Comp.		Х			
Demand (BOD₅)	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	Weekly	24-hr. Comp.		Х			
Total Suspended Solids	Monthly Average	Monitor	mg/L	Monitor	lbs/d	Weekly	24-hr. Comp.		Х			
(TSS)	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	Weekly	24-hr. Comp.		Х			
Settleable Solids	Daily Maximum	Monitor	mL/L			Weekly	Grab		Х			
Dissolved Oxygen	Daily Minimum	Monitor	mg/L			Weekly	Grab		Х			
Ammonia (as N) June 1 <sup>st</sup> – October 31 <sup>st</sup>	Monthly Average	1.7	mg/L	Monitor	lbs/d	Weekly	24-hr. Comp.		Х	1		
Ammonia (as N) November 1 <sup>st</sup> – May 31 <sup>st</sup>	Monthly Average	2.6	mg/L	Monitor	lbs/d	Weekly	24-hr. Comp.		х	1		
T (   B)	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	Weekly	24-hr. Comp.		Х			
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	Weekly	24-hr. Comp.		Х			
Total Nitrogen (as N)	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	Quarterly	Calculated		Х	2,3		
Nitrate (as N)	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	Quarterly	24-hr. Comp.		Х	3		
Nitrite (as N)	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	Quarterly	24-hr. Comp.		Х	3		
Total Kjeldahl Nitrogen (TKN) (as N)	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	Quarterly	24-hr. Comp.		х	3		
Total Dissolved Solids (TDS)	Daily Maximum	Monitor	mg/L			Quarterly	Grab		х	3		

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		Х	3,4
WET - Acute Vertebrate	See footnote			0.3	TUa	Quarterly	See footnote		Х	3,4
WET - Chronic Invertebrate	See footnote	·		2.0	TUc	Quarterly	See footnote		Х	3,4
WET - Chronic Vertebrate	See footnote			2.0	TUc	Quarterly	See footnote		Х	3,4

SPDES Number: **NY0002763**Page 6 of 19 v.1.26

#### **FOOTNOTES FOR OUTFALL 001:**

- 1. This is a final effluent limitation for summer and winter ammonia. See Schedule of Compliance.
- 2. Total Nitrogen (as N) = [Total Kjeldahl Nitrogen (TKN), as N] + [Nitrite (NO<sub>2</sub>), as N] + [Nitrate (NO<sub>3</sub>), as N].
- 3. Quarterly samples shall be collected in calendar quarters (Q1 January 1<sup>st</sup> to March 31<sup>st</sup>; Q2 April 1<sup>st</sup> to June 30<sup>th</sup>; Q3 July 1<sup>st</sup> to September 30<sup>th</sup>; Q4 October 1<sup>st</sup> to December 31<sup>st</sup>).

#### 4. Whole Effluent Toxicity (WET) Testing:

Testing Requirements — Chronic WET testing is required, but report both the acute and chronic results. Testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the 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 0.3:1 for acute, and 1.9:1 for chronic.

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

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

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

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

SPDES Number: NY0002763

Page 7 of 19 v.1.26

# PERMIT LIMITS, LEVELS AND MONITORING – OUTFALL 01A

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
01A	Process Wastewater	Deer River	EDP	ExDP
		Internal to Outfall 001		

	EFF	LUENT L	IMITATIO	ON		MONITO	RING REQUIRE	EMEN	TS	
PARAMETER								Loca	ation	FN
	Туре	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Daily Maximum	Monitor	MGD			Daily	Continuous		Х	
рН	Daily Minimum	6.0	SU			Daily	Grab		Х	
	Daily Maximum	9.0	SU			Daily	Grab		Х	
5-Day Biochemical Oxygen	Monthly Average	Monitor	mg/L	187	lbs/d	Weekly	24-hr. Comp.		Х	
Demand (BOD₅)	Daily Maximum	Monitor	mg/L	469	lbs/d	Weekly	24-hr. Comp.		X	
T 1 1 0 1 1 1 0 1 1 1	Monthly Average	Monitor	mg/L	281	lbs/d	Weekly	24-hr. Comp.		Х	
Total Suspended Solids	Daily Maximum	Monitor	mg/L	726	lbs/d	Weekly	24-hr. Comp.		Х	
Settleable Solids	Daily Maximum	0.3	mL/L			Daily	Grab		Х	
T (   D)	Monthly Average	2.0	mg/L	Monitor	lbs/d	Weekly	24-hr. Comp.		Х	
Total Phosphorus (as P)	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	Weekly	24-hr. Comp.		Х	

SPDES Number: NY0002763

Page 8 of 19 v.1.26

## PERMIT LIMITS, LEVELS AND MONITORING - OUTFALL 002

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
002	Stormwater	Deer River	EDP	ExDP

	EFF	LUENT L	IMITATIO	ON		MONITORING REQUIREMENTS				
PARAMETER								Loca	ation	FN
	Туре	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Daily Maximum	Monitor	MGD			Quarterly	Estimate		Х	1,2
5-Day Biological Oxygen Demand (BOD₅)	Daily Maximum	Monitor	mg/L			Quarterly	Grab		X	1,2
Total Kjeldahl Nitrogen (TKN) (as N)	Daily Maximum	Monitor	mg/L			Quarterly	Grab		Х	1,2
Ammonia (as N)	Daily Maximum	Monitor	mg/L			Quarterly	Grab		Х	1,2

#### **FOOTNOTES FOR OUTFALL 002:**

1. Quarterly monitoring shall be conducted in calendar quarters (Q1 – January 1<sup>st</sup> to March 31<sup>st</sup>; Q2 – April 1<sup>st</sup> to June 30<sup>th</sup>; Q3 – July 1<sup>st</sup> to September 30<sup>th</sup>; Q4 – October 1<sup>st</sup> to December 31<sup>st</sup>).

#### 2. Stormwater Monitoring:

All stormwater sampling shall be in accordance with the New York State Department of Environmental Conservation SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity Permit Number GP-0-23-001, which states:

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

The grab sample shall be taken during the first 30 minutes (or as soon thereafter as practical, but not to exceed one [1] hour) of the *discharge*. If the sampled *discharge* commingles with non-stormwater water, the *owner or operator* shall attempt to sample the stormwater *discharge* before it mixes.

SPDES Number: **NY0002763**Page 9 of 19 v.1.26

#### SPECIAL CONDITIONS

1. **Production Changes:** The permittee shall submit notice of production changes of 20% or more from the production occurring at the time of the effective date of the permit (EDP). Production for this facility is measured by the amount of milk or other applicable raw materials received by the facility in a calendar year. This condition also requires notice to be given to the Regional Water Engineer (RWE) if additional processes are added or removed from the plant that would constitute a change to the applicability of any Effluent Limitation Guideline (ELG) parts or subparts.

- 2. **Annual Production Reporting:** The permittee shall submit, on an annual basis, the supplemental application form for the Dairy Products Processing point source category and a report on whey, containing the monthly amounts produced, and amounts sent to the treatment plant. See the Schedule of Additional Submittals.
- 3. **Lagoon Treatment System Maintenance:** The permittee shall perform proper operation and maintenance on the wastewater treatment system. In support of this condition, the permittee shall perform the following two items:
  - A. The first is the development and submission of BMP(s) to facilitate the prevention of odors and discolored discharge from the lagoon system, and the prevention of algal growth within the lagoon system.
  - B. The second is the submission an annual maintenance schedule for the system and summary of internal inspections performed on the treatment system with any actions taken at the facility as a result of these inspections. See the <a href="Schedule of Additional Submittals">Schedule of Additional Submittals</a>.



SPDES Number: NY0002763

Page 10 of 19 v.1.26

## 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. <u>General</u> 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 shall be maintained at the facility and shall be available to authorized DEC representatives upon request.
- 2. <u>Compliance Deadlines</u> –The initial BMP plan was a requirement of the 2006 SPDES permit modification. The permittee shall review the BMP plan <u>annually</u> and modify the 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 in writing, <u>as an attachment to the December Discharge Monitoring Report (DMR)</u>, that the annual review has been completed. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.
- 3. Facility Review The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases. The review shall address all substances present at the facility that are identified in the SPDES application Form NY-2C (available at <a href="https://www.dec.ny.gov/docs/permits">https://www.dec.ny.gov/docs/permits</a> ej operations pdf/form2c.pdf) or that are required to be monitored for by the
- 4. 13 Minimum BMPs: Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in *Developing Your Stormwater Pollution Prevention Plan A Guide for Industrial Operators*, February 2009, EPA 833-B-09-002. As a minimum, the plan shall include the following BMPs:

1. BMP Pollution Prevention Team

2. Reporting of BMP Incidents

3. Risk Identification & Assessment

4. Employee Training

SPDES permit.

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

SPDES Number: **NY0002763**Page 11 of 19 v.1.26

## BMPs FOR INDUSTRIAL FACILITIES (continued)

5. Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater from Construction Activity to Surface Waters – The permittee shall develop a SWPPP prior to commencing any construction activity that will result in soil disturbance of one or more acres of uncontaminated area¹. (Note: the disturbance threshold is 5000 SF in the New York City East of Hudson Watershed). The SWPPP shall conform to the 2025 SPDES General Permit for Stormwater Discharges from Construction Activity (CGP), including the 2016 New York Standards and Specifications for Erosion and Sediment Control and 2024 New York State Stormwater Management Design Manual. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity at least 30 days prior to soil disturbance. The SWPPP shall be maintained on-site and submitted to the Department only upon request. When a SWPPP is required, a properly completed Notice of Intent (NOI) form shall be submitted (available at Stormwater Permit For Construction Activity - NYSDEC) prior to soil disturbance. Note that submission of the NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges. SWPPPs shall be developed for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly implemented.

6. Required Sampling For "Hot Spot" Identification - 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.

<sup>&</sup>lt;sup>1</sup> Uncontaminated area means soils which are free of contamination by any toxic or non-conventional pollutants identified in the tables of SPDES Application Form NY-2C. Disturbance of any size contaminated area(s) and the resulting discharge of contaminated stormwater is not authorized by this permit unless the discharge is under State or Federal oversight as part of a remedial program or after review by the Regional Water Engineer; nor is such discharge authorized by any SPDES general permit for stormwater discharges.

SPDES Number: **NY0002763** Page 12 of 19 v.1.26

## MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

On 10/31/2023, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10. As such, the permittee qualifies for a MMP Type IV program with requirements outlined below:

- 1. <u>General</u> The permittee shall develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below.
- 2. <u>MMP Elements</u> The MMP shall be a written document and shall include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP shall include the following elements<sup>2</sup> as described in detail below:
  - a. <u>Conditional Exclusion Certification</u> A certification (Appendix D of *DOW 1.3.10*), signed in accordance with 750-1.8 Signature of SPDES forms, must be submitted once every five (5) years for Outfall 001 to the Regional Water Engineer and to the Bureau of Water Permits certifying that Outfall 001 for 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 discharge from 1) individually permitted combined sewer overflow (CSOs)<sup>5</sup> communities and/or 2) Type II sanitary sewer overflow (SSO)<sup>6</sup> facilities;
    - One or more effluent samples which exceed 12 ng/L, including samples taken as a result of the SPDES application process;
    - Internal or tributary waste stream samples exceed the GLCA effluent limitation <u>AND</u> the final effluent samples are less than the GLCA due primarily to dilution by uncontaminated or less contaminated waste streams. Both components of this criterion may include samples taken as a result of the SPDES application process;
    - A permit application or other information indicates that mercury is handled on site and could be discharged through outfalls;
    - Outfalls which contain legacy mercury contamination;
    - The facility's collection system receives discharges from a dental and/or categorical industrial user (CIU)<sup>7</sup> 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 SPDES permit.
  - b. Control Strategy The control strategy shall contain the following minimum elements:
    - i. <u>Equipment and Materials</u> Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, shall be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee shall use mercury-free alternatives, if possible.
    - ii. <u>Bulk Chemical Evaluation</u> For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee shall obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. If possible, the permittee shall only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.
  - c. <u>Status Report</u> The permittee shall develop an **annual** status report and maintain that report on site, in accordance with the <u>Schedule of Additional Submittals</u>, summarizing:
    - i. Review of criteria to determine if the facility has a potential mercury source;
      - a. If the permittee no longer meets the criteria for MMP Type IV, the permittee shall notify the DEC for a permittee-initiated permit modification;
    - ii. All actions undertaken, pursuant to the control strategy, during the previous year; and
    - iii. Actions planned, pursuant to the control strategy, for the upcoming year.

<sup>&</sup>lt;sup>2</sup>Neither monitoring nor outreach is required for facilities meeting the criteria for MMP Type IV, but monitoring and/or outreach can be included in the permittee's control strategy.

SPDES Number: NY0002763

Page 13 of 19 v.1.26

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

- 3. MMP Modification The permittee shall modify the MMP whenever:
  - a. Changes at the facility, or within the collection system, increase the potential for mercury discharges;
  - b. A letter from the DEC identifies inadequacies in the MMP.

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

#### **DEFINITIONS:**

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



SPDES Number: **NY0002763** Page 14 of 19 v.1.26

#### DISCHARGE NOTIFICATION REQUIREMENTS

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

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

N.Y.S. PERMITTED DISCHARGE POINT
SPDES PERMIT No.: NY
OUTFALL No. :
For information about this permitted discharge contact:
Permittee Name:
Permittee Contact:
Permittee Phone: ()-###-###
OR:
NYSDEC Division of Water Regional Office Address:
NYSDEC Division of Water Regional Phone: ( ) - ### -####

- (e) Upon request, the permittee shall make available electronic or hard copies of the sampling data to the public. In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained (either electronically or as a hard copy) on record for a period of five years.
- (f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

SPDES Number: **NY0002763** Page 15 of 19 v.1.26

#### SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date <sup>3</sup>			
001	Submit Engineering Report The permittee shall develop and submit an approvable engineering report containing a performance review of the treatment system and identification of the selected approach for achieving compliance with the final ammonia limit. An approvable schedule for implementing the selected approach shall be included.	9/1/2025			
	Interim Limits Status Reports Submit interim status reports on the progress related to meeting the specified final limits.	EDP + 6 months, and every 6 months thereafter until completion of schedule in Approved Engineering Report			
	Achieve Compliance with Final Ammonia Effluent Limitations The permittee shall implement all measures identified in the approved engineering report submitted above and achieve compliance with final effluent limitations for ammonia.	9/1/2027			
	Unless noted otherwise, the above actions are one-time requirements.				

			INTERIM E	FLUE	NT LIMIT				NITORING UIREMEN	TS		
OUTFALL	PARAMETER									Loca	ation	Notes
		Туре	Limit	Units	Limit	ı	Units	Sample Frequency	Sample Type		Eff.	
001	Ammonia (as N)	Monthly Average	Monitor	mg/L	239		lbs/d	Weekly	24-hr. Comp.		Х	1
Notes:	1. Interim limits	expire on 9/	/1/2027									

- 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 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 noncompliance 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.

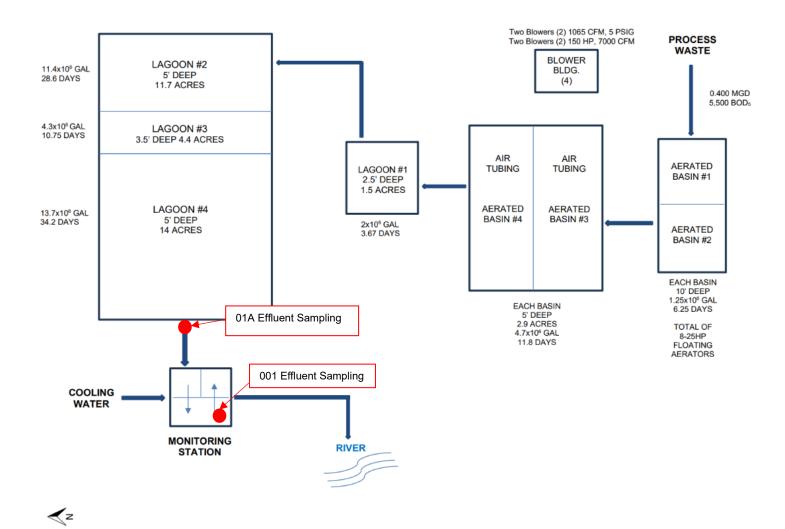
-

<sup>&</sup>lt;sup>3</sup> 6 NYCRR 750-1.14 (a)

## MONITORING LOCATIONS

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

Effluent: Sampled at the discharge of lagoon 4 (01A) before the admixture of other waste streams and at the Monitoring Station immediately prior to discharge into the Deer River (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)(94) & 2.8(c)

#### D. Monitoring and Records

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)
Signatory requirements	6 NYCRR 750-1.8 & 2.5(b)

#### E. Reporting Requirements

	sorting requirements	
1.	Reporting requirements for non-POTWs	6 NYCRR 750-2.5, 2.6, 2.7, &1.17
2.	Anticipated noncompliance	6 NYCRR 750-2.7(a)
3.	Transfers	6 NYCRR 750-1.17
4.	Monitoring reports	6 NYCRR 750-2.5(e)
5.	Compliance schedules	6 NYCRR 750-1.14(d)
6.	24-hour reporting	6 NYCRR 750-2.7(c) & (d)
7.	Other noncompliance	6 NYCRR 750-2.7(e)
8.	Other information	6 NYCRR 750-2.1(f)

#### F. Sludge Management

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

#### G. SPDES Permit Program Fee

The permittee shall pay to the 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 shall notify the DEC in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The DEC will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the DEC. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.

- 1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized 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 shall also document that adequate process controls are in place to ensure excessive levels of WTCs are not used.
- 3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The WTC Notification Form and WTC Annual Report Form are available from the DEC's website at: SPDES Permitting Of Water Treatment Chemicals (WTCs) NYSDEC

SPDES Number: **NY0002763** Page 18 of 19 v.1.26

# RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

DMRs shall be submitted electronically using the electronic reporting tool (NetDMR) specified by DEC. Instructions on the use of NetDMR can be found at: <a href="How To Complete And Submit Discharge Monitoring Reports">How To Complete And Submit Discharge Monitoring Reports</a> (DMRs) - <a href="NYSDEC">NYSDEC</a>. 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.

Phone: (518) 402-8111

C. The permittee shall summarize and report additional information, required to be submitted by this permit, 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

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 and 002	BEST MANAGEMENT PRACTICES (BMP) PLAN The permittee shall update and submit the BMP plan by attaching it to the December Discharge Monitoring Report (DMR).  After the initial submission, the permittee shall annually review the BMP plan and certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the review has been completed.  The permittee shall 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.  All BMP plan revisions shall be submitted to the Regional Water Engineer within 30 days of revision.	January 28, 2026 and Annually thereafter on January 28 <sup>th</sup>
001	WHOLE EFFLUENT TOXICITY (WET) TESTING The permittee shall perform WET testing as required in the footnote of the permit limits table. The toxicity test report including all information requested of this permit shall be attached to the permittee's WET DMRs and sent to the WET@dec.ny.gov email address.	Within 60 days following the end of each monitoring period

SPDES Number: **NY0002763**Page 19 of 19 v.1.26

Outfall(a)		Due Dete
Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	Annually with the December DMR
	MERCURY MINIMIZATION PLAN The permittee shall complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	Maintained Onsite EDP + 12 months, annually thereafter
	MERCURY - CONDITIONAL EXCLUSION CERTIFICATION  The permittee shall submit a mercury conditional exclusion certification every five years in order to maintain MMP Type IV status.	10/31/2028 and every 5 years thereafter
	SPECIAL CONDITION: ANNUAL PRODUCTION REPORTING  The permittee shall submit the supplemental application form for the Dairy Products  Processing point source category and a report on whey, containing the monthly amounts produced, and amounts sent to the treatment plant.	Annually with the December DMR
	SPECIAL CONDITION: LAGOON TREATMENT SYSTEM MAINTENANCE  A. The permittee shall develop and submit BMP(s) to facilitate the prevention of odors and discolored discharge from the lagoon system, and the prevention of algal growth within the lagoon system.	8/1/2025
	B. The permittee shall submit an annual maintenance schedule for the system including a summary of internal inspections performed on the treatment system with any actions taken at the facility as a result of these inspections.	Annually with the December DMR

#### 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.

Permittee: North Country Dairy, LLC Facility: North Country Dairy SPDES Number: NY0002763 USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

# SPDES Permit Fact Sheet North Country Dairy, LLC North Country Dairy NY0002763



Permittee: North Country Dairy, LLC Facility: North Country Dairy SPDES Number: NY0002763

USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski Water Quality Reviewer: Ethan Sullivan Full Technical Review

## Contents

Summary of Permit Changes	3
Administrative History	4
Facility Information	5
Site Overview	5
Enforcement History	6
Existing Effluent Quality	7
Receiving Water Information	7
Impaired Waterbody Information	7
Critical Receiving Water Data & Mixing Zone	7
Permit Requirements	8
USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility	8
Whole Effluent Toxicity (WET) Testing	8
Anti-backsliding	9
Antidegradation	9
Discharge Notification Act Requirements	9
Best Management Practices (BMPs) for Industrial Facilities	9
Stormwater Pollution Prevention Requirements	9
Mercury	9
Emerging Contaminant Monitoring	10
Schedule of Compliance	10
Schedule of Additional Submittals	10
Special Conditions	10
OUTFALL AND RECEIVING WATER SUMMARY TABLE	12
POLLUTANT SUMMARY TABLE	12
Outfall 001	12
Outfall 01A	17
Outfall 002	19
Outfall 001 Emerging Contaminants	20
USEPA EFFLUENT LIMITATION GUIDELINE (ELG) CALCULATIONS	25
Appendix: Regulatory and Technical Basis of Permit Authorizations	27
Regulatory References	27
Outfall and Receiving Water Information	27
Interstate Water Pollution Control Agencies	28
Existing Effluent Quality	28
Permit Requirements	28

Permittee: North Country Dairy, LLC Facility: North Country Dairy SPDES Number: NY0002763

USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

## Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) EBPS permit renewal has been drafted for North Country Dairy. The changes to the permit are summarized below:

#### General Updates

- Updated permit format, definitions, and general conditions
- Updated permittee and facility name, address and contact information
- Added requirements for implementation of Mercury Minimization Plan (MMP) Type IV

#### Outfall 001

- Decreased pH limit range from 6.5-9.0 to 6.5-8.5 SU
- Removed 5-Day Biochemical Oxygen Demand (BOD<sub>5</sub>) and Total Suspended Solids (TSS) load limits and applied at internal Outfall 01A1
- Removed the daily maximum ammonia limitation of 309 lb/d and added seasonal ammonia monthly average concentration limits of 1.7 mg/L in the summer and 2.6 mg/L in the winter and associated load monitoring and increased monitoring frequency from monthly to weekly<sup>1</sup>
- Increased total phosphorous concentration monitoring frequency from quarterly to weekly and added monthly average and daily maximum load monitoring
- Added quarterly Whole Effluent Toxicity (WET) testing in years ending in 6 and 1 with action levels of 0.3 TUa and 2.0 TUc and associated footnotes outlining the process
- Added monitoring for:
  - Daily minimum weekly concentration monitoring for Dissolved Oxygen (DO)
  - Daily maximum quarterly concentration and load monitoring for Total Nitrogen, Nitrate, Nitrite, and Total Kjeldahl Nitrogen (TKN)
  - Daily maximum quarterly concentration monitoring for Total Dissolved Solids (TDS)
- Updated Footnotes:
  - o Removed footnote defining grab samples as taking a single sample Monday through Friday, as these now require daily sampling
  - Removed footnote requiring concentration and load monitoring from select parameters, as these are now explicit in the limits table
  - Removed footnote requiring a permit application to list all water treatment chemicals (WTCs) as WTC authorization request forms must be submitted for all WTCs, which is now stated in the General Requirements section of the permit
  - Added footnote defining the total nitrogen calculation
  - o Added footnote defining quarterly samples as calendar quarters
  - Added footnote defining WET sampling requirements

#### Added Internal Outfall 01A

- New internal compliance point for Technology-based Effluent Limitations (TBELs), effective immediately<sup>1</sup>
- New flow monitoring location
- New pH limitations added consistent with applicable Effluent Limitation Guidelines (ELGs)
- New load limitations for BOD<sub>5</sub> and TSS consistent with the applicable ELGs<sup>1</sup>
  - o Corresponding concentration monitoring has been added for the same parameters
- New concentration limitations for total phosphorous<sup>1</sup> and settleable solids

#### Outfall 002 for stormwater monitoring requirements

Added quarterly monitoring of Outfall 002 after a qualifying storm event

#### Added Special Conditions

- Report production changes of more than 20% and any new production subparts
- Annual production reporting
- Lagoon treatment system maintenance

<sup>&</sup>lt;sup>1</sup> See discussion on Schedule of Compliance.

Permittee: North Country Dairy, LLC Facility: North Country Dairy SPDES Number: NY0002763

SPDES Number: NY0002763 USEPA Non-Major/Class 01 Industrial Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

#### Added Schedule of Compliance

Achieve final compliance with ammonia Water Quality-based Effluent Limitation (WQBEL) at Outfall 001<sup>1</sup>

#### Added Schedule of Additional Submittals

- Submission and annual review of BMP plans
- WET test result submissions
- WTC annual Report
- Mercury Minimization plan to be maintained onsite and revised yearly
- Mercury Conditional Exclusion form to be submitted every 5 years
- Annual production reporting
- Lagoon treatment system maintenance reporting

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 <u>Appendix</u> linked throughout this fact sheet.

## **Administrative History**

4/7/2025

The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 1/1/2009. The 2004 permit, along with all subsequent modifications, has formed the basis of this permit.
The permit was administratively renewed in 2009, 2014, 2019 and again in 2023. The current permit administrative renewal is effective until 12/31/2028.
Permit was modified to reflect the permittee's request to expand production of yogurt and cottage cheese.
Permit was modified to increase flow limits from 0.85 to 1.0 million gallons per day (MGD) Monthly Average and 1.65 to 1.85 MGD Daily Maximum, eliminate Footnote 2 and renumber the remaining footnotes, and modify the concentration based (mg/L) effluent limit for ammonia at Outfall 001 to mass based (lbs/day).
The permit was transferred from Cool Brands Dairy Inc. to North Lawrence Dairy, LLC.
The permit was transferred from North Lawrence Dairy, LLC to North Country Dairy, LLC.
New York State Department of Environmental Conservation (hereafter 'DEC') issued a Request for Information (RFI) to modify and renew the SPDES permit due to the facility's EBPS score <sup>2</sup> .
North Country Dairy, LLC submitted a NY-2C permit application, Supplemental Form H, Simple Mixing Zone Form, Consideration of Future Climate Risks Form, Stormwater No Exposure Certification, and a Conditional Exclusion Certification for Mercury.
DEC issued a letter requiring North Country Dairy, LLC to submit remaining application sampling, corrected NY-2C, and corrected Supplement H.
North Country Dairy, LLC submitted an updated NY-2C, Supplement H, No Exposure Certification Form, sampling results, updated flow diagram, Mercury Exclusion Certification, and resubmitted Simple and Detailed Mixing Zone Forms.
DEC issued a comment letter for various items of the 10/16/2024 submission to be resolved and resubmitted.
1 Coupillian Ca.

North Country Dairy, LLC resubmitted a final version of Supplement H to the DEC.

 $<sup>^2</sup>$  Pursuant to 6 NYCRR 750-1.18 and NYS Environmental Benefit Permit Strategy (EBPS) PAGE 4 OF 32

Permittee: North Country Dairy, LLC Facility: North Country Dairy SPDES Number: NY0002763

USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

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

## **Facility Information**

This is an industrial facility (SIC code 2026) that processes dairy food products. The facility is subject to categorical effluent limitation guidelines (ELGs) under the dairy products processing point source category at 40 CFR 405 (see <u>ELG summary table</u> at the end of this fact sheet).

Primary Outfall 001 consists of process, non-contact cooling, and artesian well overflow water. The current treatment system consists of four aerated basins, followed by four polishing lagoons, a manual bar screen, and monitoring at a sampling shed located immediately before effluent is discharged into the Deer River. The outfall consists of an 18-inch diameter pipe extending approximately 11 feet from the bank before bending at an approximate 90-degree angle and discharging downwards into the river.

Outfall 01A is a new internal outfall added at the effluent of the polishing lagoons and allows the sampling to appropriately capture treatment performance before co-mingling with the non-contact cooling and artesian well water. The USEPA ELGs and other technology-based effluent limitations required of the process wastewater have been applied at Outfall 01A (see the <u>Pollutant Summary Table</u> for more information).

Outfall 002 consists of site stormwater runoff discharging to the Deer River with no treatment. This Outfall previously included the artesian well overflow water that is now sent through Outfall 001.

#### Site Overview

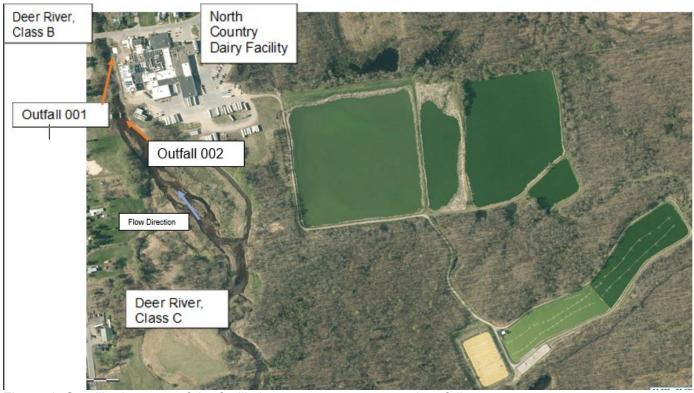


Figure 1. Satellite imagery of the facility's treatment process and outfalls

Permittee: North Country Dairy, LLC Facility: North Country Dairy SPDES Number: NY0002763 USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review



Figure 2. Image of Outfall 001 configuration from the Detailed Mixing Zone Form

#### **Enforcement History**

On 6/7/23 DEC Law Enforcement staff observed a pinkish-red discharge at Outfall 001.

On 6/22/23 DEC issued a Notice of Violation (NOV) to North Country Dairy for discharging effluent from Outfall 001 that produced a substantial visual contrast in the waters of the Deer River.

On 7/10/23, the facility responded to the NOV stating that they had tested the bacteria causing the color change and began to utilize a product to return the wastewater to normal color. North Country Dairy also stated that they will continue to monitor the lagoon and add this treatment as needed to ensure normal color and operation.

On 6/24/24, USEPA Region 2 issued a request for information for items related to the Compliance Evaluation Inspection conducted on March 27, 2024.

On 6/28/2024, DEC issued a NOV to North Country Dairy for violating their SPDES permit by discharging effluent that contributed to the violation of water quality standards defined in 6 NYCRR 700-706. The NOV cited that the effluent contained deleterious substances in quantities injurious to the propagation of fish, protected wildlife, or waterfowl, and nutrients in an amount that resulted in the growth of algae, weeds, and slimes in amounts that impaired the Deer River for its best use.

On 7/16/2024, DEC issued a NOV to North Country Dairy for discharging BOD<sub>5</sub> in excess of the daily maximum and monthly average limits as stated in the SPDES permit during the month of June.

On 12/18/2024, the facility and DEC entered into Consent Order Number R6-20240628-22 including requirements for sampling, treatment system evaluation, and submittal of an engineering report.

On 1/28/2025, DEC issued NOVs to North Country Dairy for discharging BOD₅ in excess of the monthly average limit as stated in the SPDES permit during the months of November and December 2024.

On 3/7/2025, DEC issued a NOV to North Country Dairy for discharging BOD₅ in excess of the monthly average limit as stated in the SPDES permit during the month of January 2025.

On 4/7/2025, DEC issued a NOV to North Country Dairy for discharging BOD<sub>5</sub> in excess of the monthly average limit as stated in the SPDES permit during the month of February 2025.

On 4/29/2025, DEC issued a NOV to North Country Dairy for discharging BOD<sub>5</sub> in excess of the monthly average limit as stated in the SPDES permit during the month of March 2025.

Permittee: North Country Dairy, LLC

Facility: North Country Dairy

Date: June 2, 2025 v.1.23

Permit Writer: Emily Kosinski

SPDES Number: NY0002763 Water Quality Reviewer: Ethan Sullivan

USEPA Non-Major/Class 01 Industrial Full Technical Review

On 5/29/2025, DEC issued a NOV to North Country Dairy for discharging BOD<sub>5</sub> in excess of the monthly average limit as stated in the SPDES permit during the month of April 2025.

Additional compliance and enforcement information can be found on the USEPA's <u>Enforcement and Compliance</u> <u>History Online (ECHO)</u> website.

#### **Existing Effluent Quality**

The <u>Pollutant Summary Table</u> 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 11/30/2019 to 10/31/2024. <u>Appendix Link</u>

## **Receiving Water Information**

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	2026	Process Wastewater, Non-Contact Cooling Water, and Artesian Well overflow	Deer River, Class C*
01A	2026	Internal to 001: Process wastewater	Deer River, Class C*
002	N/A	Stormwater runoff	Deer River, Class C*

<sup>\*</sup>The Deer River classification changes to Class B approximately 100ft downstream of the discharge and thus the permit has been written to be protective of both Class C and Class B waters.

**Reach Description:** This segment of the Deer River (SL(C)-32-6) is class C, until County Highway 47 directly downstream from the facility, where it changes to class B. There is a Concentrated Animal Feeding Operation (CAFO) approximately 4 miles upstream from the facility and the North Lawrence and Nicholville Sewage Treatment Plant (NY0110116, 0.0257 MGD) is located approximately 0.33 miles downstream from the facility. From there, the Deer River continues to flow north until it joins the St. Regis River.

**Existing Deer River Concerns:** After receiving public inquiries about algae growth in the Deer River, DEC's Monitoring and Assessment Section, in collaboration with Region 6, conducted a survey of the river in the summer of 2024 to evaluate water quality conditions and attempt to isolate impacts from permitted discharges.

DEC staff conducted additional monitoring on 6/4/2024 at five (5) locations along the Deer River, two (2) locations upstream of North Country Dairy, one (1) location between North Country Dairy and the North Lawrence and Nicholville Sewage Treatment Plant, and two (2) locations downstream of the facilities. From this monitoring, the Department was able to conclude that measured nutrients immediately downstream of the North Country Dairy discharge point indicate that a contravention of narrative water quality standards is occurring, specifically the 6 NYCRR 703.2 narrative standard for Phosphorous and Nitrogen stating, "None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages."

Sampling results and additional information may be found at DEC's <u>Ongoing Special Studies: Deer River Investigation</u> website.

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

#### Impaired Waterbody Information

The Deer River segment (PWL No. 0902-0097) is not listed on the 2020/2022 New York State Section 303(d) List of Impaired/TMDL Waters.

#### Critical Receiving Water Data & Mixing Zone

The low flows of the Deer River at the discharge location were found from a drainage basin ratio analysis with USGS gage station 04269500, Deer River at Brasher Ironworks, located approximately 11 miles downstream of the facility. While the upstream USGS gauge 04269043 in North Lawrence, NY is closer to the facility, it does

Permittee: North Country Dairy, LLC
Facility: North Country Dairy

Date: June 2, 2025 v.1.23

Permit Writer: Emily Kosinski

SPDES Number: NY0002763 Water Quality Reviewer: Ethan Sullivan

USEPA Non-Major/Class 01 Industrial Full Technical Review

not have sufficient data available to calculate low flow statistics. The low flow conditions at the Brasher Ironworks gage were calculated from the USGS Hydrologic Toolbox software and an analysis of data from 1913 to 1968.

DRAINAGE BASIN RATIO	1Q10	7Q10	30Q10
Gage Name		Deer River at Brasher Iron Works	S
Gage ID Number		ID # 04269500	
Low Flow at Gage (cfs)	23.22	30.95	35.81
Drainage Area at Gage (mi <sup>2</sup> )	194	194	194
Drainage Area at Facility (mi <sup>2</sup> )	87.4	87.4	87.4
Drainage Basin Ratio (facility / gage)	0.5	0.5	0.5
Calculated Flow at Facility (cfs)	10.46	13.94	16.13

Figure 3. Low Flow Calculations Using the Drainage Basin Ratio Methodology

Due to the existing water quality concerns with the Deer River, and consistent with TOGS 1.3.1, a site-specific mixing zone model was developed and used to establish dilution ratios for conducting the water quality analysis. The model shows the mixing conditions between the effluent and river are largely constrained to the right side of the bank (when facing downstream) due to the outfall pipe orientation (pointing downwards), location of the discharge in a cove, and the stream velocity at low flow conditions. Previous water quality reviews did not use a site-specific analysis and assumed rapid and complete mixing conditions which resulted in significantly higher dilution.

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001	1.5:1	2.0:1	2.0:1	TOGS 1.3.1 CORMIX

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

## Permit Requirements

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

#### 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 <u>Effluent Limitation Guidelines</u> developed by USEPA for specific industries<sup>3</sup>. The applicable effluent guidelines and limits are listed at the end of the Pollutant Summary Table in the <u>USEPA ELG</u> Calculation Table. Appendix Link

#### Whole Effluent Toxicity (WET) Testing

The requirement for WET testing is new and in response to the following criteria:

- There are observed detrimental effects on the receiving water biota. (#5)
- Treatment plants which equal or exceed a discharge of 1MGD. (#7)

Consistent with TOGS 1.3.2, given the dilution available and location outside of the Great Lakes basin, the permit requires chronic WET testing. WET testing action levels of 0.3 TUa and 2.0 TUc have been included in the permit for each species. The acute dilution ratio is less than 3.3 and the acute action level has been set equal to the

**PAGE 8 OF 32** 

 $<sup>^{\</sup>mathrm{3}}$  As promulgated under 40 CFR Parts 405 - 471

Permittee: North Country Dairy, LLC

Pacility: North Country Dairy

Permit Writer: Emily Kosinski

SPDES Number: NY0002763 Water Quality Reviewer: Ethan Sullivan

USEPA Non-Major/Class 01 Industrial Full Technical Review

default value of 0.3 TUa<sup>4</sup>. The chronic action levels represent the chronic dilution ratio. Samples will be collected and analyzed quarterly for a period of 1 full year during calendar years ending in 6 and 1. Appendix Link

#### Anti-backsliding

The ELG TBELs have been moved from Outfall 001 to new internal Outfall 01A. This adjustment does not constitute backsliding as the limits have been relocated to apply directly to the treated process water without the admixture of additional flow. This location is a more accurate measurement of treatment performance and a more stringent location for the application of the total phosphorous concentration limit,

The removal of the daily maximum ammonia limit of 309 lbs/d from Outfall 001 does not constitute backsliding as the new monthly average summer and winter concentration limits, evaluated at the design flow of 1.85 MGD, are more stringent and more protective of the concentration water quality standard.

All other limitations contained within the permit are at least as stringent as the previous permit limits. <u>Appendix Link</u>

#### Antidegradation

The permit contains effluent limitations which, based off the best information available at this time, 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)<sup>5</sup> determination. Appendix Link

#### Discharge Notification Act Requirements

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

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

#### Best Management Practices (BMPs) for Industrial Facilities

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

#### Stormwater Pollution Prevention Requirements

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

On 10/31/2023, the permittee submitted a Conditional Exclusion for No Exposure Form, certifying that all industrial activities and materials are completely sheltered from exposure. This exclusion is valid for 5 years.

While the permittee has certified to no exposure, requirements for monitoring have been added for Outfall 002 to be consistent with New York State Department of Environmental Conservation SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity Permit Number GP-0-23-001 (MSGP) Sector [U] in response to observations and monitoring initiated from an USEPA inspection of the facility in March 2024. (see <a href="Enforcement History"><u>Enforcement History</u></a>)

#### Mercury<sup>6</sup>

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

<sup>&</sup>lt;sup>4</sup> Consistent with 40 CFR Part 132, EPA's Technical Support Document Section 5.7.4, and TOGS 1.3.2.

<sup>&</sup>lt;sup>5</sup> As prescribed by 6 NYCRR Part 617

<sup>&</sup>lt;sup>6</sup> In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.

Permittee: North Country Dairy, LLC
Facility: North Country Dairy

Date: June 2, 2025 v.1.23

Permit Writer: Emily Kosinski

SPDES Number: NY0002763 Water Quality Reviewer: Ethan Sullivan

USEPA Non-Major/Class 01 Industrial Full Technical Review

On 10/31/2023, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10 and the effluent measured <12 ng/L. Therefore, consistent with DOW 1.3.10, the permit includes requirements for the implementation of MMP Type IV and does not include mercury effluent limitations. The <a href="Schedule of Additional Submittals">Schedule of Additional Submittals</a> includes a mercury minimization plan annual status report (maintained onsite), and re-certification of the exclusion every five years. As part of the re-certification, the effluent must be sampled and continue to measure <12 ng/L. This requirement is new. Appendix Link

#### **Emerging Contaminant Monitoring**

Consistent with TOGS 1.3.13, the industry SIC code of 2026 is not identified as a potential primary source of Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), or 1,4-Dioxane (1,4-D). The data submitted with the application confirmed this facility is not a primary source. Therefore, no effluent limitations or additional monitoring for PFOA, PFOS, or 1,4-D is required at this time. Please see the <u>Pollutant Summary Table</u> below for more information.

#### Schedule of Compliance

The more stringent effluent limitations for BOD<sub>5</sub> and TSS, established from the production-based ELG calculations, and the case-by-case, or BPJ (Best Professional Judgement), TBEL for total phosphorous, must be met by the deadline for compliance established under the CWA. ELGs are technology-based limitations promulgated pursuant to the Federal Water Pollution Control Act (also known as the Clean Water Act) Section 304(b) and found in the Code of Federal Regulations (CFR) Parts 405 – 471. The BPJ TBEL was developed and implemented pursuant to 40 CFR 125. 40 CFR 122.47 (a)(1) states that 'Any schedules of compliance under this section shall require compliance...not later than the applicable statutory deadline under the CWA.' The deadline for compliance with best conventional pollutant control technology (BCT) limitations under the Clean Water Act are stated in Section 301 (b)(2)(E) which reads, 'as expeditiously as practicable but in no case later than three years after the date such limitations are promulgated under section 304(b), and in no case later than March 31, 1989...' This language is echoed in 40 CFR 125 for facility compliance with BPJ TBELs. Because this deadline has passed, and consistent with TOGS 1.2.1, a schedule of compliance cannot be included in the SPDES permit for BOD<sub>5</sub>, TSS, or total phosphorus at Outfall 01A.

In addition to the reduced TBELs applicable at Outfall 01A for BOD<sub>5</sub>, TSS, and Total Phosphorous, the new WQBEL for ammonia at Outfall 001 also represents a significantly reduced limitation that requires modification to the treatment process. A Schedule of Compliance, with interim effluent limitations, has been included pursuant to 6 NYCRR 750-1.14 in the SPDES permit for achieving final compliance with ammonia. Appendix Link

#### Schedule of Additional Submittals

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

- Mercury Minimization Plan Annual Status Report (maintained onsite)
- Mercury Conditional Exclusion Certification
- Submittal of Production Information
- Updated BMP Plan
- WET Testing
- WTC Annual Report

#### **Special Conditions**

New special conditions have been included in the permit for the following:

Pursuant to 6 NYCRR 750-2.6(b), the permittee shall report production changes of more than 20% to
the conditions present at the facility at the time of permit issuance and any new production subparts
that may be added to the facility after the date of permit issuance. This requirement has been added to
the permit as a special condition to emphasize its importance to the condition of the Deer River, and to
ELG calculations. Additionally, DEC is requiring the submission of annual production reports to confirm
the presence or absence of production changes. For consistency, these reports shall be submitted on
the Dairy Products Processing Supplemental application form.

Permittee: North Country Dairy, LLC Facility: North Country Dairy SPDES Number: NY0002763 USEPA Non-Major/Class 01 Industrial Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

 Consistent with the 6 NYCRR 750-2.8 regulations for proper operation and maintenance, the permittee shall properly operate and maintain all facilities that are installed or used by the permittee to achieve compliance with conditions of the permit. A requirement for submission of an annual operation and maintenance summary for the year has been added to the schedule of additional submittals, included in this report should be a section on the prevention of violations of the WQS. Permittee: North Country Dairy, LLC Facility: North Country Dairy SPDES Number: NY0002763 USEPA Non-Major/Class 01 Industrial Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

## **OUTFALL AND RECEIVING WATER SUMMARY TABLE**

ſ						Water Index No. /	Major /					Critical	D	ilution F	Ratio
	Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Priority Waterbody Listing (PWL) No.	Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Effluent Flow (MGD)	A(A)	A(C)	HEW
	001	44° 48' 16" N	74° 40' 35" W									1.85	1.5:1	2.0:1	2.0:1
Ī	01A	Interna	I to 001	Deer River	C and B <sup>7</sup>	SLC-32-6 WIN: 910-222.1	09/02	60 <sup>8</sup>	6.8	9.0	10	-	-	-	-
	002	44° 48' 13" N	74° 40' 34" W		·							-	-	_	-

## POLLUTANT SUMMARY TABLE

#### Outfall 001

O45-II #	001	Description	of Was	tewater: P	rocess Wast	ewater, No	n-Contact Coolin	g Water, a	and Artesia	n Well over	flow				
Outfall #		Type of Tre	atment:	aerated ba	sins, polishi	ng lagoons,	and a manual b	ar screen							
			Exist	ing Discha	rge Data	٦	ΓBELs		W	ater Quality	y Data & WO	QBELs			Dania fan
Effluent Parameter	Units	Averaging Period	Permit Limit Projected Existing Effluent Quality Points Detects / Non-Detects Basis Projected Conc. Projected Bkgd. Conc. Projected Instream Conc. Projected Instream Conc. Projected Or GV WQ Type Calc. WQBEL WG Type Calc. WQBEL WG Type Calc. WQBEL WG Type Calc. WQ Type Calc. WQBEL WG Type Calc. WGBEL WG Type Calc. WG Type											ML	Basis for Permit Requirement
General Notes: for development	<b>Notes:</b> Existing discharge data from 2019 to 2024 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed lopment of the WQBELs. The standard and WQBEL shown below represent the most stringent.														
	Monthly 0.62													Design Flow	
Flow Rate		Daily Max	1.85	1.03 Actual Max	60/0	-	-	usages.							Design Flow
	Flow w	ill continue to	be limite	ed to the m	aximum des	ign and ave	erage flows for th	e facility.							
	SU	Minimum	6.5	6.6 Actual Min	60/0	6.0 (at 01A)	USEPA ELG	7.9*		6.5 – 8.5	Range	6.5 - 8.5	703.3	_	WQBEL
рН	30	Maximum	9	9.0 Actual Max	60/0	9.0 (at 01A)	<u>BCT</u>	7.9	_	0.5 – 6.5	range	0.5 - 6.5	<u>703.3</u>	-	WQBEL
							reased to the Williams From RIBs station					eam during t	he period of	1997	– 2019.

<sup>&</sup>lt;sup>7</sup> The permit has been written to be protective of both Class C and Class B waters (see <u>Receiving Water Information</u>)

<sup>8</sup> Ambient hardness was calculated as an average from RIBs station 09-DERR-0.2, located ~13 miles downstream, using 16 samples collected from 2005 – 2015.

<sup>&</sup>lt;sup>9</sup> 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 non-detects)

Permittee: North Country Dairy, LLC Facility: North Country Dairy SPDES Number: NY0002763

USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski Water Quality Reviewer: Ethan Sullivan

Full Technical Review

Outfall #	001	Description	of Was	tewater: P	rocess Was	tewater, No	n-Contact Coolin	g Water, a	ınd Artesia	n Well ove	rflow					
Outrail #	001	Type of Tre	atment:	aerated ba	asins, polishi	ng lagoons	, and a manual b	ar screen								
			Exist	ing Discha	rge Data	-	ГВELs		W	/ater Qualit	y Data & W	QBELs			Basis for	
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>9</sup>	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Permit Requirement	
Temperature	°F	°F Daily Max 90 79 Actual Max 60/0 73 <sup>10</sup> See thermal Criteria under 704.2 90 704.2														
	Consis	tent with the	previous	permit, the	e daily maxin	num temper	rature limitation v	/ill continu	e and is ex	spected to b	oe protective	e of the therm	al criteria u	nder 7	04.2.	
	mg/L	/L Daily Min Monitor Trout) 4.0 Narrative reasonable potential Monitor 750 1.13														
	under v	vinter conditi	ons is als	so expecte	d to be prote	cted at the	are maintained at reduced BOD₅ lii Lawrence and N	nitations.						ie suii	illier model, b	
		Monthly Avg	Monitor	108	60/0	-	-								Monitor 750 1.13	
	mg/L	Daily Max	Monitor	439	60/0	-	-	_		See Diss	olved Oxyge	en	<u>703.3</u>	_	Monitor 750 1.13	
5-day Biochemical	lbs/d	Monthly Avg	430	456	60/0	187 (at 01A)	USEPA ELG BCT								Applied at 01/	
Oxygen Demand	ibs/u	Daily Max	1100	1180 Actual Max	60/0	469 (at 01A)	USEPA ELG BCT								Applied at 01	
(BOD <sub>5</sub> )	*Load I	ring for cond imits for BOI ding (see <u>An</u>	o₅ have b	een remov	ed from Out	to establish fall 001 and	a baseline mea applied to new ii	surement a nternal Ou	at the facili tfall 01A (s	ity. See Dis see <u>facility i</u>	solved Oxyonformation s	gen Justificatio section above	on for WQB ). This char	EL dis	scussion. es not constitu	

PAGE 13 OF 32

<sup>&</sup>lt;sup>10</sup> Ambient temperature was calculated as an average from RIBs station 09-DERR-0.2, located ~13 miles downstream, using 16 samples collected from 2005 – 2015.

Permittee: North Country Dairy, LLC Facility: North Country Dairy SPDES Number: NY0002763 USEPA Non-Major/Class 01 Industrial Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski Water Quality Reviewer: Ethan Sullivan Full Technical Review

Outfall #	001	Description	of Was	tewater: F	Process Was	tewater, No	n-Contact Coolin	g Water, a	and Artesia	an Well ove	rflow				
Outian #	001	Type of Tre	eatment:	aerated ba	asins, polishi	ing lagoons	, and a manual b	ar screen							
			Exist	ing Discha	irge Data	-	ΓBELs		W	/ater Qualit	y Data & Wo	QBELs			Dania for
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>9</sup>	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Basis for Permit Requirement
	mg/L	Monthly Avg	Monitor	50	60/0	-	-								Monitor <u>750 1.13</u>
	IIIg/L	Daily Max	Monitor	186	60/0	-	-				e, industrial	wastes or eposition or	702.2		Monitor <u>750 1.13</u>
Total Suspended	lbs/d	Monthly Avg	640	231	60/0	281 (at 01A)	USEPA ELG BCT	_			for their be		703.2	-	Applied at <u>01A</u> *
Solids (TSS)		Daily Max	1600	738	60/0	726 (at 01A)	USEPA ELG BCT								Applied at <u>01A</u> *
	*Load I	ring for conce imits for the i ute backslidir	TSS have	e been ren	noved from C	Outfall 001 a	oses of establish and applied to ne	ing a base w internal	eline measi Outfall 01 <i>l</i>	urement at A (see <u>facili</u>	the facility. ty information	on section abo	ove). This c	hange	does not
Settleable	mL/L	Daily Max	0.3	0.1	1/59	0.3	TOGS 1.2.1	-	other w	astes that v	e, industrial will cause de for their be	eposition or	703.2	-	Applied at <u>01A</u> *
Solids	standar *Limits	its for Settleable Solids have been removed from Outfall 001 and applied to new internal Outfall 01A (see <u>facility information</u> section above). The stitute backsliding (see Anti-Backsliding section above).													
	mg/L	Monthly Avg	-	17 Actual Average	60/0	-	-	0.082*	29	0.9	A(C)	1.7			WQBEL
	IIIg/L	Daily Max	-	43 Actual Max	60/0	-	-	0.062	29	0.9	A(C)	-	703.5		No Monitoring or Limitation
Nitrogen,	lb/d	Monthly Avg	Monitor	86 Actual Average	60/0	-	-	_	_	_	_	-	703.3		Monitor <u>750 1.13</u>
Ammonia (as N),	15, 4	Daily Max	309	308 Actual Max	60/0	-	-					_			Discontinued
Summer (June 1 <sup>st</sup> to October 31 <sup>st</sup> )	assume ambien and the concen water q daily m has bee *Backg	ed value and toncentration HEW dilution is projudity. The naximum loaden added for round conce	I consisted on. The properties on ratio. I operated to ew concern this parantration for the consistency of t	ent with TO projected in The multi be greate entration lir 309 lb/d. T imeter. or ammon	OGS 1.3.1E. n-stream con plier was se r than the wa nit at the des herefore, the ia is assume	The WQBE neentration was elected from ater quality sign flow of a daily maxid consisten	EL was calculate was calculated from EPA's Technical standard and a repuis MGD is equipment food limit hours toward rock 1.3.	d from the com the maded Support the manual support to a community and the manual support	e chronic waximum val Documen Ily average monthly a discontinue	vater quality ue of 43 mg at Chapter e concentra average load d and does	y standard, g/L, a multip 3.3 to accortion limit has d of 26 lb/d as not constit	HEW dilution lier of 1.3, the unt for the nus been addecended by the backslidir	ratio, and e upstream a umber of sa I to the perr tly more stri ng. A sched	an assamble amples nit for ngent ule of	aterbody was an sumed upstream nt concentration, s. The in-stream the protection of than the existing compliance item es collected from

Permittee: North Country Dairy, LLC Facility: North Country Dairy SPDES Number: NY0002763

USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski Water Quality Reviewer: Ethan Sullivan Full Technical Review

Outfall #	001	Description	of Was	tewater: P	Process Was	tewater, No	n-Contact Coolin	ıg Water, a	and Artesia	n Well ove	rflow				
Outian #	001	Type of Tre	atment:	aerated ba	asins, polishi	ng lagoons,	, and a manual b	ar screen							
			Exist	ing Discha	rge Data	٦	ΓBELs		W	ater Qualit	y Data & Wo	QBELs			Basis for
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>9</sup>	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Permit Requirement
	mg/L	Monthly Avg         -         12 Actual Average         60/0         -         -         -         0.082*         15         1.3         A(C)         2.6           Daily Max         -         23 Actual Max         60/0         -         -         -         703.5													WQBEL
	IIIg/L	Daily Max - 23 60/0													No Monitoring or Limitation
	lb/d	,	Monitor		60/0	-	-	_	_	_	_	-	<u> </u>	-	Monitor <u>750 1.13</u>
Nitrogen,	,	Daily Max	309	140 Actual Max	60/0		-					-			Discontinued
	daily m A sche *Backg	aximum load dule of comp pround conce istent with T0 2019	l limit of 3 liance ite ntration f	309 lb/d. Tl m has bee or ammoni	herefore, the en added for ia is assume	daily maxir this parame d consisten	num load limit ha eter. t with TOGS 1.3.	as been dis	scontinued	and does	not constitut	e backsliding.			than the existing es collected from Limit Applied at
	mg/L	Monthly Avg	Monitor	28	19/0	(at 01A)	BPJ								<u>01A</u>
		Daily Max	Monitor	57	19/0	-	-	_				in growths of ill impair the	703.2	_	Monitor <u>750 1.13</u>
Total	lb/d	Monthly Avg	-	130	19/0	-	-	_			neir best usa		<u>703.2</u>	_	Monitor <u>750 1.13</u>
Phosphorus		Daily Max	-	246	19/0	-	-								Monitor <u>750 1.13</u>
					•		ncentration mon en applied to int	• .						-	verage and daily ection below).
	ng/L	Daily Max	-	0.69	1/0	-	-	-	-	0.7	H(FC)	-	-	-	DOW 1.3.10
Total Mercury	See Me	ercury section	n of this f	act sheet.											

Permittee: North Country Dairy, LLC Facility: North Country Dairy SPDES Number: NY0002763 USEPA Non-Major/Class 01 Industrial Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski Water Quality Reviewer: Ethan Sullivan Full Technical Review

Outfall #	001	Description	າ of Was	tewater: F	rocess Was	tewater, No	n-Contact Coolin	g Water, a	ınd Artesia	n Well over	flow				
Outian #	001	Type of Tre	atment:	aerated ba	asins, polishi	ng lagoons	, and a manual b	ar screen							
			Exist	ing Discha	rge Data	٦	ΓBELs		W	ater Quality	/ Data & WO	QBELs			Basis for
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>9</sup>	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Permit Requirement
Additional Poll	utants I	Detected													
	mg/L	Daily Max	-	2	5*	-	-	-	-	-	-	-	<u>703.5</u>	-	No Limitation or Monitoring
Nitrate-Nitrite							st for either Class of detects/non-de			oodies, ther	efore no lim	itation is spe	cified.		
	mg/L	Daily Max	-		esults for e-Nitrite	-	-	-	-	-	-	-	<u>703.5</u>	-	Monitor 750 1.13
Nitrate		eric water qua establish a b					ther Class C or C	lass B wat	erbodies, l	nowever mo	onitoring is b	eing added f	or the calcu	lation	
N. 11. 11	mg/L	Daily Max	-	See R	esults for e-Nitrite	-	-	-	-	0.1	A(C)	0.2	<u>703.5</u>	-	Monitor 750 1.13
Nitrite	A moni	toring require	ement for	Nitrite is b	eing include	d in the per	mit for the purpo	se of calcu	lating total	l nitrogen a	nd to establ	ish a baseline	e measurem	nent a	the facility.
Additional Poll	utants														
Total Dissolved	mg/L	Daily Max	-	_	-	-	-				case shall it	itain the best t exceed	703.3	-	Monitor 750 1.13
Solids (TDS)		toring requir		r Total Dis	solved Solid	ls (TDS) is	being included in	n the perm	nit based c	on informati	on from oth	er similar fac	cilities and t	o esta	ıblish a baseline
	mg/L	Daily Max	_	53	3*	_	_				ult in growth		703.2		Monitor
Total Nitrogen	lbs/d	Daily Max	_	33	3	_	-	weeus a	and Silines	best usag	•	ers for their	100.2	_	<u>750 1.13</u>
							n the permit to es of detects/non-de			easuremen	t at the facili	ty.			
T-4-1 1/3-1-1-1-1	mg/L	Daily Max	_	_	_	_	_	_	_	_	_	_	703.2		Monitor
Total Kjeldahl Nitrogen	lbs/d	Daily Max							_						<u>750 1.13</u>
(TKN) (as N)	A moni at the f		ement for	r Total Kjel	dahl Nitrogei	n is being in	cluded in the per	mit for the	purpose c	ot calculatin	g Total Nitro	ogen and to e	stablish a b	aselin	e measurement

Permittee: North Country Dairy, LLC Facility: North Country Dairy SPDES Number: NY0002763

USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

#### Outfall 01A

Outfall #	01A	Description	of Was	tewater: F	rocess wast	ewater									
Outrail #	UIA	Type of Tre	atment:	Aerated b	asins, settlin	g basin, pol	ishing lagoons								
			Exist	ing Discha	irge Data	-	TBELs		W	ater Qualit	y Data & Wo	QBELs			Basis for
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>11</sup>	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Permit Requirement
Limitation Guide Limitation Guide	elines ap elines (E	oplicable to t <u>LG) Calculat</u>	he facilit ions Tab	y. Technol <u>le</u> below. 1	ogy-based e The addition	effluent limit of this Outfa	e and appropriate ations (TBELs) r all allows DEC to point. As such, th	noted belowensure co	w were de mpliance v	veloped fro vith techno	om 40 CFR logy limitation	part 405 as ons prior to a	discussed diditional flo	n the w and	<b>USEPA Effluent</b>
	MGD	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750 1.13
Flow Rate	Flow w	ill be monitor	ed for inf	ormationa	l purposes a	nd to calcul	ate pollutant load	lings.			,				
	SU	Minimum	6.5 (at 001)	-	-	6.0	USEPA ELG BCT	-	-	-	-	-	-	-	TBEL
pН	50	Maximum	9.0 (at 001)	-	-	9.0	USEPA ELG BCT	-	-	-	-	-	-	-	TBEL
<b>P</b> · ·	Consis	tent with 40 (	CFR 405	, TBEL val	ues have be	en applied a	at Outfall 01A. Ca	alculations	are showr	below in th	ne <u>ELG cal</u>	culations tabl	e.		
	lbs/d	Monthly Avg	430 (at 001)	-	-	187	USEPA ELG BCT	-	-	-	-	-	-	-	TBEL
	IDS/U	Daily Max	1100 (at 001)	-	-	469	USEPA ELG BCT	-	-	ı	-	-		-	TBEL
Biochemical Oxygen	m a/l	Monthly Avg	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750 1.13
Demand (BOD₅)	mg/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750 1.13
		tent with 40 C					d in the permit as table.	calculated	d from the	oroduction	values provi	ided by the fa	cility on the	submi	tted Supplement

<sup>&</sup>lt;sup>11</sup> 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 Non-Major/Class 01 Industrial

Outfall #	01A	Description	of Was	tewater: P	rocess wast	ewater									
Outian #	UIA	Type of Tre	atment:	Aerated ba	asins, settlin	g basin, pol	ishing lagoons								
			Exist	ing Discha	rge Data	-	ΓBELs		W	ater Qualit	y Data & WO	QBELs			Basis for
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>11</sup>	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc. Projected Instream Conc. WQ Std. or GV WQ Type Calc. WQBEL Basis for WQBEL					Permit Requirement		
	lle e /el	Monthly Avg	640 (at 001)	-	-	281	USEPA ELG BCT	-	-	-	-	-	-	-	TBEL
Tatal	lbs/d	Daily Max	1600 (at 001)	-	-	726	USEPA ELG BCT	-	-	-	-	-	-	-	TBEL
Total Suspended Solids		Monthly Avg	lly Avg												
(TSS)	mg/L	Daily Max	y Max												
			t with 40 CFR 405, TBEL values have been decreased in the permit as calculated from the production values provided by the facility on the submitted nt H form. Calculations are shown below in the <a href="ELG calculations">ELG calculations</a> table.												
Settleable	mL/L	Daily Max	0.3 (at 001)	-	-	0.3	TOGS 1.2.1	-	other w	astes that v	e, industrial will cause de for their be	position or	<u>703.2</u>		TBEL
Solids	IIIL/L	Consistent v		S 1.2.1 At	tachment C,	the TBEL ir	ncluded in the exi	sting perm	nit is reflec	tive of the t	reatment ted	chnology and	remains pro	otectiv	e of the water
	lbs/d	Monthly	Monitor (at 001)	-	-	-	-					n growths of	703.2	_	Monitor 750 1.13
	mg/L	Avg	Monitor (at 001)	-	-	2.0	BPJ	_			neir best usa		<u>703.2</u>	-	BPJ
Total Phosphorus		<ul> <li>A monthly average total phosphorous limit of 2.0 mg/L has been added into the permit</li> <li>The TBEL was established using Best Professional Judgment (BPJ) and is supported by the following (see Appendix):         <ul> <li>The EPA's Development Document for ELGs for the Dairy Processing Industry states that adequate in-plant control and the reduction that accompanies biological removal typically reduces phosphorous to a level consistent with municipal secondary treatment. Municipal secondary treatment is expected to meet phosphorous limits of between 0.2 to 1.0 mg/L.</li> <li>The limit of 2.0 mg/L is achievable by facilities with similar production types within the dairy industry and by other industrial facilities implementing lagoon technology.</li> </ul> </li> </ul>													

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

## Outfall 002

045-11.4	000	Description	of Wast	tewater: S	Stormwater										
Outfall #	002	Type of Tre	atment:	None											
			Existi	ing Discha	rge Data	-	ΓBELs		Wa	iter Quality	/ Data & WO	QBELs			Basis for
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Permit Requirement
							24 was provided d. (see <u>Enforcem</u>			A's Reques	st for Inform	ation (RFI) da	ated 6/24/20	024. V	/alues presented
Flow	GPD	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750 1.13
5-Day Biological Oxygen Demand (BOD₅)	mg/L	Daily Max	-	-	-	-	-	-	-	-	-	-	-	-	Monitor 750 1.13
Chemical Oxygen Demand (COD)	mg/L	Daily Max	1	4140	4/0	1	1	-	-	-	1	-	-	1	Monitoring for BOD₅ has been added
Total Kjeldahl Nitrogen (TKN) (as N)	mg/L	Daily Max	-	8.3	6/0	-	-	-	-	-	-	-	-	-	Monitor 750 1.13
Ammonia (as N)	mg/L	Monthly Average	-	1.36	4/0	-	-	-	-	-	-	-	-	-	Monitor 750 1.13

No numeric effluent limitations have been included in this permit for Outfall 002, however, based on the values provided and existing water quality concerns, monitoring for the above parameters has been included to establish a baseline measurement at the facility. BOD₅ monitoring has been added at Outfall 002 in place of COD monitoring consistent with Outfall 001 requirements.

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

## **Outfall 001 Emerging Contaminants**

<b>Emerging Conta</b>	minan	ts Outfall 00	)1												
			Exis	ting Discha	rge Data		TBELs		Wa	ater Qualit	y Data & WO	QBELs			
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>12</sup>	# of Data Points	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis	ML	Basis for Permi Requirement
Notes: See Eme	rging C	ontaminant I	Monitorin	g section a	bove. Effluen	t samples	were analyzed fo	or the 40 P	FAS compo	ounds and	1,4-Dioxan	e.			
Perfluoro- butanoic Acid	ng/L	Daily Max	ı	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
(PFBA)	Based	l on available	data, no	additional	monitoring is	required a	at this time.								
Perfluoro- pentanoic Acid	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
(PFPeA)	Based	l on available	data, no	additional	monitoring is	required a	at this time.								
Perfluoro- hexanoic Acid	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
(PFHxA)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
Perfluoro- heptanoic Acid	ng/L	Daily Max	-	0.00099*	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
(PFHpA)					monitoring is estimated va		at this time.								
Perfluoro- octanoic Acid	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
(PFOA)	Based	l on available	data, no	additional	monitoring is	required a	at this time.								
Perfluoro- nonanoic Acid	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
(PFNA)	Based	l on available	data, no	additional	monitoring is	required a	at this time.								
Perfluoro- decanoic Acid	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
(PFDA)	Based	l on available	data, no	additional	monitoring is	required a	at this time.								
Perfluoro- undecanoic Acid	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
(PFUnA)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring

<sup>&</sup>lt;sup>12</sup> 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)
PAGE 20 OF 32

<b>Emerging Conta</b>	minan	ts Outfall 00	)1												
			Exis	ting Discha	arge Data		TBELs		Wa	ater Quality	/ Data & Wo	QBELs			
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>12</sup>	# of Data Points	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis	ML	Basis for Permit Requirement
Perfluoro- dodecanoic Acid (PFDoA)	Based	on available	e data, no	additional	monitoring is	required a	at this time.								
Perfluoro- tridecanoic Acid	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
(PFTriA)	Based	on available	e data, no	o additional	monitoring is	required a	at this time.	ı	1	1				ı	N 1
Perfluoro- tetradecanoic	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Acid (PFTeA)	Based	on available	e data, no	additional	monitoring is	required a	at this time.								
Perfluoro- butanesulfonic	ng/L	Daily Max	-	0.00085*	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Acid (PFBS)					monitoring is n estimated va		at this time.								
Perfluoro- pentanesulfonic	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Acid (PFPeS)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
Perfluoro-	ng/L	Daily Max	-	0.0019*	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
hexanesulfonic Acid (PFHxS)					monitoring is		at this time.		•	1	1		1	•	
Perfluoro- heptanesulfonic	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Acid (PFHpS)	Based	on available	e data, no	additional	monitoring is	required a	at this time.								
Perfluoro- octanesulfonic	ng/L	Daily Max	-	0.002 Actual Max	1	-	-	-	-	160,000	A(C)	No Reasonable Potential	TOGS 1.1.1 2023 Addendum	-	No Limitation or Monitoring
Acid (PFOS)	Based	on available	e data, no	additional	monitoring is	required a	at this time.								
Perfluoro- nonanesulfonic	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Acid (PFNS)	Based	on available	e data, no	additional	monitoring is	required a	at this time.								3
Perfluoro- decanesulfonic	ng/L	Daily Max	-	ND	1	-	-	_	_	_	-	-	-	-	No Limitation or Monitoring
Acid (PFDS)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
Perfluoro- dodecane-	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring

Emerging Conta	minan	ts Outfall 00	)1												
			Exist	ting Discha	rge Data		TBELs		Wa	ater Quality	y Data & WO	QBELs			
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>12</sup>	# of Data Points	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis	ML	Basis for Permit Requirement
sulfonic Acid (PFDoS)	Based	on available	e data, no	additional	monitoring is	required a	at this time.								
Perfluoro- octane-	ng/L	Daily Max	-	0.0058	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
sulfonamide (FOSA)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
N-methyl Perfluoro- octanesulfon-	ng/L	Daily Max	ı	ND	1	-	-	-	-	-	-	-	ı	-	No Limitation or Monitoring
amidoacetic Acid (NMeFOSAA)	Based	on available	e data, no	additional	monitoring is	required a	at this time.								
N-ethyl Perfluoro-	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
octanesulfon- amidoacetic Acid (NEtFOSAA)	Based	on available	e data, no	additional	monitoring is	required a	at this time.								
4:2 Fluorotelomer	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Sulfonic Acid (FTS)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
6:2 Fluorotelomer	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	1	-	No Limitation or Monitoring
Sulfonic Acid (FTS)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
8:2 Fluorotelomer	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Sulfonic Acid (FTS)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
N-ethyl Perfluoro- octanesulfon-	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
amide (NEtFOSA)	Based	on available	e data, no	additional	monitoring is	required a	at this time.								

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

USEPA Non		/Class 01 li	ndustrial			Technica	Reviewer. Eur I Review	iaii Gaiiive	411						
Emerging Conta	ıminan	ts Outfall 00	)1												
			Exis	ting Discha	rge Data		TBELs		Wa	ater Qualit	y Data & Wo	QBELs			
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>12</sup>	# of Data Points	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis	ML	Basis for Permit Requirement
N-methyl Perfluoro-	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
octanesulfon- amide (NMeFOSA)	Based	l on available	e data, no	additional	monitoring is	s required	at this time.								
N-methyl Perfluoro-	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
octanesulfon- amidoethanol (NMeFOSE)	Based	l on available	e data, no	additional	monitoring is	required	at this time.								
N-ethyl Perfluoro-	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
octanesulfon- amidoethanol (NEtFOSE)	Based	l on available	e data, no	additional	monitoring is	s required	at this time.								
9- Chlorohexadeca -fluoro-3-	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
oxanonane-1- sulfonic Acid (9CI-PF3ONS)	Based	l on available	e data, no	additional	monitoring is	required	at this time.								
Hexafluoro- propylene Oxide	ng/L	Daily Max	-	ND	1	-	-	-	_	_	-	-	-	-	No Limitation or Monitoring
Dimer Acid (HFPO-DA or GenX)	Based	l on available	e data, no	additional	monitoring is	required	at this time.								
11- Chloroeicosaflu oro-3-	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
oxaundecane-1- sulfonic Acid (11CI- PF3OUdS)	Based	l on available	e data, no	additional	monitoring is	required	at this time.							•	
4,8-Dioxa-3H- perfluorononano	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
ic Acid (ADONA)	Based	l on available	e data, no	additional	monitoring is	required	at this time.								
3- Perfluoropropyl	ng/L	Daily Max	-	ND	1	-	-	-			-	-	-	-	No Limitation or Monitoring

Emerging Conta	minan	ts Outfall 00	)1												
			Exis	ting Discha	rge Data		TBELs		Wa	ater Quality	y Data & W	QBELs			
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>12</sup>	# of Data Points	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis	ML	Basis for Permit Requirement
Propanoic Acid (3:3 FTCA)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
2H,2H,3H,3H- Perfluoro-	ng/L	Daily Max	-	ND	1	-	-	_	-	_	-	-	-	•	No Limitation or Monitoring
octanoic Acid (5:3 FTCA)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
3- Perfluoroheptyl	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
Propanoic Acid (7:3 FTCA)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
Nonafluoro-3,6- dioxaheptanoic	ng/L	Daily Max	-	ND	1	-	-	-	-	_	-	-	-	-	No Limitation or Monitoring
Acid (NFDHA)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
Perfluoro-4- methoxy-	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
butanoic Acid (PFMBA)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
Perfluoro-3- methoxy-	ng/L	Daily Max	-	ND	1	-	-	-	-	-	-	-	-	-	No Limitation or Monitoring
propanoic Acid (PFMPA)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
Perfluoro(2- ethoxyethane)su	ng/L	Daily Max	-	ND	1	-	-	-	-	_	-	-	-	-	No Limitation or Monitoring
Ifonic Acid (PFEESA)	Based	on available	data, no	additional	monitoring is	required a	at this time.								
1,4-Dioxane	μg/L	Daily Max	-	ND	1	-	-	-	-	18,000	A(C)	No Reasonable Potential	TOGS 1.1.1 2023 Addendum	-	No Limitation or Monitoring
	Based	on available	non-det	ect data, th	ere is no rea	sonable po	otential to exceed	I the water	quality star	ndard. The	erefore, no \	NQBEL is spe	cified.		

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

# 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 405	§405.17 Subpart A	§405.27 Subpart B	§405.37 Subpart C	§405.117 Subpart K
Subpart Name	Receiving Stations Subcategory	Fluid Products Subcategory	Cultured Products Subcategory	Condensed Whey Subcategory

ELG Pollutant	Daily Max Multiplier	Monthly Avg. Multiplier	Production Rate (lbs/d BOD₅)	Daily Max TBEL (lbs/d)	Monthly Avg. TBEL (lbs/d)
40 CFR 405.17 Subpart A– ELGs for Best Cor	nventional Polluta	ant Control Techi	nology (BCT)		
BOD₅	0.048	0.019	15,906	7.64	3.02
TSS	0.071	0.029	15,906	11.29	4.61
рН	Within the range fr	rom 6.0 to 9.0 SU			
40 CFR 405.27 Subpart B – ELGs for Best Co	nventional Pollut	ant Control Tech	nology (BCT)		
BOD <sub>5</sub>	0.338	0.135	53,703	181.52	72.50
TSS	0.551	0.203	53,703	295.91	109.02
pH	Within the range fr	rom 6.0 to 9.0 SU			
40 CFR 405.37 Subpart C – ELGs for Best Co	nventional Pollut	ant Control Tech	nology (BCT)		
BOD <sub>5</sub>	0.338	0.135	69,999*	236.59	94.49
TSS	0.506	0.203	69,999*	354.19	142.09
рН	Within the range fi	rom 6.0 to 9.0 SU			

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

ELG Pollutant	Daily Max Multiplier	Monthly Avg. Multiplier	Production Rate (lbs/d BOD <sub>5</sub> )	Daily Max TBEL (lbs/d)	Monthly Avg. TBEL (lbs/d)
40 CFR 405.117 Subpart K – ELGs for Best Co					
BOD <sub>5</sub>	0.1	0.04	42,750	42.75	17.10
TSS	0.15	0.06	42,750	64.13	25.65
рН	Within the range o	f 6.0 to 9.0			
40 CFR 405 Sum of Subparts A, B, C, K for in	cluded TBEL limit	s			
BOD <sub>5</sub>	-	-	-	469	187
TSS	-	726	281		
На	Within the range	of 6.0 to 9.0 SU			

**Note:** The permittee indicated in Part 2, sections 5.1 and 5.2 of their submitted NY-2C application that effluent limitation guidelines (ELGs) promulgated in 40 CFR 405 applied to their facility. In a corrected Supplement H submitted 4/7/2025, the permittee listed the applicable subparts of 40 CFR part 405 as Subparts A, B, C, and K. The facility's exact date of construction is unknown, but from historical engineering reports it can be inferred that the facility existed prior to 1977, and in previous permits, assigned BCT limitations, indicating the facility was built prior to 1974. BCT calculations continue to be applicable to this facility based on the inferred date of construction of the treatment process and production process lines.

ELGs for each subpart were summed together for final included TBELs as the flows from the various subparts flow to the same outfall.

\*BOD $_5$  Value for Subpart C is the sum of the BOD $_5$  input values for each ingredient. BOD $_5$  values for each ingredient were calculated using the formula BOD $_5$  % = [0.890\*%Fat] +[1.031\*%Protein] +[0.691\*%Carbohydrate] to calculate the percent of each ingredient that constitutes BOD $_5$  input, then multiplying the total input of each ingredient (measured in lbs/day) by the percent value from the formula above to calculate the BOD $_5$  input in lbs/day.

USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

## 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
  - o 40 CFR, Chapter I, subchapters D, N, and O
- State environmental regulations
  - 6 NYCRR Part 621
  - o 6 NYCRR Part 750
  - o 6 NYCRR Parts 700 704 Best use and other requirements applicable to water classes
  - 6 NYCRR Parts 800 941 Classification of individual surface waters
- DEC 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 guick 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(I)
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	NYCRR 750-2.1(i)
Request for Additional Information	**

## 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

Permittee: North Country Dairy, LLC Facility: North Country Dairy

SPDES Number: NY0002763

USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

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

## Interstate Water Pollution Control Agencies

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

## **Existing Effluent Quality**

The existing effluent quality is determined from a statistical evaluation of effluent data in accordance with TOGS 1.2.1 and the USEPA Office of Water, <u>Technical Support Document for Water Quality-based Toxics Control</u>, March 1991, Appendix E (TSD). The existing effluent quality is equal to the 95<sup>th</sup> (monthly average) and 99<sup>th</sup> (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 <u>Pollutant Summary Table</u> identifies the number of sample data points available.

## Permit Requirements

#### **Basis for Effluent Limitations**

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

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

#### Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*I*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law<sup>13</sup> and USEPA interpretation<sup>14</sup> 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.

<sup>&</sup>lt;sup>13</sup> American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)

<sup>&</sup>lt;sup>14</sup> 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)

USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

#### Antidegradation Policy

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

#### **Effluent Limitations**

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

## Technology-based Effluent Limitations (TBELs) for Industrial Facilities

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

#### USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

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

#### Best Professional Judgement (BPJ)

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

#### Water Quality-Based Effluent Limitations (WQBELs)

In addition to the TBELs, permits must include additional or more stringent effluent limitations and conditions, including those necessary to protect water quality. CWA sections 101 and 301(b)(1)(C), 40 CFR 122.44(d)(1), and 6 NYCRR Parts 750-1.11 require that permits include limitations for all pollutants or parameters which are or may be discharged at a level which may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. Additionally, 6 NYCRR Part 701.1 prohibits the discharge of pollutants that will cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge. Water quality standards can be found under 6 NYCRR Parts 700-704.

USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

The limitations must be stringent enough to ensure that water quality standards are met at the point of discharge and in downstream waters and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1, 1.3.2, 1.3.5 and 1.3.6. DEC considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

#### Critical Flows

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

#### Reasonable Potential Analysis (RPA)

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

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

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

SPDES Number: NY0002763
USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

Full Technical Review

cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. If a TMDL is in place, the facility's WLA for that pollutant is applied as the WQBEL.

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

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

### Whole Effluent Toxicity (WET) Testing:

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

- 1. There is the presence of substances in the effluent for which ambient water quality criteria do not exist.
- 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.

USEPA Non-Major/Class 01 Industrial

Date: June 2, 2025 v.1.23 Permit Writer: Emily Kosinski

Water Quality Reviewer: Ethan Sullivan

**Full Technical Review** 

#### 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.

#### Other Conditions

## Mercury

The multiple discharge variance (MDV) for mercury was developed in accordance with 6 NYCRR 702.17(h) "to address widespread standard or guidance value attainment issues including the presence of a ubiquitous pollutant or naturally high levels of a pollutant in a watershed." The first MDV was issued in October 2010, and subsequently revised and reissued in both 2015 and 2020; each subsequent iteration of the MDV is designed to build off the previous version, to make reasonable progress towards the water quality standard (WQS) of 0.7 ng/L dissolved mercury. The MDV is necessary because human-caused conditions or sources of mercury prevent attainment of the WQS and cannot be remedied (i.e., mercury is ubiquitous in New York waters at levels above the WQS and compliance with a water quality-based effluent limitation (WQBEL) for mercury cannot be achieved with demonstrated effluent treatment technologies). DEC has determined that the MDV is consistent with the protection of public health, safety, and welfare. During the effective period of this MDV, any increased risks to human health are mitigated by fish consumption advisories issued periodically by the NYSDOH.

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

#### Schedules of Compliance

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

#### Schedule(s) of Additional Submittals

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

#### Best Management Practices (BMP) for Industrial Facilities

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