



State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	1499	NAICS Code:	212390	SPDES Number:	NY0296783
Discharge Class (CL):	01	DEC Number:	5-1532-00007		
Toxic Class (TX):	N	Effective Date (EDP):	EDP		
Major-Sub Drainage Basin:	10 - 04	Expiration Date (ExDP):	ExDP		
Water Index Number:	C-48-6-10	Item No.:	830 - 341	Modification Dates (EDPM):	
Compact Area:	NEIWPCC				

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:	NYCO Minerals, LLC	Attention:	Eve Bailey		
Street:	189 Seventy Lane				
City:	Lewis	State:	NY	Zip Code:	12950
Email:	eve.bailey@imerys.com	Phone:	(518) 948-9700		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL									
Name:	Seventy Road Mine								
Address / Location:	189 Seventy Lane						County:	Essex	
City:	Lewis				State:	NY	Zip Code:	12950	
Facility Location:	Latitude:	44 °	18 '	9.5 " N	& Longitude:	73 °	36 '	38.4 " W	
Primary Outfall No.:	009	Latitude:	44 °	17 '	57 " N	& Longitude:	73 °	36 '	52 " W
Wastewater Description:	Stormwater & Mine Dewatering	Receiving Water:	Derby Brook	NAICS:	212390	Class:	C	Standard:	C(T)

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

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

DISTRIBUTION:

BWP Permit Coordinator (permit.coordinator@dec.ny.gov)
 BWP Permit Writer
 RWE
 RPA
 EPA Region II (Region2_NPDES@epa.gov)
 DEC Water Quality Engineer (aslam.mirza@dec.ny.gov)

Permit Administrator:	Erin M. Donhauser	
Address:	1115 NYS RTE 86, Ray Brook, NY 12977	
Signature		Date

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	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
009	Mine Dewatering and Stormwater	Derby Brook	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Daily Maximum	Monitor	MGD			1/Month	Estimate		X	
pH	Daily Minimum	6.5	SU			1/Month	Grab		X	
	Daily Maximum	8.5	SU							
Total Suspended Solids (TSS)	Monthly Average	25	mg/L			1/Month	Grab		X	
Total Suspended Solids (TSS)	Daily Maximum	45	mg/L			1/Month	Grab		X	
Dissolved Oxygen	Daily Minimum	5.0	mg/L			1/Month	Grab		X	
Oil & Grease	Daily Maximum	15	mg/L			1/Month	Grab		X	
Temperature	Daily Maximum	Monitor	°F			1/Month	Grab		X	
Ammonia (as N)	Monthly Average	Monitor	mg/L			1/Month	Grab		X	
Total Phosphorus (as P)	Monthly Average	Monitor	mg/L			1/Month	Grab		X	
Sulfite (as S)	Daily Maximum	Monitor	mg/L			1/Quarter	Grab		X	1
Sulfide (as H ₂ S)	Daily Maximum	Monitor	mg/L			1/Quarter	Grab		X	1

FOOTNOTES:

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

SPECIAL CONDITIONS

(a) Subject to the provisions of the following paragraphs of this section, there shall be no discharge of process generated wastewater pollutants into navigable waters.

(b) Only that volume of water resulting from precipitation that exceeds the maximum safe surge capacity of a process wastewater impoundment may be discharged from that impoundment. The height difference between the maximum safe surge capacity level and the normal operating level must be greater than the inches of rain representing the 10 year, 24-hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the locality in which such impoundment is located.

(c) Process generated wastewater shall mean any wastewater used in the slurry transport of mined material, air emissions control, or processing exclusive of mining. The term shall also include any other water which becomes commingled with such wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of such wastewater. Dewatering of groundwater infiltration and stormwater from the mine pit floor is not process wastewater, provided it is not comingled with process generated wastewater.

(d) The discharge of color producing substances, turbidity or solids in amounts that adversely affect the color, cause a substantial visible contrast to natural conditions, cause deposition or impair the waters for their best uses is prohibited.

STORMWATER POLLUTION PREVENTION REQUIREMENTS

Stormwater discharges through Outfall 005 at this facility must be covered by the current Multi-Sector General Permit (MSGP) Sector J (GP-0-23-001) permit ID number NYR00C104.

BEST MANAGEMENT PRACTICES (BMPs) FOR INDUSTRIAL FACILITIES

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

1. **General** - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage. The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the DEC as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized DEC representatives upon request.
2. **Compliance Deadlines** – The permittee shall develop and submit an initial BMP plan in accordance with the Schedule of Submittals to the Regional Water Engineer. The permittee shall implement the BMP plan within 6 months of submission, unless a different time frame is approved by the Department through a permit modification. Annually, the permittee **shall review** and modify the BMP plan whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify that the annual review has been completed in accordance with the Schedule of Submittals. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.
3. **Facility Review** - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The permittee shall consider relative toxicity of the pollutant in determining the significance of potential releases. The review shall address all substances present at the facility that are identified in the SPDES application Form NY-2C (available at [SPDES Application Procedures and Forms - NYSDEC](#)) or that are required to be monitored for by the SPDES permit.
4. **13 Minimum BMPs:** Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in *Developing Your Stormwater Pollution Prevention Plan A Guide for Industrial Operators*, February 2009, EPA 833-B-09-002. As a minimum, the plan shall include the following BMPs:

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

BMPs FOR INDUSTRIAL FACILITIES (continued)

5. **Stormwater Discharges from Construction Activity to Surface Waters** – Pursuant to Section 402 of the Clean Water Act (CWA), and 40 CFR 122.26(b)(14)(x), (15)(i), and (15)(ii), stormwater discharges from certain construction activities (including discharges through a municipal separate storm sewer system) are unlawful unless they are authorized by a SPDES permit. Prior to initiating such construction associated with this facility, the permittee must obtain coverage under the current version of the SPDES General Permit for Stormwater Discharges from Construction Activity (CGP) or a separate individual stormwater construction SPDES permit, if not eligible for the CGP.
6. **Required Sampling For “Hot Spot” Identification** – The permittee’s development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutant “hot spot” identification. The economic achievability of effluent limits will not be considered until plant site “hot spot” sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology. For the purposes of this permit condition a “hot spot” is a segment of an industrial facility (including but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem pollutants to the wastewater or stormwater collection system of that facility. For the purposes of this definition, problem pollutants are substances for which treatment to meet a water quality or technology requirement may, considering the results of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at the compliance monitoring location so as to allow for an economically justifiable removal, isolation, or B.A.T. treatment of wastewaters emanating from the segment.
7. **Facilities with Petroleum or Chemical Bulk Storage (PBS and CBS) Areas** - Compliance must be maintained with all applicable regulations including those involving releases, registration, handling and storage (6 NYCRR 595-599 and 612-614). The permittee must eliminate stormwater discharges from handling and storage areas where practical.
 - A. **Spill Cleanup** – The permittee must remove all spilled or leaked substances from secondary containment systems as soon as practical and for CBS storage areas within 24 hours, unless written authorization is received from the DEC. The permittee must thoroughly clean containment systems to remove any residual contamination which could cause contamination of stormwater and the resulting discharge of pollutants to waters of the State. Following spill cleanup, the permittee must completely flush the affected area with clean water three times and properly dispose of the water removed after each flushing in an on-site or off-site wastewater treatment plant designed to treat such water and permitted to discharge such wastewater. Alternately, the permittee may test the first batch of stormwater following the spill cleanup to determine discharge acceptability. If the water contains no pollutants at concentrations above the applicable effluent limits or Action Levels it may be discharged. Otherwise, it must be disposed of as noted above. See *Discharge Monitoring* below for the list of parameters to be sampled for.
 - B. **Discharge Operation** – The permittee must remove stormwater before it compromises the required containment system capacity. Each discharge may only proceed with the prior approval of the permittee staff person responsible for ensuring SPDES permit compliance. Bulk storage secondary containment drainage systems must be locked in a closed position except when the operator is in the process of draining accumulated stormwater. Transfer area secondary containment drainage systems must be locked in a closed position during all transfers to or from these systems and must not be reopened unless the transfer area is clean of contaminants. Stormwater discharges from secondary containment systems should be avoided during periods of precipitation. The permittee shall maintain a logbook on site noting the date, time and personnel supervising each discharge.

BMPs FOR INDUSTRIAL FACILITIES (continued)

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

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

(i) *Bulk Storage Secondary Containment Systems:*

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

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

(ii) *Transfer Area Secondary Containment Systems:*

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

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

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

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

** If the stored substance is gasoline or aviation fuel then sample for oil & grease, benzene, ethylbenzene, naphthalene, toluene and total xylenes. If the stored substance is kerosene, diesel fuel, fuel oil, or lubricating oil then sample for oil & grease and polynuclear aromatic hydrocarbons (PAHs). The analytical methods selected for monitoring the stored substances are to be the most sensitive in detecting and quantifying the target analytes as approved under 40 CFR Part 136 and in compliance with NYSDOH ELAP certified methods or as directed by the Department. If the substance(s) are listed in the tables of SPDES Application Form NY-2C then sampling is required. Contact the facility inspector for further guidance. In all cases flow and pH monitoring is required.

MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

On 3/06/2026, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.E. of DOW 1.3.10.

1. General - To reduce mercury effluent levels with the goal of achieving the water quality standard of 0.7 ng/L, the permittee must develop, implement, and maintain a written MMP plan, which includes the elements set forth below.
2. Conditional Exclusion Certification – A certification (Appendix C of DOW 1.3.10), signed in accordance with 6 NYCRR 750-1.8, must be submitted once every 5 years for Outfall 009 to the Regional Water Engineer and to the Bureau of Water Permits, certifying that the facility is neither a mercury source nor receives flows from a mercury source. Criteria to determine if a facility has a mercury source are as follows:
 - The facility is, or receives flow from, a Combined Sewer System (CSS) or sanitary sewer system with Type II Sanitary Sewer Overflows (SSO¹);
 - One or more effluent samples exceed 12 ng/L, including samples taken as a result of the SPDES application process;
 - Internal or tributary waste stream samples exceed the GLCA effluent limitation and the final effluent samples are less than the GLCA due primarily to dilution by uncontaminated or less contaminated waste streams. Both components of this criterion may include samples taken as a result of the SPDES application process;
 - A SPDES permit application, or other information, indicates that mercury is handled on-site and could be discharged through outfalls;
 - Existence of outfalls that contain legacy mercury contamination;
 - The facility's collection system receives discharges from a dental and/or Categorical Industrial User (CIU²) that may discharge mercury;
 - The facility accepts hauled wastes; OR,
 - The facility is defined as a categorical industry that may discharge mercury. This may also include dentists, universities, hospitals, or laboratories, which have their own individual SPDES permit.
3. Control Strategy – develop and implement with the following minimum elements:
 - a. Equipment and Materials – Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.
 - b. Bulk Chemical Evaluation – for chemicals used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain:
 - i. A manufacturer's certificate of analysis;
 - ii. A chemical analysis performed by a certified laboratory; OR,
 - iii. A notarized affidavit that describes the substances' mercury concentration and the detection limit achieved.

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

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

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

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

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

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

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

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

DEFINITIONS:

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

DISCHARGE NOTIFICATION REQUIREMENTS

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

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

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. : _____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

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

OR:

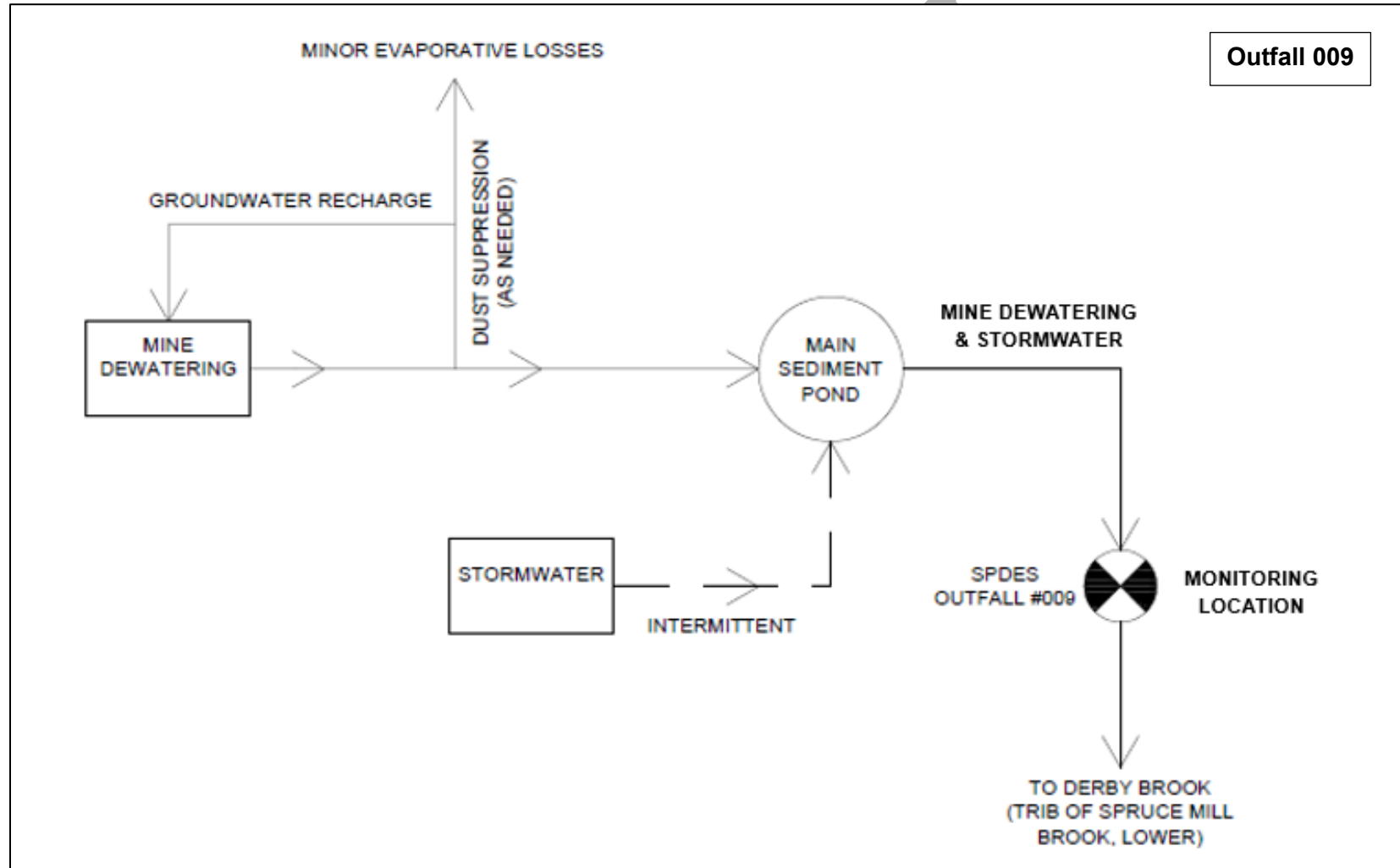
NYSDEC Division of Water Regional Office Address:

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

- (e) The permittee shall provide for public review at the business office repository of the permittee or at the off-premises location of its choice, provided the custodian of the off-premise location grants written permission, (such off-premise location shall be the village, town, city or county clerk's office, local library or other location accessible by the public) all the Discharge Monitoring Reports (DMR) prepared by the permittee to demonstrate compliance with the SPDES permit conditions. A copy of each DMR shall be placed on file at such location at the same time it is sent to the department, or within 60 days of preparation for DMRs not required to be submitted to the Department. In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained (either electronically or as a hard copy) on record for a period of five years.
- (f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

MONITORING LOCATIONS

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



GENERAL REQUIREMENTS

- A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through H as follows:
- B. General Conditions
- | | |
|--|---|
| 1. Duty to comply | 6 NYCRR 750-2.1(e) & 2.4 |
| 2. Duty to reapply | 6 NYCRR 750-1.16(a) |
| 3. Need to halt or reduce activity not a defense | 6 NYCRR 750-2.1(g) |
| 4. Duty to mitigate | 6 NYCRR 750-2.7(f) |
| 5. Permit actions | 6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h) |
| 6. Property rights | 6 NYCRR 750-2.2(b) |
| 7. Duty to provide information | 6 NYCRR 750-2.1(i) |
| 8. Inspection and entry | 6 NYCRR 750-2.1(a) & 2.3 |
- C. Operation and Maintenance
- | | |
|-----------------------------------|--------------------------------------|
| 1. Proper Operation & Maintenance | 6 NYCRR 750-2.8 |
| 2. Bypass | 6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7 |
| 3. Upset | 6 NYCRR 750-1.2(a)(98) & 2.8(c) |
- D. Monitoring and Records
- | | |
|---------------------------|--|
| 1. Monitoring and records | 6 NYCRR 750-2.5(a)(2), 2.5(a)(6), 2.5(c)(1), 2.5(c)(2), & 2.5(d) |
| 2. Signatory requirements | 6 NYCRR 750-1.8 & 2.5(b) |
- E. Reporting Requirements
- | | |
|---|-----------------------------------|
| 1. Reporting requirements for non-POTWs | 6 NYCRR 750-2.5, 2.6, 2.7, & 1.17 |
| 2. Anticipated noncompliance | 6 NYCRR 750-2.7(a) |
| 3. Transfers | 6 NYCRR 750-1.17 |
| 4. Monitoring reports | 6 NYCRR 750-2.5(e) |
| 5. Compliance schedules | 6 NYCRR 750-1.14(d) |
| 6. 24-hour reporting | 6 NYCRR 750-2.7(c) & (d) |
| 7. Other noncompliance | 6 NYCRR 750-2.7(e) |
| 8. Other information | 6 NYCRR 750-2.1(f) |
- F. Sludge Management
- The permittee shall comply with all applicable requirements of 6 NYCRR Part 360 series.
- G. SPDES Permit Program Fee
- The permittee shall pay to the DEC an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the DEC, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.
- H. Water Treatment Chemicals (WTCs)
- New or increased use and discharge of a WTC requires prior DEC review and authorization. At a minimum, the permittee must notify the DEC in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The DEC will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed under the current permit. The use and discharge of a WTC shall not proceed without prior authorization from the DEC. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.
1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized by the DEC.
 2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure excessive levels of WTCs are not used.
 3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The *WTC Notification Form* and *WTC Annual Report Form* are available from the DEC's website at: [SPDES Permitting of Water Treatment Chemicals](#).

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

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

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

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

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

Phone: (518) 402-8111

Department of Environmental Conservation
Regional Water Engineer, Region 5
232 Golf Course Road, Warrensburg, New York, 12885-1172 Phone: (518) 623-1200

- 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
009	BMP PLAN The permittee shall develop and submit an initial BMP plan to the Regional Water Engineer. The BMP plan shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions must be submitted to the Regional Water Engineer within 30 days.	EDP + 6 Months Annually thereafter on January 28 th
009	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite a mercury minimization plan and subsequent annual mercury minimization status reports in accordance with MMP item 4 above.	<i>Maintained Onsite</i> EDP + 12 months, annually thereafter
009	MERCURY - CONDITIONAL EXCLUSION CERTIFICATION The permittee must submit a mercury conditional exclusion certification every five years in order to maintain MMP Type IV status.	3/06/2031 and every 5 years thereafter

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

- E. Monitoring and analysis shall be conducted using sufficiently sensitive test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.
- F. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.
- G. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.
- H. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.
- I. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

SPDES Permit Fact Sheet

NYCO Minerals, LLC

Seventy Mine Road Wollastonite Quarry

NY0296783



**Department of
Environmental
Conservation**

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Summary of Permit Changes

A new State Pollutant Discharge Elimination System (SPDES) permit has been drafted for the Seventy Mine Road Wollastonite Quarry.

- The permit includes monitoring requirements for flow, temperature, ammonia, phosphorus, sulfite, and sulfide.
- The permit includes effluent limits for pH, total suspended solids (TSS), dissolved oxygen, and oil & grease.

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

Administrative History

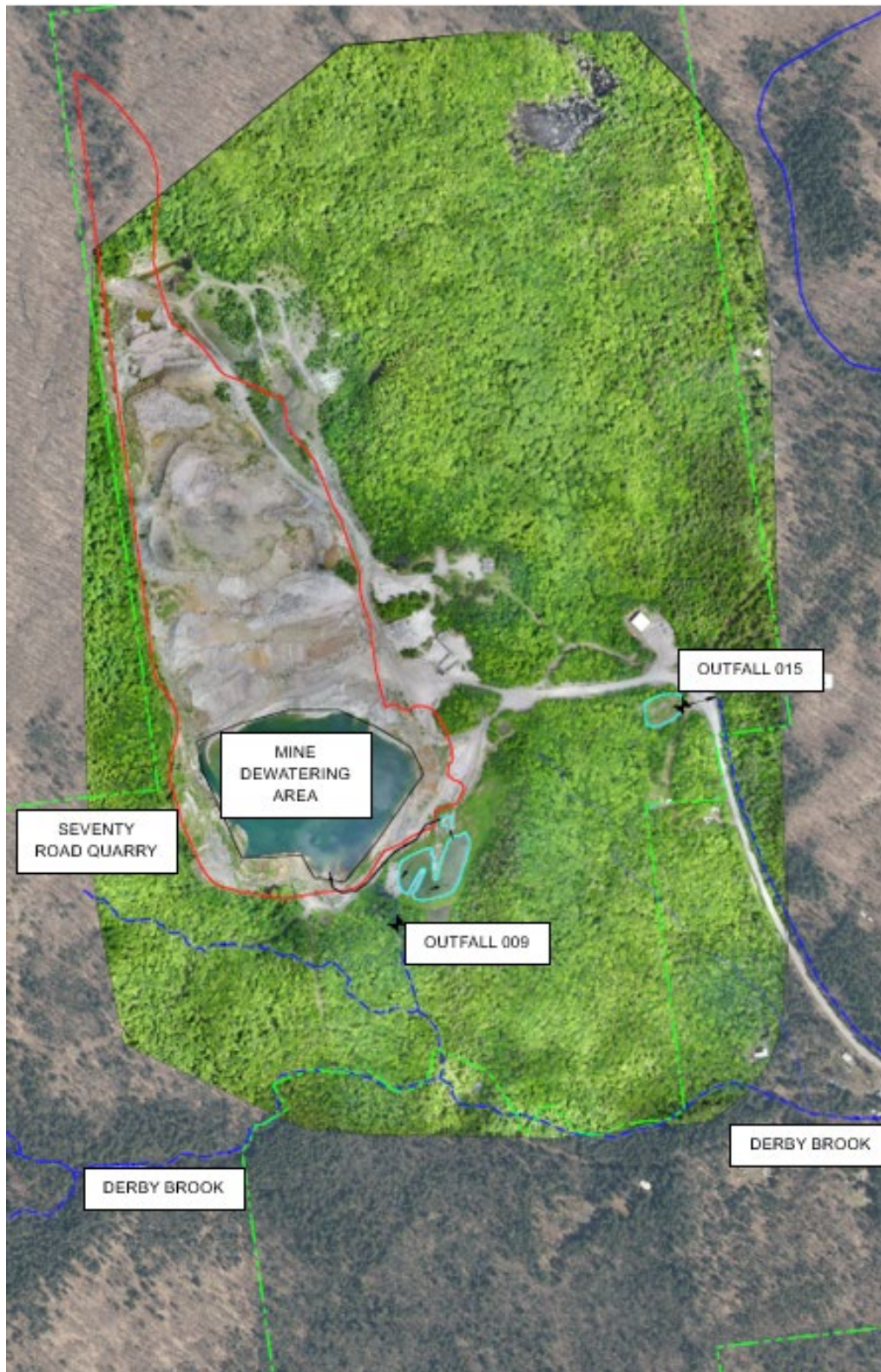
3/9/2026 NYCO Minerals, LLC submitted a NY-2C permit application.

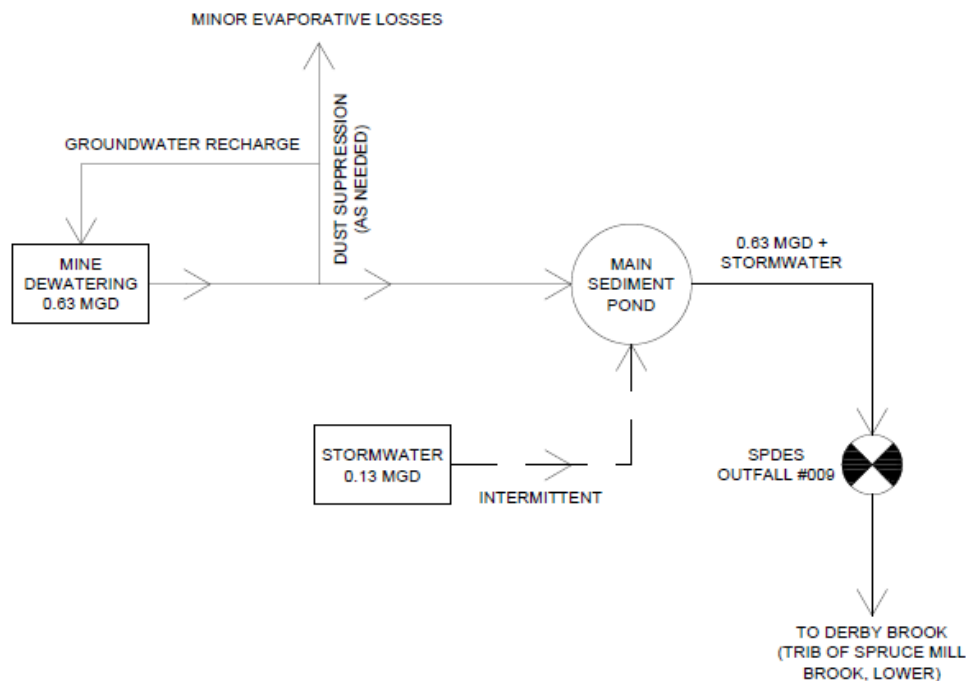
The Notice of Complete Application, published in the [Environmental Notice Bulletin](#) and newspapers, contains information on the public notice process.

Facility Information

This is an industrial facility (SIC code 1499, Miscellaneous Nonmetallic Metals) that mines wollastonite ore and is subject to categorical effluent limitation guidelines (ELGs) specified in 40 CFR Part 436, Mineral Mining and Processing Point Source Category (see [summary table](#) at the end of this factsheet). Effluent consists of stormwater and mine dewatering water. The current treatment system consists of a sediment pond. This is an existing facility that currently has coverage under the Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity (MSGP) (GP-0-23-001), Sector J, but due to the discharge of mine dewatering water the MSGP is not applicable for Outfall 009.

Site Overview





Enforcement History

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

Existing Effluent Quality

The [Pollutant Summary Table](#) presents the existing effluent quality and effluent limitations. The existing effluent quality which is dependent on mine dewatering represents data collected over a 24-hour period from 11/18/2025 to 11/19/2025 and submitted by the permittee with the NY-2C application. [Appendix Link](#)

Interstate Water Pollution Control Agencies

Outfall 009 is located within the New England Interstate Water Pollution Control Commission (NEIWPCC) compact area. [Appendix Link](#)

Receiving Water Information

The facility discharges via the following outfall:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
009	1499	Stormwater and Mine Dewatering	Ditch to Derby Brook, Class C(T)
015 Authorized under MSGP NYR00C104	1499	Stormwater	Ditch to Derby Brook, Class C(T)

Impaired Waterbody Information

The Derby Brook segment (PWL No. 1004-0079) is not listed on the 2020/2022 [New York State Section 303\(d\) List](#) of Impaired/Total Maximum Daily Load (TMDL), and therefore, there are no applicable wasteload allocations (WLAs) for this discharge. However, this waterbody segment is located within the Lake Champlain Watershed and is subject to the applicable requirements of the [Lake Champlain Phosphorus TMDL](#), as discussed below.

Lake Champlain TMDL Watershed Information

On 9/25/2002, a TMDL was approved for the Lake Champlain watershed to address phosphorus. Additional information is needed to determine if industrial facilities contribute total phosphorus loading in their effluent and how to account for these potential loads in the update of the TMDL. NYCO Minerals, LLC is required to monitor Total Phosphorus as P.

Critical Receiving Water Data

Reach Description

The treated discharge is to an un-named tributary of Derby Brook and is approximately 1150 feet long. There is no other discharge in the vicinity of NYCO Minerals, LLC.

However, NYCO Minerals, LLC has another discharge on Derby Brook which is approximately two miles downstream of the confluence of the un-named tributary and Derby Creek. The un-named tributary is classified as D whereas Derby Creek is class C(T). The terrain of the stream is steep and provides good aeration capacity to oxidize the dissolved organic pollutants, i.e., carbon and nitrogen components of the waste.

Hydrology

The un-named tributary is not shown on the USGS map and point-of discharge is the origin of the ditch and therefore the stream will be considered as intermittent. In addition, Derby Brook is also an intermittent stream due to small drainage area.

Water Quality Model

Even though both streams were intermittent, a water quality model was developed to take advantage of the good aeration capacity of the receiving waters to determine if effluent limits greater than intermittent stream effluent limits (ISELs) were feasible. A 10-reach water quality model was developed originating from the point-of-discharge to the confluence of Derby Brook and an un-named stream emanating from Big Pond. The WQ model spanned over a distance of approximately four miles. The WQ modeling results indicated that secondary treatment standards were acceptable for maintaining the dissolved oxygen standard of 5.0 mg/l for Derby Brook.

Mixing/Dispersion and Dilution Analysis

As noted above, the receiving water is intermittent and therefore effluent limits equal to the water quality standards are applicable per TOGS 1.3.1 with no mixing or dilution for toxic pollutants. The acute, chronic and HEW-based dilutions are indicated in the table below.

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
009	1:1	1:1	1:1	TOGS 1.3.1 ISEL Limits

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

Permit Requirements

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

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

Best Practicable Control Technology Currently Available (BPT), Best Conventional Pollutant Control Technology (BCT), Best Available Technology Economically Achievable (BAT), and New Source Performance Standards (NSPS) limitations are based on [Effluent Limitation Guidelines](#) developed by USEPA for specific industries¹. The applicable effluent guidelines and limits are listed at the end of the Pollutant Summary Table in the USEPA ELG Calculation Table.

ELGs for this facility are specified in 40 CFR Part 436, Subpart G – Asbestos and Wollastonite Subcategory 436.72 and includes the following BPT requirements:

- (a) Subject to the provisions of the following paragraphs of this section, there shall be no discharge of process generated wastewater pollutants into navigable waters.
- (b) Only that volume of water resulting from precipitation that exceeds the maximum safe surge capacity of a process wastewater impoundment may be discharged from that impoundment. The height difference between the maximum safe surge capacity level and the normal operating level must be greater than the inches of rain representing the 10-year, 24-hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the locality in which such impoundment is located.

The term process generated wastewater shall mean any wastewater used in the slurry transport of mined material, air emissions control, or processing exclusive of mining. The term shall also include any other water which becomes commingled with such wastewater in a pit, pond, lagoon, mine, or other facility used for treatment of such wastewater. Dewatering of groundwater infiltration and stormwater from the mine pit floor is not process wastewater, provided it is not comingled with process generated wastewater. [Appendix Link](#)

Whole Effluent Toxicity (WET) Testing

None of the seven criteria that are indicative of potential toxicity are applicable to this facility; therefore, WET testing has not been included in the permit. [Appendix Link](#)

Antidegradation

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

¹ As promulgated under 40 CFR Parts 405 - 471

² As prescribed by 6 NYCRR Part 617

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 new.

Additionally, the permit contains a requirement to make the DMR sampling data available to the public upon request. This requirement is new.

Best Management Practices (BMPs) for Industrial Facilities

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

Stormwater Pollution Prevention Requirements

The facility discharges stormwater associated with industrial activity and requires SPDES permit coverage under 40 CFR 122.26(a)(6). Stormwater discharges at this facility are required to obtain coverage under the current Multi-Sector General Permit (MSGP) Sector [J] (GP-0-23-001). The MSGP permit ID number is NYR00C104.

Mercury

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

The facility is located outside of the Great Lakes Basin and is a SPDES Class 01. The permittee submitted a Conditional Exclusion Form on 3/6/2026, certifying the facility does not have a mercury source as listed in Part III.E. of the MDV. Therefore, consistent with the MDV, the permit includes requirements for the implementation of MMP Type IV. The [Schedule of Additional Submittals](#) includes a mercury minimization plan annual status report (maintained onsite), and recertification of the exclusion every five years. This requirement is new.

Emerging Contaminant Monitoring

Based on the available data and knowledge of this industry, no additional monitoring for perfluorooctanoic acid (PFOA), perfluorooctanesulfonic acid (PFOS), and 1,4-dioxane (1,4-D) is required at this time. Additionally, consistent with TOGS 1.3.13, the industry SIC code of 1499 is not identified as potential primary sources of PFOA, PFOS, and 1,4-D. Please see the [Pollutant Summary Table](#) below for more information.

[Appendix Link](#)

Schedule of Additional Submittals

BMP Plan

Please see [BMPs for Industrial Facilities](#) above.

Mercury Conditional Exclusion Certification

Please see [above discussion](#) of mercury. Consistent with DOW 1.3.10 and 6 NYCRR 750-1.14(f), the permittee must submit the [form](#), signed in accordance with 6 NYCRR 750-1.8, every five years certifying that the facility is neither a mercury source nor receives flow from a mercury source.

Permittee: NYCO Minerals, LLC
Facility: Seventy Mine Road Wollastonite Quarry
SPDES Number: NY0296783
USEPA Non-Major/Class 01 Industrial

Date: June 25, 2026 v.1.40
Permit Writer: Steven Rose
Water Quality Reviewer: Aslam Mirza
Full Technical Review

Mercury Minimization Plan (MMP) and Status Report

Please see [above discussion](#) of MMP and the required annual Status Report., in accordance with 6 NYCRR 750-1.14(f).

Special Conditions

Conditions have been added to the permit prohibiting the discharge of process generated wastewater in accordance with BPT requirements specified in 40 CFR Part 436.72. Please see the USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility section for more information.

OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/L)	1Q10 (CFS)	7Q10 (CFS)	30Q10 (CFS)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
009	44° 17' 57" N	73° 36' 52" W	Ditch to Derby Brook	C(T)	C-48-6-10 PWL: 1004-0079	10/04	-	Intermittent Stream			0.64	1:1		

POLLUTANT SUMMARY TABLE

Outfall 009

Outfall #	009	Description of Wastewater: Mine Dewatering and Stormwater													
		Type of Treatment: Sediment Pond													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ³	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
General Notes: Existing discharge data from 11/18/2025 to 11/19/2025 was obtained from the application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	MGD	Daily Max	-	0.13	1	-	750-1.13	No alterations that will impair the waters for their best usages.				703.2	-	Monitor	
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions.														
pH	SU	Minimum	-	7.8	1	-	-	-	-	6.5 – 8.5	Range	6.5 - 8.5	703.3	-	WQBEL
		Maximum	-	7.8	1	-									
	In absence of dilution, an effluent limitation equal to the WQS is appropriate.														
Temperature	°C	Daily Max	-	7.1 Actual Max	1	-	750-1.13 Monitor	-	No discharge at a temperature over 70°F (21°C) shall be permitted at any time to streams classified for trout			704.2	-	Monitor	
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required to determine compliance with the water quality standard.														

³ 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)

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Full Technical Review

Outfall #	009	Description of Wastewater: Mine Dewatering and Stormwater													
		Type of Treatment: Sediment Pond													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ³	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Dissolved Oxygen (DO)	mg/L	Daily Min	-	-	-	-	-	-	-	5.0 mg/L		5.0	703.3	-	WQBEL
	Consistent with TOGS 1.3.1, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution. These limits represent the highest degree of treatment that can reasonably be achieved by the industry.														
5-day Biochemical Oxygen Demand (BOD ₅)	mg/L	Daily Max	-	3.0	1	-	-	-	DO=5.0 mg/l Surrogate Standard		-	703.3	-	No Limitation	
		7 Day Avg	-	-	-	-	-				-				
	The downstream DO concentration was modeled using the Streeter-Phelps equations with the following inputs: Effluent DO = 5.0 mg/l, Effluent UOD = 48.76 mg/L, Effluent BOD ₅ = 30 mg/L, Effluent NOD = 3.76 mg/L. The model showed that DO standards are maintained and consequently WQBEL for BOD ₅ is unnecessary and the TBELs are protective of water quality.														
Total Suspended Solids (TSS)	mg/L	Daily Max	-	2.6	1	25	BPJ	-	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.		703.2	-	TBEL		
		7 Day Avg	-	-	-	45	BPJ								
	The TBEL is based on BPJ and is considered achievable by the industry. The TBEL and the following note are included to be protective of water quality. NOTE: The discharge of color producing substances, turbidity or solids in amounts that adversely affect the color, cause a substantial visible contrast to natural conditions, cause deposition or impair the waters for their best uses is prohibited.														
Nitrogen, Ammonia (as N)	mg/L	Daily Max	-	0.07	1	-	-	-	0.43	0.824/1.614	A(C)	No RP	703.5	-	Monitor
SUMMER 6/1 – 10/31															
WINTER 11/1 – 5/31	The WQS for Ammonia were determined from TOGS 1.1.1 for a pH of 7.8 S.U. (basin-wide analysis) and a temperature of 24/10°C for summer and winter, respectively. The temperatures of the receiving waterbody were default values and consistent with TOGS 1.3.1E. Since the EEQ is less than the WQS, there is no reasonable potential to contribute or violate a WQS and therefore, WQBELs have not been included in the SPDES permit. However, monitoring has been included to inform future decisions consistent with 6NYCR 750-1.13(a).														
Chemical Oxygen Demand (COD)	mg/L	Daily Max	-	10.0	1	-	-	-	-	-	-	-	-	-	No Limitation
Water Quality based effluent limit not calculated in absence of WQ Standard.															

Outfall #	009	Description of Wastewater: Mine Dewatering and Stormwater													
		Type of Treatment: Sediment Pond													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ³	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Total Organic Carbon (TOC)	mg/L	Daily Max	-	3.4	1	-	-	-	-	-	-	-	-	-	No Limitation
	Water Quality based effluent limit not calculated in absence of WQ Standard.														
Total Phosphorus	mg/L	Daily Max	-	0.011	1	-	-	-	None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.			703.2	-	Monitor	
	lb/d	12 MRA	-	-	-	-	-								
	Consistent with the TMDL, and to maximize phosphorus removal ⁴ to improve the water quality of Lake Champlain, the permit includes a total phosphorus concentration monthly average monitoring.														
Total Mercury	ng/L	Daily Max	-	3.1	1	-	-	-	-	0.7	H(FC)	35	GLCA	-	No Limitation DOW 1.3.10
	See Mercury section of this fact sheet .														
Additional Pollutants Detected															
Oil and Grease	mg/L	Daily Max	-	2.0	1	15	TOGS 1.2.1	-	None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages. 703.2			-	-	TBEL	
	In absence of numeric water quality standard, TBEL is appropriate and may be protective of water quality.														
Sulfate (as SO ₄)	mg/L	Daily Max	-	21	1	-	-	-	-	-	-	-	-	-	No Limitation
	The WQ Standard for class C(T) is not available and therefore no reasonable potential analysis is conducted. Consequently, WQBEL is not suggested.														
Sulfite (as SO ₃)	mg/L	Daily Max	-	<2.0	1	-	-	-	-	0.2	A(C)	0.2	703.5	-	Monitor
	The water quality standard is less than the reporting limit, which is the lowest value to which the test procedure can accurately measure the analyte. A water quality-based effluent limitation is not proposed at this time since the data available is less than the reporting limit. However, monitoring has been included to inform future decisions consistent with 6NYCR 750-1.13(a).														
Sulfide (as H ₂ S)	mg/L	Daily Max	-	<0.05	1	-	-	-	-	0.002 (as H ₂ S)	A(C)	0.002	703.5	-	Monitor
	The water quality standard is less than the reporting limit, which is the lowest value to which the test procedure can accurately measure the analyte. A water quality-based effluent limitation is not proposed at this time since the data available is less than the reporting limit. However, monitoring has been included to inform future decisions consistent with 6NYCR 750-1.13(a).														

⁴ Consistent with NYCRR 750-2.8(a)(5).

Permittee: NYCO Minerals, LLC
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 Water Quality Reviewer: Aslam Mirza
 Full Technical Review

Emerging Contaminants: Outfall # 009															
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Notes: See Emerging Contaminant Monitoring section above. Effluent samples were analyzed for the 40 PFAS compounds and 1,4-Dioxane.															
Perfluoro-butanoic Acid (PFBA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-pentanoic Acid (PFPeA)	ng/L	Daily Max	-	0.670 Actual Max	1/3	-	-	-	-	-	-	-	-	-	No Limitation
	*Result reported by laboratory with a J-qualifier indicating estimated value.														
Perfluoro-hexanoic Acid (PFHxA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-heptanoic Acid (PFHpA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-octanoic Acid (PFOA)	ng/L	Daily Max	-	0.593 Actual Max	3/1	-	-	-	-	-	-	-	TOGS 1.1.1	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-nonanoic Acid (PFNA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-decanoic Acid (PFDA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-undecanoic Acid (PFUnA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														

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

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Emerging Contaminants: Outfall # 009															
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Perfluoro-dodecanoic Acid (PFDoA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-tridecanoic Acid (PFTriA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-tetradecanoic Acid (PFTeA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-butananesulfonic Acid (PFBS)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-pentanesulfonic Acid (PFPeS)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-hexanesulfonic Acid (PFHxS)	ng/L	Daily Max	-	0.989 Actual Max	4/0	-	-	-	-	-	-	-	-	-	No Limitation
	*Result reported by laboratory with a J-qualifier indicating estimated value. Based on available data, no additional monitoring is required at this time.														
Perfluoro-heptanesulfonic Acid (PFHpS)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-octanesulfonic Acid (PFOS)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	TOGS 1.1.1	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-nonanesulfonic Acid (PFNS)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-decanesulfonic Acid (PFDS)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														

Permittee: NYCO Minerals, LLC
 Facility: Seventy Mine Road Wollastonite Quarry
 SPDES Number: NY0296783
 USEPA Non-Major/Class 01 Industrial

Date: June 25, 2026 v.1.40
 Permit Writer: Steven Rose
 Water Quality Reviewer: Aslam Mirza
 Full Technical Review

Emerging Contaminants: Outfall # 009															
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Perfluoro-dodecane-sulfonic Acid (PFDoS)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro-octane-sulfonamide (FOSA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
N-methyl Perfluoro-octanesulfon-amidoacetic Acid (NMeFOSAA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
N-ethyl Perfluoro-octanesulfon-amidoacetic Acid (NEtFOSAA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
4:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
6:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
8:2 Fluorotelomer Sulfonic Acid (FTS)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														

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Emerging Contaminants: Outfall # 009															
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
N-ethyl Perfluoro-octanesulfon-amide (NEtFOSA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
N-methyl Perfluoro-octanesulfon-amide (NMeFOSA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
N-methyl Perfluoro-octanesulfon-amidoethanol (NMeFOSE)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
N-ethyl Perfluoro-octanesulfon-amidoethanol (NEtFOSE)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
9-Chlorohexadeca-fluoro-3-oxanonane-1-sulfonic Acid (9Cl-PF3ONS)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
Hexafluoro-propylene Oxide Dimer Acid (HFPO-DA or GenX)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation

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Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic Acid (11Cl-PF3OUdS)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
3-Perfluoropropyl Propanoic Acid (3:3 FTCA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
2H,2H,3H,3H-Perfluoro-octanoic Acid (5:3 FTCA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
3-Perfluoroheptyl Propanoic Acid (7:3 FTCA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
Perfluoro-4-methoxy-butanoic Acid (PFMBA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation

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Emerging Contaminants: Outfall # 009															
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Perfluoro-3-methoxy-propanoic Acid (PFMPA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
Perfluoro(2-ethoxyethane)sulfonic Acid (PFEEESA)	ng/L	Daily Max	-	ND	0/4	-	-	-	-	-	-	-	-	-	No Limitation
	Based on available data, no additional monitoring is required at this time.														
1,4-Dioxane	µg/L	Daily Max	-	0.116 Actual Max	3/1	-	-	-	0.30	18,000	A(C)	No RP	TOGS 1.1.1	-	No Limitation
	*Result reported by laboratory with a J-qualifier indicating estimated value. The projected instream concentration was calculated using the maximum reported effluent concentration of 0.116 ug/L, a multiplier of 2.6, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL has been specified. There is no calculated reasonable potential to exceed the WQBEL and, therefore, no effluent limits or monitoring are required for 1,4-dioxane.														

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USEPA EFFLUENT LIMITATION GUIDELINE (ELG) CALCULATIONS

[Appendix Link](#)

For the applicable categorical limitations under 40 CFR Part 436.72, Subpart G, the following basis was used to determine the TBEL:

Outfall	009
40 CFR Part/Subpart	§436.72, Subpart G
Subpart Name	Asbestos and Wollastonite Subcategory

ELG Pollutant	Daily Max Multiplier	Monthly Avg. Multiplier	Production Rate (Million lbs/d)	Daily Max TBEL (lbs/d)	Monthly Avg. TBEL (lbs/d)
40 CFR Part 436.72 Subpart G – ELGs for Best Practicable Control Technology Currently Available					
(a) Subject to the provisions of the following paragraphs of this section, there shall be no discharge of process generated wastewater pollutants into navigable waters.					
(b) Only that volume of water resulting from precipitation that exceeds the maximum safe surge capacity of a process wastewater impoundment may be discharged from that impoundment. The height difference between the maximum safe surge capacity level and the normal operating level must be greater than the inches of rain representing the 10-year, 24-hour rainfall event as established by the National Climatic Center, National Oceanic and Atmospheric Administration for the locality in which such impoundment is located.					
Note: The facility does not discharge process generated wastewater. Derby Brook is not a navigable waterbody.					

Appendix: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

SPDES Permit Requirements	Regulatory Reference
Anti-backsliding	6 NYCRR 750-1.10(c) and 750-1.10(d), CWA sections 402(o), 303(d)(4), ECL 17-0809, 40 CFR 122.44(l)
Best Management Practices (BMPs) for CSOs	6 NYCRR 750-2.8(a)(2)
Environmental Benefits Permit Strategy (EBPS)	6 NYCRR 750-1.18, NYS ECL 17-0817(4), TOGS 1.2.2 (revised January 25, 2012)
Exceptions for Type I SSO Outfalls (bypass)	6 NYCRR 750-2.8(b)(2), 40 CFR 122.41
Mercury Multiple Discharge Variance	Division of Water Program Policy 1.3.10 (DOW 1.3.10)
Mixing Zone and Critical Water Information	TOGS 1.3.1 & Amendments
PCB Minimization Program	40 CFR Part 132 Appendix F Procedure 8, 6 NYCRR 750-1.13(a) and 750-1.14(f), and TOGS 1.2.1
Pollutant Minimization Program (PMP)	6 NYCRR 750-1.13(a), 750-1.14(f), TOGS 1.2.1
Schedules of Compliance	6 NYCRR 750-1.14
Sewage Pollution Right to Know (SPRTK)	NYS ECL 17-0826-a, 6 NYCRR 750-2.7
State Administrative Procedure Act (SAPA)	State Administrative Procedure Act Section 401(2), 6 NYCRR 621.11(l)
State Environmental Quality Review (SEQR)	6 NYCRR Part 617
USEPA Effluent Limitation Guidelines (ELGs)	40 CFR Parts 405-471
USEPA National CSO Policy	33 USC Section 1342(q)
Whole Effluent Toxicity (WET) Testing	TOGS 1.3.2
General Provisions of a SPDES Permit Department Request for Additional Information	NYCRR 750-2.1(i)

Outfall and Receiving Water Information

Impaired Waters

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

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

Interstate Water Pollution Control Agencies

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

Existing Effluent Quality

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

Permit Requirements

Basis for Effluent Limitations

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

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

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(l) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law⁶ and USEPA interpretation⁷ 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.

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

⁷ U.S. EPA, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; 65 Fed. Reg. 31682, 31704 (May 18, 2000); Proposed Water Quality Guidance for the Great Lakes System, 58 Fed. Reg. 20802, 20837 & 20981 (April 16, 1993)

Antidegradation Policy

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

Effluent Limitations

In developing a permit, the 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 or Best Management Practices (BMPs). CWA sections 301(b) and 402, ECL sections 17-0509, 17-0809 and 17-0811, and 6 NYCRR 750-1.11 require technology-based controls on effluents. TBELs are set based upon an evaluation of New Source Performance Standards (NSPS), Best Available Technology Economically Achievable (BAT), Best Conventional Pollutant Control Technology (BCT), Best Practicable Technology Currently Available (BPT), and Best Professional Judgment (BPJ).

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

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

Best Professional Judgement (BPJ)

For substances that are not explicitly limited by regulations, the permit writer is authorized to use BPJ in developing TBELs. Consistent with section 402(a)(1) of the CWA, and NYS ECL section 17-0811, the 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.

Technology-based Effluent Limitations (TBELs)

CWA sections 301(b)(1)(B) and 304(d)(1), 40 CFR 133.102, ECL section 17-0509, and 6 NYCRR 750-1.11 require technology-based controls, known as secondary treatment. These and other requirements are summarized in TOGS 1.3.3. Where the TBEL is more stringent than the WQBEL, the TBEL is applied as a limit in accordance with TOGS 1.3.3. Equivalent secondary treatment, as defined in 40 CFR 133.105, allow for effluent limitations of the more stringent of the consistently achievable concentrations or monthly/weekly averages of 45/65 mg/L, and the minimum monthly average of at least 65% removal. Consistently achievable concentrations are defined in 40 CFR 133.101(f) as the 95th percentile value for the 30-day (monthly) average effluent quality achieved by the facility in a period of two years. The achievable 7-day (weekly) average value is equal to 1.5 times the 30-day average value calculated

above. Equivalent secondary treatment applies to those facilities where the principal treatment process is either a trickling filter or a waste stabilization pond; the treatment works provides significant biological treatment of municipal wastewater; and, the effluent concentrations consistently achievable through proper operation and maintenance of the facility cannot meet traditional secondary treatment requirements. There are no federal technology-based standards for toxic pollutants from POTWs. A statistical analysis of existing effluent data, as described in TOGS 1.2.1, may be used to establish other performance-based TBELs.

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

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

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

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

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

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

Water Quality-Based Effluent Limitations (WQBELs)

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

1.1.1, 1.3.1, 1.3.2, 1.3.5 and 1.3.6. The DEC considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

Mixing Zone Analyses

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

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

Critical Flows

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

Reasonable Potential Analysis (RPA)

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

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

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

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

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

Minimum Level of Detection

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

Monitoring Requirements

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

Other Conditions

Mercury

Mercury is widespread in New York State (NYS) waters at levels above the most stringent dissolved mercury water quality standard (WQS) of 0.7 ng/L. SPDES permittees cannot comply with a Water Quality-Based Effluent Limitation (WQBEL) for mercury. Therefore, an MDV is appropriate, in accordance with 6 NYCRR 702.17(h), "to

address widespread standard or guidance value attainment issues including the presence of a ubiquitous pollutant or naturally high levels of a pollutant in a watershed.” The first MDV was issued in October 2010 and subsequently revised and reissued in 2015, 2020, and 2025. Each iteration of the MDV builds off the previous version supporting the State’s effort to reduce mercury pollution and make reasonable progress toward achieving the WQBEL for mercury. This iteration of the MDV refines the content and application of the MDV for mercury.

The MDV does not change the WQS of 0.7 ng/L; it establishes a variance of the WQBEL which is based on the WQS. SPDES permits which include this variance comply with 40 CFR 122.44.

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

Emerging Contaminants

Emerging Contaminants, such as Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), and 1,4-Dioxane (1,4-D), have been used in a wide variety of consumer and industrial products as well as in manufacturing processes for decades. Based on available research, water quality assessments for 1,4-D will follow existing WQBEL development. PFOA and PFOS do not break down easily; therefore, their presence in wastewater can remain a concern for years following their discontinued use. As the science surrounding these contaminants is still evolving, additional monitoring is needed to better understand potential sources and background levels. For more information on emerging contaminants, please see the DEC Division of Water web page: [Emerging Contaminants In NY's Waters - NYSDEC](#).

Schedule(s) of Additional Submittals

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

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.