State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**3351**	NAICS Code:	**331420**	SPDES Number:	**NY0257176**
Discharge Class (CL):	**01**			DEC Number:	**6-3014-00019/00004**
Toxic Class (TX):	**T**			Effective Date (EDP):	
Major-Sub Drainage Basin:	**07 - 03**			Expiration Date (ExDP):	
Water Index Number:	**Ont. 66-11-P26-25**	Item No.:	**899 - 148**	Modification Dates (EDPM):	
Compact Area:	**IJC**				

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

PERMITTEE NAME AND ADDRESS					
Name:	**International Wire Group, Inc.**	Attention:	**Eric Bryant, Operational Excellence Manager**		
Street:	**12 Masonic Avenue**				
City:	**Camden**	State:	**NY**	Zip Code:	**13316**
Email:	**e_byrant@iwgbwd**	Phone:	**(315) 245-3800**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL																	
Name:	**International Wire - Sherrill Operations**																
Address / Location:	**3960 Kenwood Road**												County:	**Oneida**			
City:	**Sherrill**							State:	**NY**				Zip Code:	**13421**			
Facility Location:		Latitude:	**43**	°	**03**	'	**22.9**	" N	& Longitude:	**75**	°	**36**	'	**09.8**	" W		
Primary Outfall No.:	**002**	Latitude:	**43**	°	**03**	'	**19.1**	" N	& Longitude:	**75**	°	**36**	'	**13.0**	" W		
Wastewater Description:	**Process Wastewater**	Receiving Water:	**Oneida Creek**					NAICS:	**331420 332813**	Class:	**C**		Standard:	**C**			

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)
Regional Water Engineer
Oneida County Health Department
EPA Region II (Region2_NPDES@epa.gov)

Permit Administrator:	Todd Phillips
Address:	State Office Building 207 Genesee Street Utica, NY 13501-2885
Signature	Date

Contents

DEFINITIONS

TERM	DEFINITION
7-Day Geo Mean	The highest allowable geometric mean of daily discharges over a calendar week.
7-Day Average	The average of all daily discharges for each 7-days in the monitoring period. The sample measurement is the highest of the 7-day averages calculated for the monitoring period.
12-Month Rolling Average (12 MRA)	The current monthly value of a parameter, plus the sum of the monthly values over the previous 11 months for that parameter, divided by the number of months for which samples were collected in the 12-month period.
30-Day Geometric Mean	The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Action Level	Action level means a monitoring requirement characterized by a numerical value that, when exceeded, triggers additional permittee actions and department review to determine if numerical effluent limitations should be imposed.
Compliance Level / Minimum Level	A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136, or otherwise accepted by the 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
002	Process Wastewater	Oneida Creek	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly Average	Monitor	GPD			Continuous	Meter		X	
Flow	Daily Maximum	Monitor	GPD			Continuous	Meter		X	
pH	Daily Minimum	6.0	SU			1/Month	Grab		X	
	Daily Maximum	9.0	SU							
Temperature	Daily Maximum	90	ºF			1/Month	Grab		X	
Total Suspended Solids	Monthly Average	Monitor	mg/L	2.8	lbs/d	1/Month	6-hr. Comp.		X	1
Total Suspended Solids	Daily Maximum	Monitor	mg/L	3.5	lbs/d	1/Month	6-hr. Comp.		X	1
Oil & Grease	Daily Maximum	Monitor	mg/L	2.3	lbs/d	1/Month	Grab		X	
Chromium, Total	Monthly Average	Monitor	ug/L	0.035	lbs/d	1/Month	6-hr. Comp.		X	1
Chromium, Total	Daily Maximum	Monitor	ug/L	0.086	lbs/d	1/Month	6-hr. Comp.		X	1
Copper, Total	Daily Maximum	Monitor	ug/L	0.050	lbs/d	1/Month	6-hr. Comp.		X	1
Lead, Total	Monthly Average	Monitor	ug/L	0.021	lbs/d	1/Month	6-hr. Comp.		X	1
Lead, Total	Daily Maximum	Monitor	ug/L	0.023	lbs/d	1/Month	6-hr. Comp.		X	1
Nickel, Total	Monthly Average	Monitor	ug/L	0.086	lbs/d	1/Month	6-hr. Comp.		X	1
Nickel, Total	Daily Maximum	Monitor	ug/L	0.13	lbs/d	1/Month	6-hr. Comp.		X	1
Tin, Total	Daily Maximum	Monitor	ug/L	0.038	lbs/d	1/Month	6-hr. Comp.		X	1
Zinc, Total	Monthly Average	Monitor	ug/L	0.10	lbs/d	1/Month	6-hr. Comp.		X	1
Zinc, Total	Daily Maximum	Monitor	ug/L	0.24	lbs/d	1/Month	6-hr. Comp.		X	1

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			15	TUa	Quarterly	See footnote		X	2
WET - Acute Vertebrate	See footnote			15	TUa	Quarterly	See footnote		X	2
WET - Chronic Invertebrate	See footnote			100	TUc	Quarterly	See footnote		X	2
WET - Chronic Vertebrate	See footnote			100	TUc	Quarterly	See footnote		X	2

See footnotes listed on next page.

PERMIT LIMITS, LEVELS AND MONITORING (continued)

FOOTNOTES:

1. At least 8 individual manual grab samples must be collected over the course of 6 hours analyzed separately and the concentrations averaged. Alternatively, grab samples may be composited and analyzed as a single sample if the results are equivalent to the arithmetic averaging of individual grab samples. Where effluent flows do not vary more than 10 percent over the course of composite sample collection, composite samples may be composed of equal size grab samples taken at equal time intervals. Where effluent flows do vary more than 10 percent over the course of sample collection, composite samples must be flow-proportioned.

2. **Whole Effluent Toxicity (WET) Testing:**

   Testing Requirements – Chronic WET testing is required, but report both the acute and chronic results. Testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the DEC. The test species shall be Ceriodaphnia dubia (water flea - invertebrate) and Pimephales promelas (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is **50:1** for acute, and **100:1** for chronic.

   Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in **7** and **2**.

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

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

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

STORMWATER POLLUTION PREVENTION REQUIREMENTS

NO EXPOSURE CERTIFICATION

The permittee submitted a Conditional Exclusion for No Exposure Form on 01/10/2024, certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and stormwater runoff except as allowed under 40 CFR 122.26(g)(2). The permittee must maintain a condition of no exposure for the exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to stormwater, the permittee must notify the Regional Water Engineer. The permittee must recertify a condition of no exposure every five years by completing the “No Exposure Certification Form” found on the DEC website.

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 BMP plan dated March 2023, was received by the Department. The BMP plan **shall be reviewed annually** and shall be modified whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the 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. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.

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

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

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

BMPs FOR INDUSTRIAL FACILITIES (continued)

5. **Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater from Construction Activity to Surface Waters -** A SWPPP shall be developed prior to commencing any construction activity that will result in soil disturbance of one or more acres of uncontaminated area[1]. (Note: the disturbance threshold is 5000 SF in the New York City East of Hudson Watershed). The SWPPP shall conform to the current version of the SPDES General Permit for Stormwater Discharges from Construction Activity (CGP), including the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Stormwater Management Design Manual.* The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity **at least 30 days prior to soil disturbance**. The SWPPP shall be maintained on-site and submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at www.dec.ny.gov/chemical/43133.html) prior to soil disturbance. Note that submission of the NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges. SWPPPs must be developed for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly implemented.

6. **Required Sampling For "Hot Spot" Identification** - Development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutant "hot spot" identification. The economic achievability of effluent limits will not be considered until plant site "hot spot" sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology. For the purposes of this permit condition a "hot spot" is a segment of an industrial facility (including but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem pollutants to the wastewater or stormwater collection system of that facility. For the purposes of this definition, problem pollutants are substances for which treatment to meet a water quality or technology requirement may, considering the results of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at the compliance monitoring location so as to allow for an economically justifiable removal, isolation, or B.A.T. treatment of wastewaters emanating from the segment.

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

MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

On 10/10/2024, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10.

1. General - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below.
2. MMP Elements - The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements[2] as described in detail below:

    a. Conditional Exclusion Certification - A certification (Appendix D of *DOW 1.3.10*), signed in accordance with 750-1.8 Signature of SPDES forms, must be submitted once every five (5) years 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 discharge from 1) individually permitted combined sewer overflow (CSOs)[3] communities and/or 2) Type II sanitary sewer overflow (SSO)[4] facilities;
    - One or more effluent samples which exceed 12 ng/L, including samples taken as a result of the SPDES application process;
    - Internal or tributary waste stream samples exceed the GLCA effluent limitation **AND** the final effluent samples are less than the GLCA due primarily to dilution by uncontaminated or less contaminated waste streams. Both components of this criterion may include samples taken as a result of the SPDES application process;
    - A permit application or other information indicates that mercury is handled on site and could be discharged through outfalls;
    - Outfalls which contain legacy mercury contamination;
    - The facility's collection system receives discharges from a dental and/or categorical industrial user (CIU)[5] that may discharge mercury;
    - The facility accepts hauled wastes; or,
    - The facility is defined as a categorical industry that may discharge mercury. This may also include dentists, universities, hospitals, or laboratories which have their own SPDES permit.

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

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

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

[2] Neither monitoring nor outreach is required for facilities meeting the criteria for MMP Type IV, but monitoring and/or outreach can be included in the permittee's control strategy.

[3] CSO permits are included under the 05 and 07 permit classifications.

[4] These are overflow retention facilities (ORFs) and are included under the 05 and 07 permit classifications.

[5] CIUs include those listed under Federal Regulation in 40 CFR Part 400.

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

c. **Status Report** - An **annual** status report must be developed and maintained on site, in accordance with the Schedule of Additional Submittals, summarizing:

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

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

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

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

DEFINITIONS:

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

DISCHARGE NOTIFICATION REQUIREMENTS

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

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

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

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

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

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

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

OR:

NYSDEC Division of Water Regional Office Address:

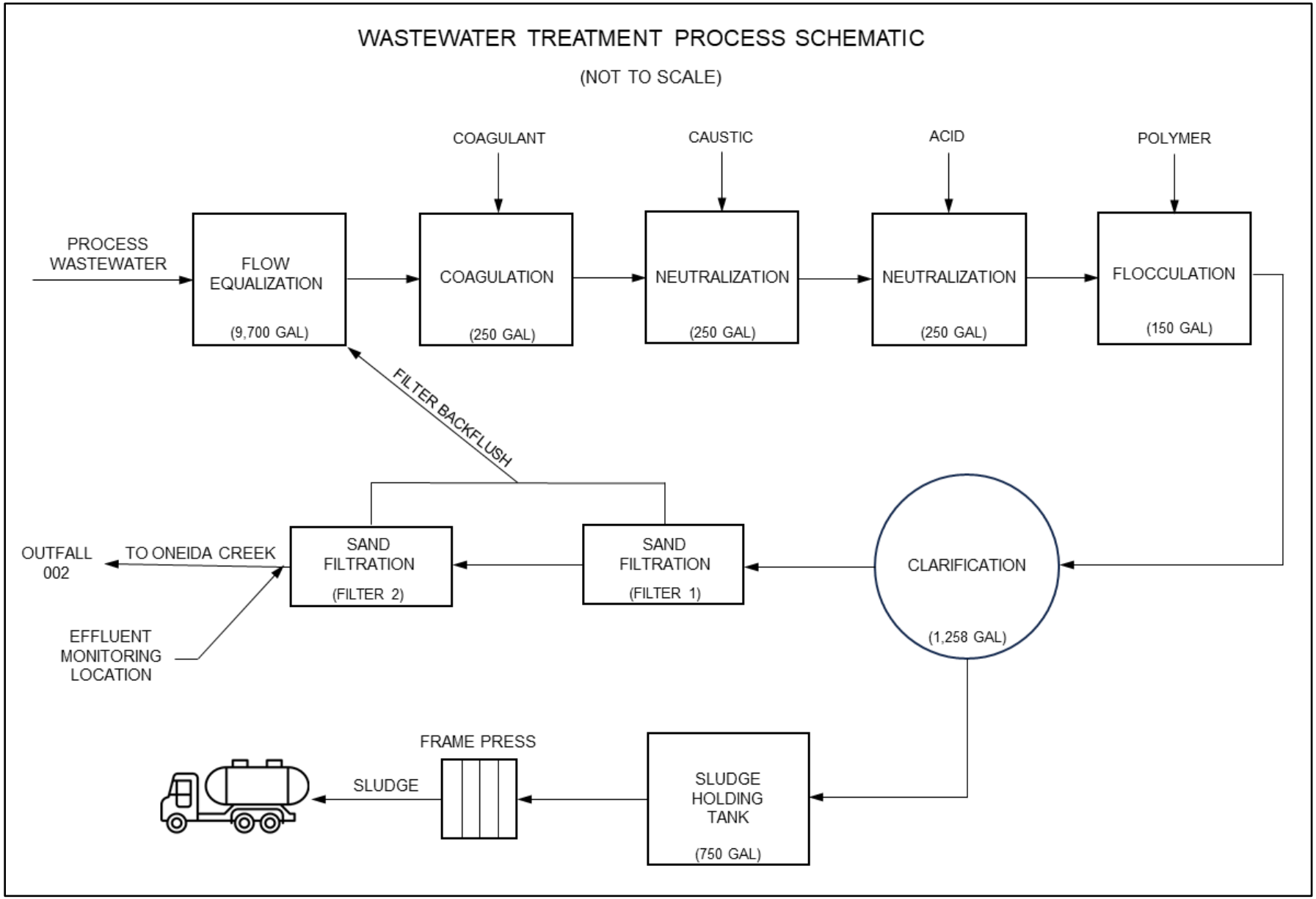
NYSDEC Division of Water Regional Phone: ( ) - ### -####

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

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

MONITORING LOCATIONS

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



GENERAL REQUIREMENTS

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

B. General Conditions

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

C. Operation and Maintenance

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

D. Monitoring and Records

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

E. Reporting Requirements

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

F. Sludge Management

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

G. SPDES Permit Program Fee

The permittee shall pay to the 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 outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the DEC. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.

1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized by the DEC.
2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook 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: http://www.dec.ny.gov/permits/93245.html

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

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

DMRs must be submitted 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
Regional Water Engineer, Region 6
State Office Building, 207 Genesee Street, Utica, NY 13501-2885 Phone: (315) 793-2554

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

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
002	**EMERGING CONTAMINANT SHORT-TERM MONITORING** The permittee shall collect grab samples of both the influent and effluent from the facility's treatment system(s) associated with the identified outfall for Per-and Polyfluoroalkyl Substances (PFAS) utilizing EPA draft analytical method 1633 and 1,4-Dioxane (1,4-D) utilizing EPA Method 8270D SIM or 8270E SIM. The samples must represent normal discharge conditions and treatment operations and shall be obtained on a monthly basis **for at least 3 consecutive months**. The results shall be reported to the Regional Water Engineer and through the "Emerging Contaminants Survey for Industrial Facilities" found at: Emerging Contaminants In NY's Waters - NYSDEC. Upon written notification from DEC, the permittee shall initiate track down of potential sources by completing the "Emerging Contaminants Investigation Checklist for Industrial Facilities" available at the above link. DEC may periodically request updates or additional monitoring to check progress on track down investigations. Elements of the checklist may be used as permit conditions in future permit modifications.	EDP + 18 months Within 90 days of DEC written notification

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS (continued)

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
002	**WHOLE EFFLUENT TOXICITY (WET) TESTING** WET testing shall be performed as required in the footnote of the permit limits table. The toxicity test report including all information requested of this permit shall be attached to the WET DMRs and sent to the WET@dec.ny.gov email address.	Within 28 days following the end of each monitoring period
	BMP PLAN The permittee shall annually review the completed BMP plan, submitted to DEC dated March 2023, on an annual basis. The BMP plan shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) actual releases indicate the plan is inadequate, or (c) a letter from the 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.	Annually on January 28th
002	**WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM** The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	Annually on January 28th
002	**MERCURY MINIMIZATION PLAN** The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	***Maintained Onsite*** EDP + 12 months, Annually by January 28th thereafter
	STORMWATER NO EXPOSURE CERTIFICATION Permittee must recertify every five years a condition of no exposure to stormwater in order to continue to qualify for the no exposure exclusion. The No Exposure Certification Form can be found on the DEC website.	01/10/2029 and every 5 years thereafter
002	**MERCURY - CONDITIONAL EXCLUSION CERTIFICATION** Permittee must submit a mercury conditional exclusion certification with a minimum of one monitoring result every five years in order to maintain MMP Type IV status.	10/10/2029 and every 5 years thereafter

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS (continued)

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

International Wire Group, Inc.

International Wire - Sherrill Operations

NY0257176

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SUMMARY OF PERMIT CHANGES

A State Pollutant Discharge Elimination System (SPDES) permit modification and renewal has been drafted for International Wire - Sherrill Operations pursuant to 6 NYCRR Part 750-1.18, and 750-1.19, the Priority Ranking System known as New York State's Environmental Benefit Permit Strategy (EBPS).

The proposed changes to the permit are summarized below:

- Removed Outfall 001 and associated permit requirements because the outfall has been closed.
- Reduced the daily maximum effluent limitation for total copper from 0.68 lbs/d to 0.050 lbs/d.
- Reduced the daily maximum effluent limitation for total tin from 0.4 lbs/d to 0.038 lbs/d.
- Added new daily maximum and monthly average effluent limitations of 0.086 lbs/d and 0.035 lbs/d for total chromium.
- Added new daily maximum and monthly average effluent limitations of 0.023 lbs/d and 0.021 lbs/d for total lead.
- Added new daily maximum and monthly average effluent limitations of 0.13 lbs/d and 0.086 lbs/d for total nickel.
- Added new daily maximum and monthly average effluent limitations of 0.24 lbs/d and 0.10 lbs/d for total zinc.
- Removed the effluent limitations and monitoring requirements for fluoride and fluoroborates.
- Revised the sample type from 24-Hour to 6-Hour composite to better align with the facility's batch discharge duration.
- Added new action levels and monitoring requirements for whole effluent toxicity testing.
- Added a new requirement to develop and implement a mercury minimization plan.
- Added new monitoring requirements for emerging contaminants.
- Revised the flow monitoring location diagram.
- Added a new Schedule of Submittals.
- Updated permittee legal ownership identity and facility contact information.
- Updated permit pages to reflect current NYSDEC format, nomenclature, and latest general conditions.

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

08/01/2008 The SPDES permit became effective with a five-year term and expiration date of 07/31/2013. The 2008 permit was the first SPDES permit issued to the facility and has formed the basis of this permit.

08/01/2013 The permit was administratively renewed for a five-year term and expiration date of 07/31/2018.

08/01/2018 The permit was administratively renewed for a five-year term and expiration date of 07/31/2023.

08/01/2023 The current permit was allowed to stay in effect pursuant to State Administrative Procedures Act[1] (SAPA).

02/26/2024 The Department issued a Request for Information (RFI) to modify and renew the SPDES permit due to the facility's EBPS score[2]. At the time of the RFI, the facility had an EBPS score of 181 and a NYSDEC Region 6 ranking of 5.

04/02/2024 The permittee requested an extension to the RFI due date by ninety days from 05/31/2024 until 08/29/2024 because the facility was reviewing projected production rates due an anticipated plant expansion and needed additional time to perform comprehensive sampling required by the SPDES permit application.

04/02/2024 The Department granted the permittee's request to extend the RFI due date and set the submittal due date to 08/31/2024.

08/28/2024 The permittee submitted a completed SPDES Application Form NY-2C for Industrial Facilities.

11/06/2024 The permittee submitted form Application for Permit Transfer and Application for Transfer of Pending Application changing the legal ownership entity name from Omega Wire, Inc. to International Wire Group, Inc.

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

[1] State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(*l*)
[2] Pursuant to 6 NYCRR 750-1.18 and NYS Environmental Benefit Permit Strategy (EBPS)

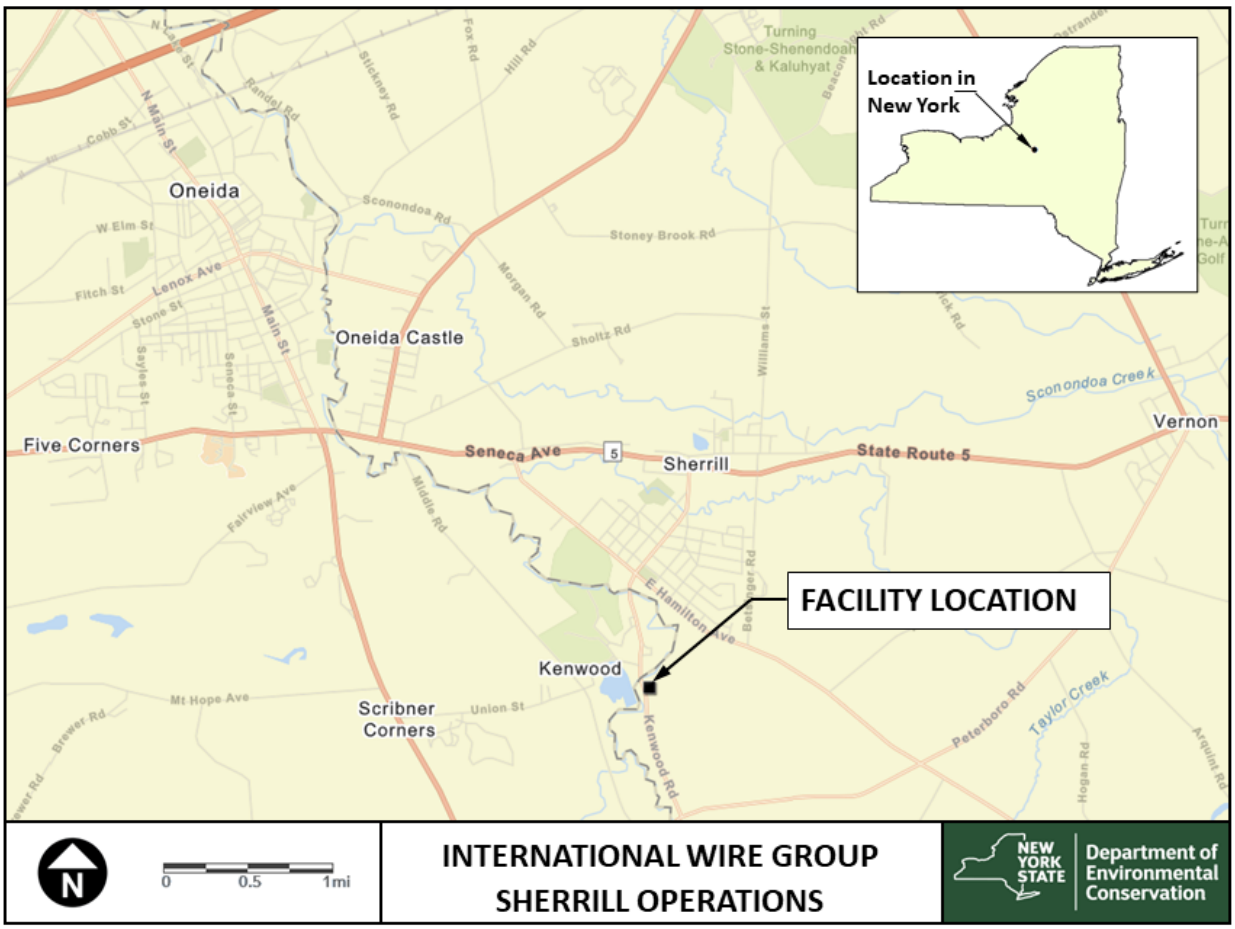
FACILITY INFORMATION

This is an industrial facility (SIC Codes 3351, 3471) that produces tin plated bare copper wire and is subject to federal categorical effluent limitation guidelines (ELG) (see summary table towards the end of this factsheet).

Site Overview

International Wire - Sherrill Operations, is a manufacturing facility located in the City of Sherrill, Oneida New York, about 28 miles east of Syracuse and 18 miles west of Utica. The facility is owned and operated by International Wire Group, inc., with main offices located at 12 Masonic Avenue, Village of Camden, Oneida County, New York.

Figure 1. Facility Location Map



Outfall 001

Outfall 001 is being removed from the permit. Former Outfall 001 consisted of noncontact cooling water. Water used for equipment cooling was withdrawn from Oneida Creek and authorized under the facility's Water Withdrawal Permit (WWA #11,835), with a maximum permitted withdrawal of 2.16 MGD.

The facility has not withdrawn water from Oneida Creek since 2015 when the non-contact cooling system was converted from a once-through system to a closed-loop system. In 2021, the intake structure was dismantled including removal of the water pumps, sealing the intake pipes, and disconnection of electrical service. All water used at the facility is provided by the City of Sherrill.

On 04/22/2024, the permittee submitted a written request that Water Withdrawal Permit #11,835 be discontinued. On 12/30/2024, NYSDEC discontinued the permit. Therefore, SPDES Outfall 001 is being removed from the permit.

Outfall 002

Effluent consists of treated process wastewater from manufacturing of copper wire. Industrial processes include rolling, drawing, extrusion, and tin electroplating.

The permittee's wastewater treatment system consists of the following processes:

- Flow Equalization
- Coagulation
- Neutralization
- Polymer Addition
- Clarification
- Sand Filtration

Each process occurs in separate treatment tanks. The treatment system operates in batch mode. Batch treatment occurs about 2 to 3 times per week and lasts around 5 hours per batch. A 9,700-gallon flow equalization tank is used to hold the wastewater until batch treatment occurs.

Treatment residuals are held in a sludge holding tank and are processed by a plate/frame press. Processed sludge is hauled by licensed hauler to be recycled.

The treated effluent is discharged to a drainage ditch located at the south side of the facility. The drainage ditch enters a culvert and crosses under Kenwood Road and discharges into Oneida Creek through Outfall 002.

Figure 2. Outfall Locations

Enforcement History

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

Existing Effluent Quality

Table 1 below presents the existing effluent quality and current effluent limitations at Outfall 002. The existing effluent quality was determined from Discharge Monitoring Reports submitted by the permittee for the period 01/01/2019 to 12/31/2023.

Table 1. Existing Effluent Quality (2019 - 2023)

Parameter	Type	Units	Effluent Limit	Minimum	Average	Maximum
Flow	Monthly Average	GPD	Monitor	346	1,417	2,513
Flow	Daily Maximum	GPD	Monitor	978	2,253	5,147
Temperature	Daily Maximum	°F	90	49	69	82
pH	Range	SU	6.0 - 9.0	6.2	7.3	8.0
Suspended Solids	Daily Maximum	lbs/d	6.0	0.02	0.22	1.3
Oil & Grease	Daily Maximum	mg/L	15	<5	<5	<5
Fluoride	Daily Maximum	lbs/d	6.0	<0.0003	0.005	0.086
Fluoroborates	Daily Maximum	lbs/d	5.0	<0.0004	0.054	1.07
Copper, Total	Daily Maximum	lbs/d	0.68	0.0004	0.004	0.045
Tin, Total	Daily Maximum	lbs/d	0.4	<0.0002	0.004	0.041

Interstate Water Pollution Control Agencies

Outfall 001 is located within the Great Lakes watershed and International Joint Commission (IJC) compact area. The IJC Great Lakes Water Quality Agreement (GLWQA) is an agreement between the United States and Canada to restore and maintain the chemical, physical and biological integrity of the waters of the Great Lakes Basin Ecosystem. Appendix Link

There are no permit conditions or effluent limitations required under the GLWQA that are applicable to the facility's SPDES permit.

RECEIVING WATER INFORMATION

The facility discharges via the following outfalls:

Table 2. Outfall Information

Outfall No.	Design Flow (MGD)	SIC Code	Wastewater Type	Receiving Water
002	0.0023	3471	Process Wastewater	Oneida Creek, Class C
001	Former Outfall 001 (Noncontact Cooling Water) - Removing from Permit			

The design flow for Outfall 002 was set to the long-term average of the daily maximum flows in accordance with NYSDEC Technical and Operational Guidance Series (TOGS) 1.2.1 - Industrial Permit Writing and the 2010 USEPA NPDES Permit Writers Manual (EPA 833-K-10-001) based on the past five years (2019 - 2023) of monthly effluent monitoring conducted by the permittee.

Reach Description

Oneida Creek is a tributary of Oneida Lake and is part of the Oneida River watershed which drains to Lake Ontario. Oneida Creek has a flow length of about 36 miles and a drainage area of 148 square miles before entering Oneida Lake.

The portion of Oneida Creek at the discharge location drains 62 square miles and is specified in 6 NYCRR Part 899, Table 1, Item 148, with a Waters Index Number (WIN) of Ont. 66-11-P26-25 and is classified as a Class C fresh surface water.

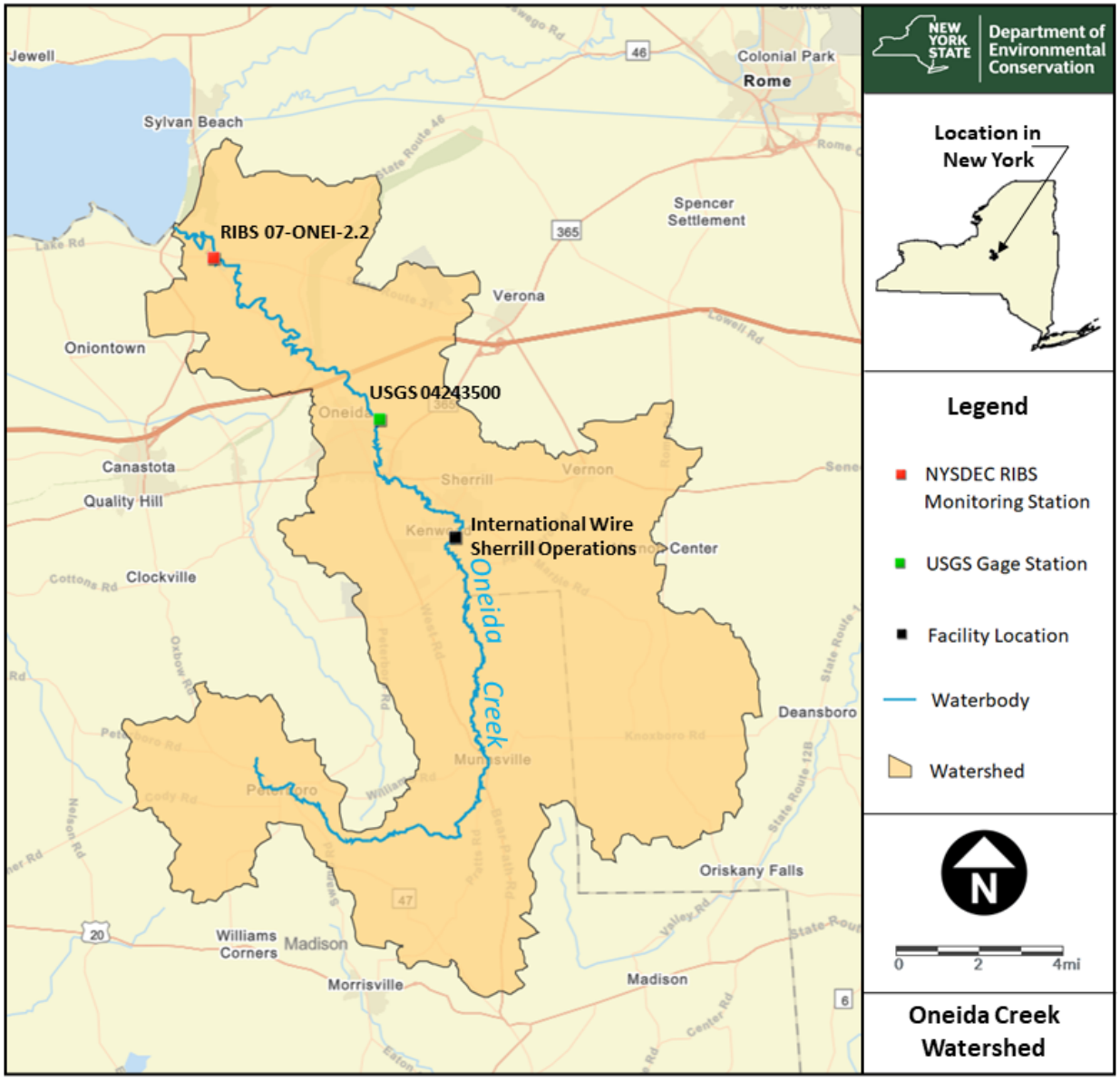
The best usage of Class C waters is fishing. These waters shall be suitable for fish, shellfish and wildlife propagation and survival. The water quality shall be suitable for primary and secondary contact recreation, although other factors may limit the use for these purposes.

Oneida Creek flows into Oneida Lake. Oneida Lake is classified as a Class B fresh surface water. The best usages of Class B waters are primary and secondary contact recreation and fishing. These waters shall be suitable for fish, shellfish and wildlife propagation and survival.

The classifications of individual surface waters are specified in 6 NYCRR Parts 800-941. The best uses and standards of quality and purity (water quality standards) applicable to specific water classes are specified in 6 NYCRR Parts 701-706.

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

Figure 3. Oneida Creek Watershed



Impaired Waterbody Information

The segment of Oneida Creek (PWL No. 0703-0090) at the discharge location is not listed on the 2020/2022 New York State Section 303(d) List of Impaired/TMDL Waters, and therefore, there are no applicable wasteload allocations (WLAs) for this discharge.

Critical Receiving Water Flow Information

NYSDEC uses critical low flows to evaluate effluent limitations to ensure water quality standards are maintained. The 1Q10, 7Q10 and 30Q10 flows can be thought of as the lowest 1-Day, 7-Day and 30-Day average flows that are expected to occur on average once every 10 years. More precisely, there is a 10 percent chance that the low flows are not exceeded (fall below) for the n-day averaging period in any given year and is calculated using probabilistic techniques.

The 1Q10 flow is used to assess for aquatic acute A(A), the 7Q10 for aquatic chronic A(C), and the 30Q10 for human, aesthetic, wildlife (HEW) water quality standards.

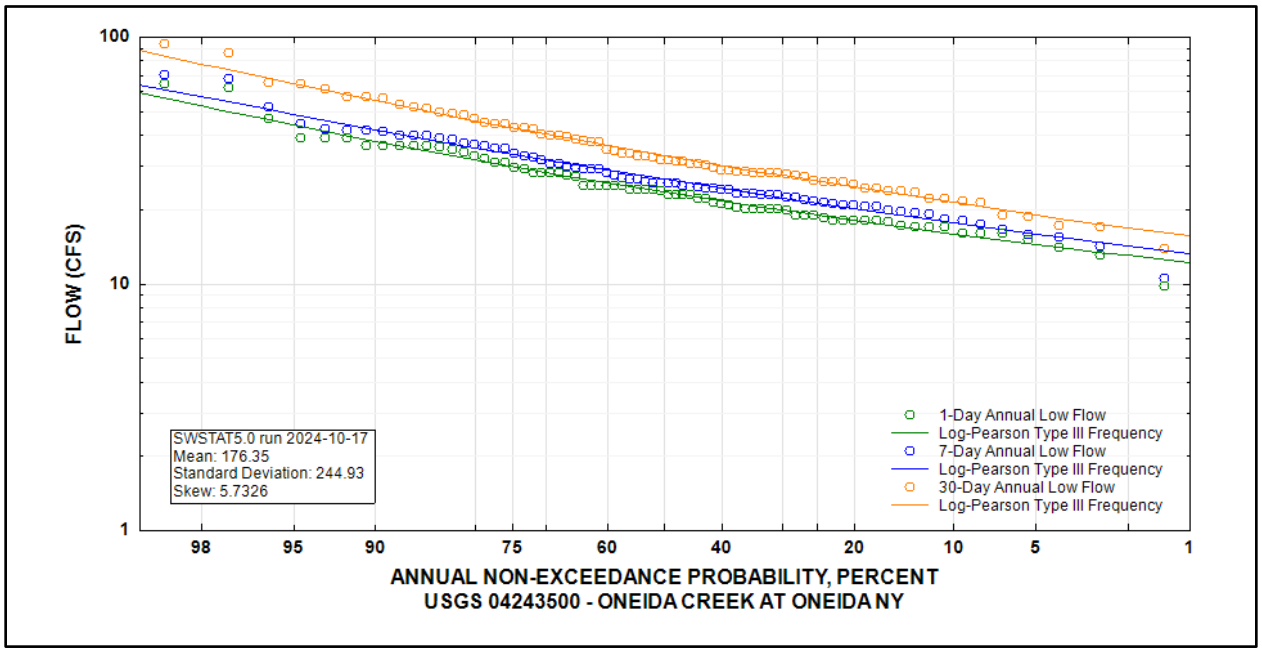
HEW is the NYSDEC generic term used that refers to several specific standards such as Health (Water Source), Health (Fish Consumption), Wildlife, Aesthetic (Water Source), Aesthetic (Food Source), and Recreation which are designated as H(WS), H(FC), W, E(WS), E(FS), or R.

The 1Q10, 7Q10 and 30Q10 flows were calculated at United States Geological Survey (USGS) gage station USGS 04243500, Oneida Creek at Oneida NY, using the USGS Hydrologic Toolbox software based on the Log-Pearson Type III distribution. Results were transferred to the discharge location using the ratio of the drainage areas between the gage and the outfall location.

The gage is located about 6 miles downstream of Outfall 002. Only USGS approved data was used in the analysis, recent provisional data was excluded. Low flow water years used in the analysis were specified from April 1 through March 31 of each year.

Gage ID:	USGS 04243500
Gage Name:	Oneida Creek at Oneida NY
Period of Record Used:	April 1, 1950 - March 31, 2024
Drainage Area at Gage (mi^2):	113
1Q10 Flow at Gage (CFS):	15.8
7Q10 Flow at Gage (CFS):	17.6
30Q10 Flow at Gage (CFS):	21.2
Drainage Area at Facility (mi^2):	62.1
1Q10 Flow at Facility (CFS):	8.68
7Q10 Flow at Facility (CFS):	9.67
30Q10 Flow at Facility (CFS):	11.7

Figure 4. Low Flow Frequency Curves



To convert flow from cubic feet per second (CFS) to million gallons per day (MGD), a multiplier of 0.6463 is applied. The critical low flows for Oneida Creek at the discharge location in MGD are:

Table 3. Critical Low Flows at Outfall 002

Outfall	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)
002	5.6	6.2	7.6

The 1Q10, 7Q10, and 30Q10 flows are used to calculate the acute, chronic, and human, aesthetic, wildlife (HEW) dilution ratios, respectively, by the following expression:

Dilution Ratio = (Facility Flow + Low Flow) / Facility Flow

Resulting dilution ratios are shown in the table below:

Table 4. Dilution Ratios Based on Stream Gage Analysis

Outfall No.	Facility Design Flow (MGD)	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
002	0.023	2436:1	2697:1	3305:1	Stream Gage Analysis

Based on NYSDEC Technical Operations Guidance Series (TOGS) 1.3.1 and current NYSDEC permitting practice, maximum dilution ratios of 50:1 and 100:1 for aquatic acute and chronic mixing zone criteria, respectively, shall be used as the limiting conditions for mixing assessments when evaluating water quality. HEW is set to a maximum allowance of 100:1.

Final dilution ratios to evaluate resulting water quality are summarized in the table below.

Table 5. Maximum Allowable Dilution Ratios

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
002	50:1	100:1	100:1	TOGS 1.3.1

Receiving Water Quality Information

NYSDEC collects and maintains water quality information on rivers, streams, lakes, estuaries, and coastal waters in New York. The Rotating Integrated Basin Studies (RIBS) Program monitors rivers, lakes and streams. The RIBS program is designed so that all 17 major drainage basins in the state are monitored every five years, with 3 to 4 basins being monitored each year. The RIBS program also includes routine monitoring stations that are sampled each year regardless of the 5-year cycle.

Water quality information for Oneida Creek was obtained from RIBS Station 07-ONEI-2.2, Oneida Creek in Lenox NY, located 16 miles downstream from the discharge location. The station was monitored in 2019 and 2020.

Table 6. Receiving Water Quality Information

Parameter	Units	Mean	Range	Number of Samples
pH	SU	8.1	7.7 - 8.4	8
Hardness (as $CaCO_3$)	mg/L	406	365 - 449	7

The permittee's discharge is subject to federal Effluent Limitation Guidelines (ELGs) found in 40 CFR Part 468, Copper Forming Point Source Category, which requires effluent limitations on chromium, copper, lead, nickel, and zinc, all expressed as total recoverable.

New York water quality standards specified in 6 NYCRR Part 703.5. Certain metals are expressed as the dissolved fraction in ug/L and are calculated as a function of receiving water hardness (in mg/L). The formulas relevant to this permit to calculate applicable water quality standards are:

Chromium (Dissolved)

$$A(A) = (0.316)\exp\{0.819\,[\ln(\text{hardness})] + 3.7256\}$$
$$A(C) = (0.86)\exp\{0.819\,[\ln(\text{hardness})] + 0.6848\}$$

Copper (Dissolved)

$$A(A) = (0.96)\exp\{0.9422\,[\ln(\text{hardness})] - 1.7\}$$
$$A(C) = (0.96)\exp\{0.8545[\ln(\text{hardness})] - 1.702\}$$

Lead (Dissolved)

$$A(A) = \{1.46203 - [\ln(\text{hardness})(0.145712)]\}\exp\{1.273\,[\ln(\text{hardness})] - 1.052\}$$
$$A(C) = \{1.46203 - [\ln(\text{hardness})(0.145712)]\}\exp\{1.273\,[\ln(\text{hardness})] - 4.297\}$$

Nickel (Dissolved)

$$A(A) = (0.998)\exp\{0.846\,[\ln(\text{hardness})] + 2.255\}$$
$$A(C) = (0.997)\exp\{0.846\,[\ln(\text{hardness})] + 0.0584\}$$

Zinc (Dissolved)

$$A(A) = 0.978\exp\{0.8473\,[\ln(\text{hardness})] + 0.884\}$$
$$A(C) = \exp\{0.85\,[\ln(\text{hardness})] + 0.50\}$$

The more stringent of the A(A) and A(C) water quality standard applies for each pollutant.

Metal Translators

40 CFR 122.45(c) requires that effluent limitations for most metals be expressed as total recoverable. However, water quality standards are expressed in the dissolved form. To reconcile the difference, a dissolved metal can be converted to a total metal by applying a metals "translator", which is a conversion factor. A metals translator is the fraction of total recoverable metal in the receiving water that is dissolved, such that:

$$C_T = \frac{C_D}{CF}$$

Where:

C_T = total metal concentration
C_D = dissolved metal concentration
CF = conversion factor (metal translator)

The USEPA publication "*The Metals Translator: Guidance for Calculating a Total Recoverable Permit Limit from a Dissolved Criterion, 1996, EPA 823-B-96-007*", provides procedures to calculate site-specific translators. Typically, a minimum of ten samples that includes both total and dissolved results is recommended. Because there are less than ten samples available for Oneida Creek, general freshwater metals translators shown in Table 7 were taken from the above publication (EPA 823-B-96-007) and will be applied to water quality evaluations.

Table 7. Freshwater Metals Translators

Metal	Metal Translator (CF) (Hardness = 406 mg/L)	
	A(A)	A(C)
Chromium	N/A	N/A
Copper	0.960	0.960
Lead(1)	0.587	0.587
Nickel	0.998	0.997
Zinc	0.978	0.986

(1) CF = 1.46203 – {ln(hardness) (0.145712)}

Site specific water quality standards at the discharge location applicable to the permit for dissolved metals in Table 8 were calculated based on a receiving water hardness of 406 mg/L. Metals translators from Table 7 were applied to express the water quality standard as a total metal.

Table 8. Site Specific Water Quality Standards

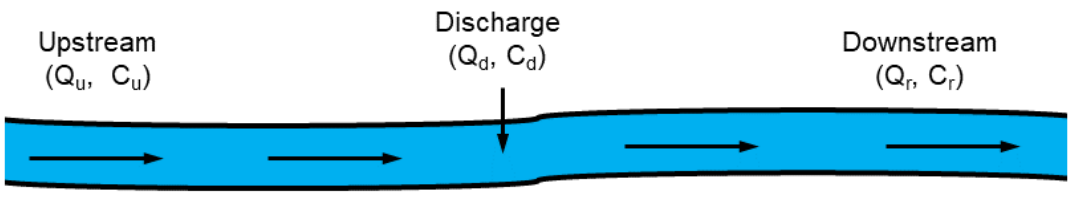
Metal	Site Specific Water Quality Standards (Hardness = 406 mg/L)			
	Dissolved		Total	
	Acute (ug/L)	Chronic (ug/L)	Acute (ug/L)	Chronic (ug/L)
Chromium	1795	233.5	1795	233.5
Copper	50.32	29.65	52.42	30.89
Lead	428.8	16.71	730.2	28.47
Nickel	1532	170.2	1535	170.7
Zinc	384.1	271.9	392.7	275.8

Water Quality Analysis

For conservative pollutants with rapid and complete mixing, a steady-state, mass-balance approach used to calculate the downstream water quality resulting from a discharge. A

conservative pollutant is a pollutant that does not readily degrade or breakdown in the environment and are mitigated primarily by dilution after entering receiving waters.

Figure 5. Mass Balance Schematic



$$Q_r \times C_r = Q_u \times C_u + Q_d \times C_d$$

because $Q_r = Q_u + Q_d$, the resulting downstream concentration becomes:

$$C_r = \frac{(Q_u \times C_u) + (Q_d \times C_d)}{(Q_u + Q_d)}$$

where:

Q_u = upstream flow in MGD or CFS above the point of discharge
C_u = upstream background pollutant concentration in mg/L or ug/L
Q_d = discharge flow in MGD or CFS
C_d = discharge pollutant concentration in mg/L or ug/L
Q_r = resulting downstream flow, after discharge in MGD or CFS
C_r = resulting downstream pollutant concentration in mg/L or ug/L

The various terms in the general mass balance equation can also be solved in terms of dilution, which can simplify water quality calculations and becomes necessary when dilution is reduced to NYSDEC maximum allowable or limited by mixing zone requirements.

When receiving water background concentrations are considered, the projected instream concentration (PIC) or resulting downstream pollutant concentration (C_r) for conservative pollutants based on dilution can be calculated as:

$$C_r = \frac{C_d + C_u(D - 1)}{DF}$$

Where:

C_r = resulting downstream pollutant concentration
C_d = discharge pollutant concentration
C_u = upstream or background pollutant concentration
DF = dilution factor

The dilution factor is the allowable dilution. For example, if the dilution ratio is 100:1, the dilution factor is 100.

For the case when the pollutant background concentration is considered negligible or zero, the above equation simplifies to the discharge concentration divided by the allowable dilution:

$$C_r = \frac{C_d}{DF}$$

Effluent limitations for conservative pollutants can also be calculated based on dilution as follows:

$$C_{eff} = (C_{wqs} - C_b)DF + C_b$$

Where:

C_{eff} = allowable effluent concentration
C_{wqs} = water quality standard concentration
C_b = background pollutant concentration
DF = dilution factor

For the case when the background concentration is considered negligible or zero, the above equation simplifies to the water quality standard times allowable dilution:

$$C_{eff} = (C_{wqs})DF$$

To calculate the mass loading of a pollutant in pounds per day (lbs/d) from a concentration (mg/L), the following conversion formula is applied:

$$\text{Loading (lbs/d)} = \text{Flow (MGD)} \times \text{Concentration (mg/L)} \times 8.34$$

For concentration values provided/reported in ug/L or µg/L by a laboratory, the value must be converted to mg/L by dividing by 1,000 when using the formula above to calculate the loading.

Effluent limitations based on water quality standards are typically expressed as a daily maximum. When a daily maximum WQBEL is less than a monthly average TBEL, the monthly average TBEL should not be specified in a SPDES permit because it could potentially cause an exceedance of the water quality standards.

Applicable water quality standards for each pollutant 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.

The Clean Water Act (CWA) requires a minimum level of treatment of pollutants for point source discharges based on available wastewater treatment technologies be specified in SPDES permits (TBELs) and that more stringent WQBELs must be imposed in SPDES permits when the TBELs will not assure compliance with New York water quality standards under critical conditions.

USEPA Effluent Limitation Guidelines (ELGs)

Effluent Limitation Guidelines (ELGs) developed by USEPA for specific industries[3] reflect pollutant reductions that can be achieved in categories or subcategories of industrial operations using specific technology levels of control which include 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).

For existing facilities, the more stringent of the BPT, BCT, BAT effluent limitation applies for each pollutant. NSPS apply to facilities that started operations or installed new process equipment after the applicable ELGs regulations took effect.

Table 9. Summary of ELGs Control Technologies

Type of Facility	BPT	BCT	BAT	NSPS
Existing Direct Dischargers	•	•	•	
New Direct Dischargers				•
Pollutants Regulated	BPT	BCT	BAT	NSPS
Conventional Pollutants	•	•		•
Nonconventional Pollutants	•		•	•
Toxic (Priority) Pollutants	•		•	•

Source: 2010 USEPA NPDES Permit Writers Manual (EPA/833-K-10-001)

ELGs applicable to this facility include 40 CFR Part 433, Metal Finishing Point Source Category and 40 CFR Part 468, Copper Forming Point Source Category. However, Part 433.10(b) states that Part 468 may be effective and applicable to wastewater discharges from the metal finishing operations and that Part 433 limits shall not apply. Therefore, EGLs for this facility are based on 40 CFR Part 468.

The facility is subject to NSPS. NSPS applies to direct dischargers that installed new process equipment after promulgation of the applicable effluent guidelines. For the Copper Forming Point Source Category, the promulgated date was August 15, 1983. International Wire acquired the property/building in 2006 from the former Oneida LTD Knife Plant, and subsequently installed process equipment for production lines involving copper wire manufacturing.

[3] As promulgated under 40 CFR Parts 405 - 471

NSPS reflect effluent reductions that are achievable based on the "best available demonstrated control technology." USEPA's rationale is that new sources have the opportunity to install the best and most efficient production processes and wastewater treatment technologies.

Technology Based Effluent Limitations (TBELs)

Where USEPA-promulgated ELGs are not applicable to a discharge or to a pollutant of concern, technology based effluent limitations (TBELs) can be established on a case-by-case basis using Best Professional Judgement (BPJ) in accordance with 40 CFR Part 125.3(c)(2). BPJ can consider any reasonable method such as selecting an appropriate model treatment technology for the category of discharge or other unique factors relating to a facility. NYSDEC has developed model BPJ TBELs for common wastewater treatment technologies and various pollutants in TOGS 1.2.1, Attachment C.

Water Quality Based Effluent Limitations (WQBELs)

SPDES permits may require additional or more stringent effluent limitations and conditions than ELGs/TBELs.

WQBELs are designed to protect water quality by ensuring that water quality standards are met in the receiving water under critical low flow conditions. WQBELs are imposed when TBELs are not sufficient to protect water quality.

The procedure for developing WQBELs includes knowing the pollutants present in the discharge(s), identifying water quality criteria applicable to these pollutants, determining if WQBELs are necessary (reasonable potential), and calculating the WQBELs. Factors also considered in this analysis include available dilution of effluent in the receiving water under low flow conditions, receiving water chemistry, and other pollutant sources that are present.

If the expected concentration of the pollutant of concern in the receiving water could exceed the ambient water quality standard or guidance value, then there is reasonable potential that the discharge may cause or contribute to a violation, and a WQBEL for the pollutant is required.

Final Effluent Limitations

The Pollutant Summary Table and USEPA Effluent Limitation Guidelines (ELG) Calculations Table provide specific details for the development of the proposed effluent limitations for each pollutant. The Pollutant Summery Table also includes a Reasonable Potential Analysis (RPA) for each pollutant detected in the discharge based on additional sampling required by SPDES Permit Application NY-2C.

In accordance with 6 NYCRR Part 750-1.2(29)(iv), discharges authorized by a SPDES permit may also include pollutants not explicitly listed in the SPDES permit, but reported in the SPDES permit application record as detected in the discharge or as something the permittee knows or has reason to believe to be present in the discharge (reported in the permit application record) that does not exceed, by an amount in excess of normal effluent variability for the level of discharge that may reasonably be expected for that pollutant from information provided in the SPDES permit application record, and are made through the outfalls listed in the permit.

Monitoring Requirements

The draft permit includes monitoring and sampling requirements to determine compliance with the effluent limitations specified in the SPDES permit. Appendix Link

Sampling Types

6-Hour composite sampling has been specified for most pollutants, except for flow which is metered and pH, temperature, oil and grease, which are specified as grab samples.

The previous permit specified 24-Hour composite, however, the facility batch discharges lasting around 5 hours per batch, therefore, 6-Hour composite sampling better aligns with facility operations.

Analytical Methods

The permittee is required to use sufficiently sensitive test procedures approved by the USEPA as specified in 40 CFR Part 136.

Laboratory Requirements

Sample analysis is required to be performed by a laboratory certified by the New York State Department of Health (DOH) for Non-Potable Water under the Environmental Laboratory Approval Program (ELAP) to ensure the accuracy and reliability of the analysis. The permit requires that all sampling records be maintained for a minimum of five years and made available to NYSDEC upon request.

Monitoring Frequency

Monitoring frequencies are based on TOGS 1.2.1 and include monthly monitoring for most pollutants, with the exception for flow, which is continuous. These are the minimum frequencies NYSDEC has determined to be necessary to adequately monitor the facility's performance and to characterize the discharge.

Discharge Monitoring Reports

Completed Discharge Monitoring Reports (DMRs) summarizing all monitoring results specified in the SPDES permit shall be submitted to NYSDEC for each one (1) month reporting period electronically using the USEPA's electronic reporting system, NetDMR.

Whole Effluent Toxicity (WET) Testing

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

- There is the possibility of complex synergistic or additive effects of chemicals, typically when the number of metals or organic compounds discharged by the permittee equals or exceeds five.

The requirement for WET testing is new. No previous WET data was available to perform a reasonable potential analysis. Consistent with TOGS 1.3.2, given the dilution available and location within the Great Lakes basin, the permit requires chronic WET testing. WET testing action levels of 15 TUa and 100 TUc have been included in the permit for each species. The acute action

level for each species represent the acute dilution ratio (50:1) times a factor of 0.3. The chronic action levels represent the chronic dilution ratio (100:1). Samples will be collected quarterly for a period of 1-year during calendar years ending in 7 and 2. The first round of WET testing will be due in 2027.

Stormwater Pollution Prevention Requirements

Discharges stormwater associated with industrial activity requires SPDES permit coverage under 40 CFR 122.26(a)(6). On 01/10/2024, the permittee submitted a Conditional Exclusion for No Exposure Form, certifying that all industrial activities and materials are completely sheltered from exposure. The facility's permit number is NYR00G159 under the SPDES Multi Sector General Permit for Stormwater Discharges Associated with Industrial Activity (GP-0-23-001). This condition must be maintained for the exclusion to remain applicable. The schedule of submittals also includes a due date for re-certification every five years as required by 40 CFR 122.26(g)(iii). This requirement is 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 continue implementation of a BMP plan that prevents, or minimizes the potential for, the release of toxic or hazardous pollutants to state waters. The BMP plan requires annual review by the permittee.

Discharge Notification Act Requirements

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

Figure 6. Typical SPDES Discharge Point Sign

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

Mercury[4]

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

The Mercury Multiple Discharge Variance (MDV) was developed in accordance with 6 NYCRR Part 702.17(h) because water quality standard for mercury is not being achieved on a statewide level due natural background sources and human-caused conditions. Setting effluent limits to the water quality standard of 0.70 ng/L (0.0000007 mg/L) to prevent discharges from contributing to water quality exceedances is not feasible because the level cannot be consistently achieved with current treatment technologies.

The facility is categorized as an existing Non-major USEPA/State Significant (Class 01) industrial facility within the Great Lakes basin. Low level mercury effluent sampling results submitted with the SPDES permit application were 0.986 ng/L.

On 10/10/2024, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10 and the effluent measured <12 ng/L. Therefore, consistent with DOW 1.3.10, the permit includes requirements for the implementation of MMP Type IV and does not include mercury effluent limitations. The Schedule of Additional Submittals includes a mercury minimization plan annual status report (maintained onsite), and re-certification of the exclusion every five years. As part of the re-certification, the effluent must be sampled and continue to measure <12 ng/L. This requirement is new.

Cooling Water Intake Structure (CWIS) Biological Monitoring

Cooling water intake structures (CWIS) cause adverse environmental impact by pulling large numbers of fish and shellfish or their eggs. Section §316(b) of the Clean Water Act requires that CWIS reflect the best technology available (BTA) for minimizing adverse environmental impact. Federal regulations promulgating Section §316(b) are specified in 40 CFR Part 125.

The facility stopped utilizing its CWIS in 2015 when the cooling system was converted from a once-through to a closed-loop system. In 2021, the intake structure was dismantled including removal of the water pumps, sealing the intake pipes, and disconnection of electrical service. All water used by the facility is provided by the City of Sherrill.

On 04/22/2024, the permittee submitted a written request that Water Withdrawal Permit #11,835 be discontinued. On 12/30/2024, NYSDEC discontinued the permit which previously authorized a maximum withdrawal of 2.16 MGD. The facility is no longer authorized to withdraw cooling water from Oneida Creek and the water withdrawal system no longer exists. Therefore, the facility is no longer subject to CWIS BTA requirements.

[4] In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.

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

PFOA/PFOS and 1,4-Dioxane were detected in the effluent from monitoring conducted by the permittee submitted with the SPDES Permit Application. Pursuant to 6 NYCRR Part 750-1.13(b), the permit includes a short-term monitoring program listed in the Schedule of Additional Submittals to evaluate the influent and effluent discharge levels of Per-and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane. This monitoring program is consistent with TOGS 1.3.13, Industrial Permitting Strategy for Implementing Guidance Values for PFOA, PFOS, and 1,4-Dioxane, and guidance released in USEPA guidance memos dated April 28, 2022, and December 5, 2022.

The Department will review the monitoring results and pursuant to 6 NYCRR 750-2.1(i) may notify the permittee of the need for further monitoring to identify potential sources as specified in the Emerging Contaminants Investigation Checklist for Industrial Facilities to determine whether cause exists to modify the permit to incorporate a pollutant minimization program per 6 NYCRR 750-1.14(f). The Department will consider this information and progress made to track down and reduce or eliminate the source of the identified pollutants in determining if a permit modification is needed.

Climate Resiliency

Following the 2019 Climate Leadership and Community Protection Act (Climate Act), SPDES permit applicants for certain permit types are required to demonstrate consideration of future physical climate risks, including those due to sea level rise, storm surges, and flooding.

The facility submitted a completed SPDES Permit Supplemental Information Form, Consideration of Future Physical Climate Risk with the SPDES permit application outlining specific measures taken to reduce the risks associated with future climate conditions. Facility infrastructure is not located within a FEMA designated flood zone.

Schedule of Additional Submittals

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

- Sort-Term emerging contaminant monitoring program for PFOAs and 1,4-Dioxane lasting three months.
- Whole Effluent Toxicity (WET) testing results.
- Mercury Minimization Program Annual Status Report (maintained onsite).
- Best Management Practices (BMP) plan annual review.

- Water Treatment Chemicals (WTCs) annual usage report.
- No exposure certification for stormwater associated with industrial activity every five years.
- Mercury conditional exclusion certification with monitoring every five years.

Anti-backsliding

In general, state and federal regulations prohibit the relaxation of effluent limitations in permits unless one of the specified exceptions applies. The limitations contained in the permit are at least as stringent as the previous permit limits and there are no instances of backsliding. Appendix Link

Antidegradation

The permit contains effluent limitations which ensure that the best usages of the receiving waters will be maintained. The Notice of Complete Application published in the Environmental Notice Bulletin contains information on the State Environmental Quality Review (SEQR)[5] determination. Appendix Link

[5] As prescribed by 6 NYCRR Part 617

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OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
002	43° 03' 19.1" N	75° 36' 13.0" W	Oneida Creek	C	Ont. 66-11-P26-25 PWL: 0703-0090	07/03	406	5.6	6.2	7.5	0.0023	50:1	100:1	100:1

See Critical Receiving Water Flow Information section of the fact sheet for dilution ratio details.

POLLUTANT SUMMARY TABLE

Outfall 002

Outfall #	002	**Description of Wastewater:** Process Wastewater														
		Type of Treatment: NA														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		

General Notes:

- Existing discharge data from 01/01/2019 to 12/31/2023 was obtained from Discharge Monitoring Reports submitted by the permittee.
- Supplemental effluent quality was obtained from SPDES Application Form NY-2C provided by the permittee.
- Technology based effluent Limitations (TBELs) based on USEPA Effluent Limitation Guidelines (ELGs) were developed from 40 CFR Part 468, Copper Forming Point Source Category. Detailed information is presented in the USEPA Effluent Limitation Guideline (ELG) Calculations section of this Fact Sheet.
- All applicable water quality standards were reviewed for development of the WQBELs.
- The water quality standard shown below represents the most stringent of A(A), A(C), and HEW standards.
- The basis of the permit condition is typically the more stringent of the TBELs or WQBELs for each pollutant.

[6] 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)

Outfall #	002	**Description of Wastewater:** Process Wastewater
		Type of Treatment: NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Flow Rate	MGD	Monthly Avg	Monitor	0.0014	60/0	**Monitor**	6 NYCRR Part 750-1.13	Narrative: No alterations that will impair the waters for their best usages.					6 NYCRR Part 703.2	-	Monitor
	MGD	Daily Max	Monitor	0.0023	60/0	**Monitor**	6 NYCRR Part 750-1.13								

Existing effluent quality is the long-term averages based on DMRs submitted by the permittee from 2019 - 2023.

TBELs
Pursuant to 6 NYCRR Part 750-1.13(b)(1), flow is required to be monitored and is needed to calculate pollutant loadings in lbs/d.

WQBELs
Not applicable.

Basis of Permit Condition
Flow monitoring is continued from the previous permit.

Outfall #	002	**Description of Wastewater:** Process Wastewater
		Type of Treatment: NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
pH	SU	Minimum	6.0	6.2	60/0	**6.0**	TOGS 1.2.1	8.1[7]	8.08	6.5 – 8.5	Range	-	6 NYCRR Part 703.3	-	TBEL
		Maximum	9.0	8.0	60/0	**9.0**			8.11						

Existing effluent quality is the lowest minimum and highest maximum based on DMRs submitted by the permittee from 2019 - 2023.

TBELs
The ELGs specified in 40 CFR Part 468 is in the range of 7.5 - 10.0. Consistent with TOGS 1.2.1, TBELs in the range of 6.0 - 9.0 reflect the available treatment technology listed in Attachment C. The TBELs from TOGS 1.2.1 and the current permit are being continued.

WQBELs
The projected instream concentration (PIC) with the TBELs and the maximum allowable A(C) dilution factor of 100.

$$\mathrm{PIC} = \frac{C_d + C_u(DF - 1)}{DF}$$

$$\mathrm{PIC\ ph\ Min} = \frac{6.0 + 8.1(100 - 1)}{100} = 8.08\ \mathrm{SU}$$

$$\mathrm{PIC\ ph\ Max} = \frac{9.0 + 8.1(100 - 1)}{100} = 8.11\ \mathrm{SU}$$

The TBELs are protective of the water quality standards and WQBELs are unnecessary.

Basis of Permit Condition
The TBELs are being continued.

[7] Ambient pH calculated from RIBS Station 07-ONEI-2.2, Oneida Creek in Lenox NY, located 16 miles downstream, using 8 samples collected from 2019 - 2020.

Outfall #	002	**Description of Wastewater:** Process Wastewater
		Type of Treatment: NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Temperature	°F	Daily Max	90	82	60/0	-	-	Narrative (Non-Trout): The water temperature at the surface of a stream shall not be raised to more than 90F at any point and... 50% of the cross-sectional area and/or volume of flow of shall not be raised or lowered to more than 5°F over the temperature that existed before the addition					6 NYCRR Part 704.2	-	WQBEL

Existing effluent quality is the highest daily maximum based on DMRs submitted by the permittee from 2019 - 2023.

TBELs
Not applicable.

WQBELs
To achieve standards specified in 6 NYCRR Part 704.2(b)(1)(ii) and (iii) under critical conditions that include a receiving water temperature near the freezing point (32 ºF) and an effluent temperature set at the effluent limit of 90 ºF. Assuming half the cross-sectional area contains half the stream flow, the dilution factor becomes 50 based on the maximum allowable A(C) dilution of 100:1. The projected instream temperature within half the cross-sectional area is:

$$\mathrm{PIC} = \frac{C_d + C_u(\mathrm{DF} - 1)}{\mathrm{DF}}$$

$$\mathrm{PIC} = \frac{90 + 32(50 - 1)}{50} = 33.2\ °\mathrm{F}$$

$$\text{Temperature Change} = 33.2 - 32.0 = 1.2\ °\mathrm{F}$$

The maximum possible water temperature change within half the cross-sectional area is 1.2 °F. Therefore, an effluent temperature limit of 90 ºF achieves the thermal criteria specified in in 6 NYCRR Part 704.

Basis of Permit Condition
The WQBEL of 90 ºF is being continued.

Outfall #	002	**Description of Wastewater:** Process Wastewater **Type of Treatment:** NA												
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[6]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
Total Suspended Solids (TSS)	lbs/d	Monthly Avg	-	-	-	**2.8**	USEPA ELG NSPS	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				6 NYCRR Part 703.2	-	TBEL
	lbs/d	Daily Max	6.0	0.22	56/4	**3.5**	USEPA ELG NSPS	-							
	Existing effluent quality is the average loading in lbs/d with nondetects set to the detection level based on DMRs submitted by the permittee from 2019 - 2023. Permittee is not required to report effluent concentrations. Lognormal or delta-lognormal based percentiles (95th, 99th) are not recommended for effluent characterization because sampling concentrations have been multiplied by the effluent flow on the day the sample was collected. **TBELs** The calculated ELGs based on daily production rates result in a monthly average limitation of 2.8 lbs/d and a daily maximum limitation of 3.5 lbs/d. Please refer to the USEPA ELG Calculations Table for details. **WQBELs** Not applicable – narrative water quality standards. **Basis of Permit Condition** The TBELs are specified and are more stringent than the current limitations. The monthly average limitation is a new requirement.														
Oil & Grease	lbs/d	Daily Max	6.0	0.10	0/60	**2.3**	USEPA ELG NSPS	-	Narrative: No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.				6 NYCRR Part 703.2	-	TBEL
	Existing effluent quality were all nondetects with a reported detection level of 5 mg/L based on DMRs submitted by the permittee from 2019 - 2023. Reported concentrations in mg/L were converted to lbs/d based on the daily maximum design flow of 0.0023 MGD. **TBELs** The calculated ELGs based on daily production rates result in a monthly average limitation of 2.3 lbs/d and a daily maximum limitation of 2.3 lbs/d. Please refer to the USEPA ELG Calculations Table for details. Because the monthly average and daily maximum are identical, only the daily maximum effluent limitation is being specified. **WQBELs** Not applicable – narrative water quality standards. **Basis of Permit Condition** The TBELs are specified and are more stringent than the current limitations.														

Outfall #	002	**Description of Wastewater:** Process Wastewater **Type of Treatment:** NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Fluoride	lbs/d	Daily Max	6.0	0.005	23/37	0.58	TOGS 1.2.1	-	0.58	14.48	A(C)	14	6 NYCRR Part 703.5	-	Discontinued

Existing effluent quality is the average loading in lbs/d with nondetects set to the detection level based on DMRs submitted by the permittee from 2019 - 2023. Permittee is not required to report effluent concentrations. Lognormal or delta-lognormal based percentiles (95th, 99th) are not recommended for effluent characterization because sampling concentrations have been multiplied by the effluent flow on the day the sample was collected.

TBELs

There are no ELGs specified in 40 CFR Part 468 for fluoride. BPJ TBELs from TOGS 1.2.1, Attachment C, includes a daily maximum of 30 mg/L. The TBEL expressed in pounds per day based on design flow is:

$$\text{TBEL} = 0.0023 \text{ MGD x } 30 \text{ mg/l x } 8.34 = 0.58 \text{ lbs/d}$$

WQBELs

Because the ambient background loading for fluoride is assumed to be negligible, the projected instream loading is equal to the TBEL. The A(A) water quality standard for fluoride is not applicable to Class C waterbodies. Based on a stream hardness of 406 mg/L, the A(C) water quality standard is:

$$\text{A(C)} = (0.02)\exp(0.907\,[\ln(\text{ppm hardness})] + 7.394) = (0.02)\exp(0.907\,[\ln(406 \text{ mg/L})] + 7.394) = 7553 \text{ ug/L} = 7.55 \text{ mg/L}$$

The calculated WQBEL based on allowable dilution:

$$C_{eff} = (C_{wqs})D = 7.55 \text{ mg/L x } 100 = 755 \text{ mg/L}$$

To express the WQBEL in lbs/d based on design flow is:

$$\text{WQBEL} = \text{Flow (MGD) x Concentration (mg/L) x } 8.34 = 0.0023 \text{ MGD x } 755 \text{ mg/L x } 8.34 = 14.48 \text{ lbs/d}$$

There is no reasonable potential to exceed water quality standards.

Basis of Permit Condition

Fluoride is being discontinued from the permit based on the following considerations:

- More than half the sample results were non-detect and the remaining were just slightly above the detection level.
- The highest result in the past five years was 0.086 lbs/d.
- In comparing the existing effluent quality and proposed TBEL effluent limit, the effluent limit is about a multiple of 100 times higher than the discharge levels.
- No reasonable potential to exceed water quality standards.
- There are no applicable ELGs in 40 CFR Part 468.
- The probable source of the trace levels of fluoride is from municipal drinking water supplied by the City of Sherrill.

Outfall #	002	**Description of Wastewater:** Process Wastewater **Type of Treatment:** NA													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Fluoroborates	lbs/d	Daily Max	5.0	0.05	35/25	-	-	-	-	-	-	-	-	-	Discontinued

Existing effluent quality is the average loading in lbs/d with nondetects set to the detection level based on DMRs submitted by the permittee from 2019 - 2023. Permittee is not required to report effluent concentrations. Lognormal or delta-lognormal based percentiles (95th, 99th) are not recommended for effluent characterization because sampling concentrations have been multiplied by the effluent flow on the day the sample was collected.

TBELs
There are no TBELs for fluoroborates listed in TOGS 1.2.1, Attachment C. There is no documentation in NYSDEC records indicating the basis of the current effluent limitation.

WQBELs
Not applicable, no water quality standards or guidance values for fluoroborates.

Basis of Permit Condition
Fluoroborates are being discontinued from the permit based on the following considerations:

- Existing effluent quality indicates many non-detects.
- There are no applicable water quality standards.
- There are no applicable ELGs in 40 CFR Part 468.
- There are no applicable TBELs in TOGS 1.2.1.
- No applicable water quality standards in 6 NYCRR Part 703.5.
- There are no water quality guidance values in TOGS 1.1.1.

Outfall #	002	**Description of Wastewater:** Process Wastewater **Type of Treatment:** NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Chromium	lbs/d	Monthly Avg	-		-	**0.035**	USEPA ELG NSPS	-	0.035	0.45	-	-	6 NYCRR Part 703.5	-	TBEL
	lbs/d	Daily Max	-	<0.00006	1/1	**0.086**	USEPA ELG NSPS	-	0.086	0.45	A(C)	0.45			

Existing effluent quality is based on effluent monitoring submitted with SPDES Permit Application form NY-2C.

TBELs
The calculated ELGs based on production rates result in a monthly average limitation of 0.035 lbs/d and a daily maximum limitation of 0.086 lbs/d. Please refer to the USEPA ELG Calculations Table for calculation details.

WQBELs
There are no upstream industrial discharges, therefore, the ambient background concentration for chromium is assumed to be negligible. Because the TBELs are expressed in lbs/d, the projected instream loading under critical conditions is equal to the TBELs.

The calculated water quality standards/WQBELs based on maximum allowable dilution using the site-specific water quality standards for total chromium from Table 8 are:

$$C_{eff} = (C_{wqs})D$$

$$A(A) = 1{,}795 \text{ ug/L x } 50 \quad = 89{,}750 \text{ ug/L} = 89.75 \text{ mg/L}$$
$$A(C) = 2{,}33.5 \text{ ug/L x } 100 = 23{,}350 \text{ ug/L} = 23.35 \text{ mg/L}$$

The A(C) standard applies because it is more stringent. To achieve the water quality standard, the WQBEL in lbs/d is calculated based on the design flow:

$$\text{WQBEL} = \text{Flow (MGD)} \text{ x Concentration (mg/L)} \text{ x } 8.34 = 0.0023 \text{ MGD x } 23.35 \text{ mg/L x } 8.34 = 0.45 \text{ lbs/d}$$

Basis of Permit Condition
The TBELs are more stringent than the WQBEL, therefore the TBELs are specified. Effluent limitations and monitoring requirements are new requirements.

Outfall #	002	**Description of Wastewater:** Process Wastewater
		Type of Treatment: NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Copper	lbs/d	Monthly Avg	-	-	-	0.14	USEPA ELG NSPS	-	0.14	-	-	-	6 NYCRR Part 703.5	-	WQBEL
	lbs/d	Daily Max	0.68	0.02	57/3	0.30	USEPA ELG NSPS	-	0.30	0.05	A(A)	**0.050**			

Existing effluent quality is the average loading in lbs/d with nondetects set to the detection level based on DMRs submitted by the permittee from 2019 - 2023. Permittee is not required to report effluent concentrations. Lognormal or delta-lognormal based percentiles (95th, 99th) are not recommended for effluent characterization because sampling concentrations have been multiplied by the effluent flow on the day the sample was collected.

TBELs
The calculated ELGs based on production rates result in a monthly average limitation of 0.14 lbs/d and a daily maximum limitation of 0.30 lbs/d. Please refer to the USEPA ELG Calculations Table for calculation details.

WQBELs
There are no upstream industrial discharges, therefore, the ambient background concentration for copper is assumed to be negligible. Because the TBELs are expressed in lbs/d, the projected instream loading under critical conditions is equal to the TBELs.

The calculated water quality standards/WQBELs based on maximum allowable dilution using the site-specific water quality standards for total copper from Table 8 are:

$$C_{eff} = (C_{wqs})D$$

$$A(A) = 52.42 \text{ ug/L x } 50 = 2{,}621 \text{ ug/L} = 2.62 \text{ mg/L}$$
$$A(C) = 30.89 \text{ ug/L x } 100 = 3{,}089 \text{ ug/L} = 3.09 \text{ mg/L}$$

The A(A) standard applies because it is more stringent. To express the WQBEL in lbs/d based on design flow is:

$$\text{Flow (MGD) x Concentration (mg/L) x } 8.34 = 0.0023 \text{ MGD x } 2.62 \text{ mg/L x } 8.34 = 0.050 \text{ lbs/d}$$

Basis of Permit Condition
The WQBEL is more stringent than the TBELs, therefore the WQBEL is specified and is less than the current permit. Monthly average effluent limitations are not specified when the daily maximum is less than the monthly average.

Outfall #	002	**Description of Wastewater:** Process Wastewater **Type of Treatment:** NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Lead	lbs/d	Monthly Avg	-	-	-	**0.021**	USEPA ELG NSPS	-	0.021	-	A(C)	-	6 NYCRR Part 703.5	-	TBEL
	lbs/d	Daily Max	-	<0.000009	0/1	**0.023**	USEPA ELG NSPS	-	0.023	0.055	A(C)	0.055			

Existing effluent quality is based on effluent monitoring submitted with SPDES Permit Application form NY-2C.

TBELs
The calculated ELGs based on production rates result in a monthly average limitation of 0.021 lbs/d and a daily maximum limitation of 0.023 lbs/d. Please refer to the USEPA ELG Calculations Table for calculation details.

WQBELs
There are no upstream industrial discharges, therefore, the ambient background concentration for lead is assumed to be negligible. Because the TBELs are expressed in lbs/d, the projected instream loading under critical conditions is equal to the TBELs.

The calculated WQBELs based on maximum allowable dilution using the site-specific water quality standards for total lead from Table 8 are:

$$C_{eff} = (C_{wqs})D$$

$$A(A) = 730.2 \text{ ug/L x } 50 = 36{,}510 \text{ ug/L} = 36.51 \text{ mg/L}$$
$$A(C) = 28.47 \text{ ug/L x } 100 = 2{,}847 \text{ ug/L} = 2.847 \text{ mg/L}$$

The A(C) standard applies because it is more stringent. To express the WQBEL in lbs/d based on design flow is:

$$\text{Flow (MGD) x Concentration (mg/L) x } 8.34 = 0.0023 \text{ MGD x } 2.847 \text{ mg/L x } 8.34 = 0.055 \text{ lbs/d}$$

Basis of Permit Condition
The TBELs are more stringent than the WQBEL, therefore the TBELs are specified. Effluent limitations and monitoring requirements for total lead are new requirements.

Outfall #	002	**Description of Wastewater:** Process Wastewater **Type of Treatment:** NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Nickel	lbs/d	Monthly Avg	-	-	-	**0.086**	USEPA ELG NSPS	-	0.086	-	-	-	6 NYCRR Part 703.5	-	TBEL
	lbs/d	Daily Max	-	0.00075	1/0	**0.13**	USEPA ELG NSPS	-	0.13	0.33	A(C)	0.33			

Existing effluent quality is based on effluent monitoring submitted with SPDES Permit Application form NY-2C.

TBELs
The calculated ELGs based on production rates result in a monthly average limitation of 0.086 lbs/d and a daily maximum limitation of 0.13 lbs/d. Please refer to the USEPA ELG Calculations Table for calculation details.

WQBELs
There are no upstream industrial discharges, therefore, the ambient background concentration for nickel is assumed to be negligible. Because the TBELs are expressed in lbs/d, the projected instream loading under critical conditions is equal to the TBELs.

The calculated WQBELs based on maximum allowable dilution using the site-specific water quality standards for total nickel from Table 8 are:

$$C_{eff} = (C_{wqs})D$$

$$A(A) = 1{,}535 \text{ ug/L x } 50 = 76{,}750 \text{ ug/L} = 76.75 \text{ mg/L}$$
$$A(C) = 170.7 \text{ ug/L x } 100 = 17{,}070 \text{ ug/L} = 17.07 \text{ mg/L}$$

The A(C) standard applies because it is more stringent. To express the WQBEL in lbs/d based on design flow is:

$$\text{Flow (MGD) x Concentration (mg/L) x } 8.34 = 0.0023 \text{ MGD x } 17.07 \text{ mg/L x } 8.34 = 0.33 \text{ lbs/d}$$

Basis of Permit Condition
The TBELs are more stringent than the WQBEL, therefore the TBELs are specified. Effluent limitations and monitoring requirements for total nickel are new requirements.

Outfall #	002	**Description of Wastewater:** Process Wastewater **Type of Treatment:** NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Tin	lbs/d	Daily Max	0.40	0.0040	34/26	**0.038**	BPJ	-	-	-	-	-	-	-	TBEL

Existing effluent quality is the average loading in lbs/d with nondetects set to the detection level based on DMRs submitted by the permittee from 2019 - 2023. Permittee is not required to report effluent concentrations. Lognormal or delta-lognormal based percentiles (95th, 99th) are not recommended for effluent characterization because sampling concentrations have been multiplied by the effluent flow on the day the sample was collected.

TBELs
There are no ELGs specified in 40 CFR Part 468 specified for tin. There are no BPJ TBELs from TOGS 1.2.1, Attachment C (Chemical Treatment) or ELGs in 40 CFR Part 433 to establish TBELs. Because facility operations include tin electroplating, an effluent limitation is appropriate to ensure excessive levels are not discharged.

The fact sheet for the previous permit used a daily maximum TBEL 2.0 mg/L with a design flow 0.024 MGD. The design flow at the time was based on projected values prior to the commencement of facility operations. Continuation of the previous limit based on the concentration adjusted for the current daily maximum design flow is proposed. The revised TBEL is calculated as:

$$\text{Daily Max TBEL} = 0.0023 \text{ MGD x } 2.0 \text{ mg/L x } 8.34 = 0.038 \text{ lbs/d}$$

WQBELs
Not applicable, there are no water quality standards or guidance values for Tin.

Basis of Permit Condition
The previous permit limit, adjusted for the daily maximum design flow, is being continued.

Outfall #	002	**Description of Wastewater:** Process Wastewater **Type of Treatment:** NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Zinc	lbs/d	Monthly Avg	-	-	-	**0.10**	USEPA ELG NSPS	-	0.10	-	-	-	6 NYCRR Part 703.5	-	TBEL
	lbs/d	Daily Max	-	0.00008	1/0	**0.24**	USEPA ELG NSPS	-	0.24	-	A(A)	0.38			

Existing effluent quality is based on effluent monitoring submitted with SPDES Permit Application form NY-2C.

TBELs
The calculated ELGs based on production rates results in a monthly average limitation of 0.10 lbs/d and a daily maximum limitation of 0.24 lbs/d. Please refer to the USEPA ELG Calculations Table for calculation details.

WQBELs
There are no upstream industrial discharges, therefore, the ambient background concentration for nickel is assumed to be negligible. Because the TBELs are expressed in lbs/d, the projected instream loading under critical conditions is equal to the TBELs.

The calculated WQBELs based on maximum allowable dilution using the site-specific water quality standards for total zinc from Table 8 are:

$$C_{eff} = (C_{wqs})D$$

$$A(A) = 392.7 \text{ ug/L x } 50 = 19{,}635 \text{ ug/L} = 19.64 \text{ mg/L}$$
$$A(C) = 275.8 \text{ ug/L x } 100 = 27{,}580 \text{ ug/L} = 27.58 \text{ mg/L}$$

The A(A) standard applies because it is more stringent. To express the WQBEL in lbs/d based on design flow is:

$$\text{Flow (MGD) x Concentration (mg/L) x } 8.34 = 0.0023 \text{ MGD x } 19.64 \text{ mg/L x } 8.34 = 0.38 \text{ lbs/d}$$

Basis of Permit Condition
The TBELs are more stringent than the WQBEL, therefore the TBELs are specified. Effluent limitations and monitoring requirements are new requirements.

Outfall #	002	**Description of Wastewater:** Process Wastewater **Type of Treatment:** NA													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[6]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
Total Mercury	ng/L	Daily Max	-	0.986	1/0	-	-	-	-	0.7	H(FC)	-	6 NYCRR Part 703.5	-	DOW 1.3.10
	Existing effluent quality is based on effluent monitoring submitted with SPDES Permit Application form NY-2C. **Basis of Permit Condition** For more information regarding New York's Multiple Discharge Variance (MDV) and Mercury Minimization Program (MMP) requirements, please see the Mercury section of this fact sheet.														
Additional Pollutants Detected from SPDES Application Form NY-2C															
Total Antimony	ug/L	Daily Max	-	0.96	1/0	-	-	-	0.06	-	-	-	-	0.40	No Limitation
	Existing effluent quality is based on effluent monitoring submitted with SPDES Permit Application form NY-2C. **Reasonable Potential Analysis** In accordance with 40 CFR Part 122.44(d)(1)(ii), a Reasonable Potential Analysis (RPA) is conducted to determine if a pollutant has the potential to exceed water quality standards. Methods from the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (TSD), Chapter 3.3 are applied. Because existing effluent quality includes one (1) sample result, a reasonable potential multiplier (RPM) of 6.2 based on a coefficient of variation (CV) of 0.6 at the 95th confidence level is applied to the sample result to account for effluent variability to project the maximum effluent concentration that could be expected in the discharge. Pursuant to 40 CFR Part 122.44(d)(1)(iii) and in accordance the 2010 EPA Permit Writer's Manual (2010), Section 6.3.2.3, if the RPA projected instream concentration (PIC) is equal to or less than the applicable water quality standard, there is no reasonable potential and, thus far, there is no demonstrated need to calculate WQBELs. With maximum allowable chronic dilution factor (DF) of 100, the projected instream concentration is: $$PIC = \frac{C_d\,(RPM)}{DF}$$ $$PIC = (0.96 \times 6.2) / 100 = 0.06\ ug/L$$ There are no water quality standards or guidance values for antimony applicable Class C waters, therefore, WQBELs are unnecessary. Although not applicable to the discharge, for qualitative and perspective purposes only, the Class A water quality standard antimony is 3 ug/L.														

Outfall #	002	**Description of Wastewater:** Process Wastewater **Type of Treatment:** NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Arsenic	ug/L	Daily Max	-	17.6	1/0	-	-	-	1.1	150	A(C)	-	6 NYCRR Part 703.5	1.0	No Limitation

Existing effluent quality is based on effluent monitoring submitted with SPDES Permit Application form NY-2C.

Reasonable Potential Analysis

In accordance with 40 CFR Part 122.44(d)(1)(ii), a Reasonable Potential Analysis (RPA) is conducted to determine if a pollutant has the potential to exceed water quality standards. NYSDEC applies methods detailed in the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (EPA/505-2-90-001), Chapter 3.3 and Appendix E.

Because existing effluent quality includes one (1) sample result, a reasonable potential multiplier (RPM) of 6.2 based on a coefficient of variation (CV) of 0.6 at the 95th confidence level is applied to the sample result to account for effluent variability to project the maximum effluent concentration that could be expected in the discharge.

Pursuant to 40 CFR Part 122.44(d)(1)(iii) and in accordance the 2010 EPA Permit Writer's Manual (2010), Section 6.3.2.3, if the RPA projected instream concentration (PIC) is equal to or less than the applicable water quality standard, there is no reasonable potential and, thus far, there is no demonstrated need to calculate WQBELs.

With maximum allowable chronic dilution factor (DF) of 100, the projected instream concentration is:

$$\text{PIC} = \frac{C_d\ (\text{RPM})}{\text{DF}}$$

$$\text{PIC} = \ (17.6 \text{ x } 6.2) \ / \ 100 = 1.1 \text{ ug/L}$$

The water quality standards for arsenic (dissolved) from 6 NYCRR Part 703.5 are:

$$\text{A(A)} = 340 \text{ ug/L}$$
$$\text{A(C)} = 150 \text{ ug/L}$$

A comparison of the projected instream concentration to the water quality standards indicates no reasonable potential to cause or contribute to a water quality violation. Therefore, WQBELs are unnecessary.

Outfall #	002	**Description of Wastewater:** Process Wastewater
		Type of Treatment: NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Boron	ug/L	Daily Max	-	356	1/0	-	-	-	22	10,000	A(C)	-	6 NYCRR Part 703.5	50	No Limitation

Existing effluent quality is based on effluent monitoring submitted with SPDES Permit Application form NY-2C.

Reasonable Potential Analysis

In accordance with 40 CFR Part 122.44(d)(1)(ii), a Reasonable Potential Analysis (RPA) is conducted to determine if a pollutant has the potential to exceed water quality standards. NYSDEC applies methods detailed in the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (EPA/505-2-90-001), Chapter 3.3 and Appendix E.

Because existing effluent quality includes one (1) sample result, a reasonable potential multiplier (RPM) of 6.2 based on a coefficient of variation (CV) of 0.6 at the 95th confidence level is applied to the sample result to account for effluent variability to project the maximum effluent concentration that could be expected in the discharge.

Pursuant to 40 CFR Part 122.44(d)(1)(iii) and in accordance the 2010 EPA Permit Writer's Manual (2010), Section 6.3.2.3, if the RPA projected instream concentration (PIC) is equal to or less than the applicable water quality standard, there is no reasonable potential and, thus far, there is no demonstrated need to calculate WQBELs.

With maximum allowable chronic dilution factor (DF) of 100, the projected instream concentration is:

$$\mathrm{PIC} = \frac{\mathrm{C_d}\ (\mathrm{RPM})}{\mathrm{DF}}$$

$$\mathrm{PIC} = \ (356 \times 6.2) \ / \ 100 = 22 \ \mathrm{ug/L}$$

The water quality standard for boron (acid-soluble) from 6 NYCRR Part 703.5 is:

$$\mathrm{A(C)} = 10{,}000 \ \mathrm{ug/L}$$

A comparison of the projected instream concentration to the water quality standards indicates no reasonable potential to cause or contribute to a water quality violation. Therefore, WQBELs are unnecessary.

Outfall #	002	**Description of Wastewater:** Process Wastewater
		Type of Treatment: NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Chloroform	ug/L	Daily Max	-	1.5	1/0	-	-	-	0.09	-	-	-	-	1.0	No Limitation

Existing effluent quality is based on effluent monitoring submitted with SPDES Permit Application form NY-2C.

Reasonable Potential Analysis

In accordance with 40 CFR Part 122.44(d)(1)(ii), a Reasonable Potential Analysis (RPA) is conducted to determine if a pollutant has the potential to exceed water quality standards. Methods from the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (TSD), Chapter 3.3 are applied.

Because existing effluent quality includes one (1) sample result, a reasonable potential multiplier (RPM) of 6.2 based on a coefficient of variation (CV) of 0.6 at the 95th confidence level is applied to the sample result to account for effluent variability to project the maximum effluent concentration that could be expected in the discharge.

Pursuant to 40 CFR Part 122.44(d)(1)(iii) and in accordance the 2010 EPA Permit Writer's Manual (2010), Section 6.3.2.3, if the RPA projected instream concentration (PIC) is equal to or less than the applicable water quality standard, there is no reasonable potential and, thus far, there is no demonstrated need to calculate WQBELs.

With maximum allowable chronic dilution factor (DF) of 100, the projected instream concentration is:

$$\text{PIC} = \frac{C_d\,(\text{RPM})}{\text{DF}}$$

$$\text{PIC} = \ (1.5 \text{ x } 6.2) \ / \ 100 = 0.09 \text{ ug/L}$$

There are no water quality standards or guidance values for chloroform applicable Class C waters, therefore, WQBELs are unnecessary.

Although not applicable to the discharge location or any point downstream, for qualitative and perspective purposes only, the Class A water quality standard chloroform is 7 ug/L.

Outfall #	002	**Description of Wastewater:** Process Wastewater
		Type of Treatment: NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Selenium	ug/L	Daily Max	-	73.7	1/0	-	-	-	4.6	4.6	A(C)	460	6 NYCRR Part 703.5	2.0	No Limitation

Existing effluent quality is based on effluent monitoring submitted with SPDES Permit Application form NY-2C.

Reasonable Potential Analysis

In accordance with 40 CFR Part 122.44(d)(1)(ii), a Reasonable Potential Analysis (RPA) is conducted to determine if a pollutant has the potential to exceed water quality standards. NYSDEC applies methods detailed in the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (EPA/505-2-90-001), Chapter 3.3 and Appendix E.

Because existing effluent quality includes one (1) sample result, a reasonable potential multiplier (RPM) of 6.2 based on a coefficient of variation (CV) of 0.6 at the 95th confidence level is applied to the sample result to account for effluent variability to project the maximum effluent concentration that could be expected in the discharge.

Pursuant to 40 CFR Part 122.44(d)(1)(iii) and in accordance the 2010 EPA Permit Writer's Manual (2010), Section 6.3.2.3, if the RPA projected instream concentration (PIC) is equal to or less than the applicable water quality standard, there is no reasonable potential and, thus far, there is no demonstrated need to calculate WQBELs.

With maximum allowable chronic dilution factor (DF) of 100, the projected instream concentration is:

$$\text{PIC} = \frac{C_d\,(\text{RPM})}{\text{DF}}$$

$$\text{PIC} = (73.7 \text{ x } 6.2) \,/\, 100 = 4.6 \text{ ug/L}$$

The water quality standard for selenium (dissolved) from 6 NYCRR Part 703.5 is:

A(C) = 4.6 ug/L

Because the projected instream concentration does not exceed the water quality standard, there is no reasonable potential to cause or contribute to a water quality violation. Therefore, WQBELs are unnecessary.

Outfall #	002	**Description of Wastewater:** Process Wastewater **Type of Treatment:** NA													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Sulfate	mg/L	Daily Max	-	4080	1/0	-	-	-	253	-	-	-	6 NYCRR Part 703.5	250	No Limitation

Existing effluent quality is based on effluent monitoring submitted with SPDES Permit Application form NY-2C.

Reasonable Potential Analysis

In accordance with 40 CFR Part 122.44(d)(1)(ii), a Reasonable Potential Analysis (RPA) is conducted to determine if a pollutant has the potential to exceed water quality standards. NYSDEC applies methods detailed in the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (EPA/505-2-90-001), Chapter 3.3 and Appendix E.

Because existing effluent quality includes one (1) sample result, a reasonable potential multiplier (RPM) of 6.2 based on a coefficient of variation (CV) of 0.6 at the 95th confidence level is applied to the sample result to account for effluent variability to project the maximum effluent concentration that could be expected in the discharge.

Pursuant to 40 CFR Part 122.44(d)(1)(iii) and in accordance the 2010 EPA Permit Writer's Manual (2010), Section 6.3.2.3, if the RPA projected instream concentration (PIC) is equal to or less than the applicable water quality standard, there is no reasonable potential and, thus far, there is no demonstrated need to calculate WQBELs.

With maximum allowable chronic dilution factor (DF) of 100, the projected instream concentration is:

$$\text{PIC} = \frac{C_d\,(\text{RPM})}{\text{DF}}$$

$$\text{PIC} = \ (4080 \text{ x } 6.2) \ / \ 100 = 253 \text{ ug/L}$$

There are no water quality standards or guidance values for sulfate applicable Class C waters, therefore, WQBELs are unnecessary.

Although not applicable to the discharge location or any point downstream, for qualitative and perspective purposes only, the Class A water quality standard for sulfate is 250 mg/L.

Outfall #	002	**Description of Wastewater:** Process Wastewater
		Type of Treatment: NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Thallium	ug/L	Daily Max	-	0.36	1/0	-	-	-	0.22	8	A(C)	-	6 NYCRR Part 703.5	0.30	No Limitation

Existing effluent quality is based on effluent monitoring submitted with SPDES Permit Application form NY-2C.

Reasonable Potential Analysis

In accordance with 40 CFR Part 122.44(d)(1)(ii), a Reasonable Potential Analysis (RPA) is conducted to determine if a pollutant has the potential to exceed water quality standards. NYSDEC applies methods detailed in the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (EPA/505-2-90-001), Chapter 3.3 and Appendix E.

Because existing effluent quality includes one (1) sample result, a reasonable potential multiplier (RPM) of 6.2 based on a coefficient of variation (CV) of 0.6 at the 95th confidence level is applied to the sample result to account for effluent variability to project the maximum effluent concentration that could be expected in the discharge.

Pursuant to 40 CFR Part 122.44(d)(1)(iii) and in accordance the 2010 EPA Permit Writer's Manual (2010), Section 6.3.2.3, if the RPA projected instream concentration (PIC) is equal to or less than the applicable water quality standard, there is no reasonable potential and, thus far, there is no demonstrated need to calculate WQBELs.

With maximum allowable chronic dilution factor (DF) of 100, the projected instream concentration is:

$$\text{PIC} = \frac{C_d\,(\text{RPM})}{\text{DF}}$$

$$\text{PIC} = \ (0.36 \text{ x } 6.2) \ / \ 100 = 0.22 \text{ ug/L}$$

The water quality standard for thallium (acid-soluble) from 6 NYCRR Part 703.5 is:

$$\text{A(C)} = 8 \text{ ug/L}$$

A comparison of the projected instream concentration to the water quality standards indicates no reasonable potential to cause or contribute to a water quality violation. Therefore, WQBELs are unnecessary.

Outfall #	002	**Description of Wastewater:** Process Wastewater
		Type of Treatment: NA

Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Nitrogen, Ammonia (as NH_3)	mg/L	Monthly Ave	-	0.61	1/0	-	-	-	0.04	0.62	A(C)	-	TOGS 1.1.1	0.10	No Limitation

Existing effluent quality is based on effluent monitoring submitted with SPDES Permit Application form NY-2C. Ammonia was reported as NH_3 by the laboratory.

Reasonable Potential Analysis

In accordance with 40 CFR Part 122.44(d)(1)(ii), a Reasonable Potential Analysis (RPA) is conducted to determine if a pollutant has the potential to exceed water quality standards. NYSDEC applies methods detailed in the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (EPA/505-2-90-001), Chapter 3.3 and Appendix E.

Because existing effluent quality includes one (1) sample result, a reasonable potential multiplier (RPM) of 6.2 based on a coefficient of variation (CV) of 0.6 at the 95th confidence level is applied to the sample result to account for effluent variability to project the maximum effluent concentration that could be expected in the discharge.

Pursuant to 40 CFR Part 122.44(d)(1)(iii) and in accordance the 2010 EPA Permit Writer's Manual (2010), Section 6.3.2.3, if the RPA projected instream concentration (PIC) is equal to or less than the applicable water quality standard, there is no reasonable potential and, thus far, there is no demonstrated need to calculate WQBELs.

With maximum allowable dilution factor (DF) of 100, the projected instream concentration is:

$$\text{PIC} = \frac{C_d\,(\text{RPM})}{\text{DF}}$$

$$\text{PIC} = \ (0.61 \text{ x } 6.2) \ / \ 100 = 0.04 \text{ mg/L}$$

The water quality standard for Ammonia (as NH_3) based on a Class C waterbody was determined from TOGS 1.1.1 with a pH of 8.2 and a summer temperature of 25 °C. The pH of the receiving waterbody was set to the 75th percentile from RIBS Station 07-ONEI-2.2, Oneida Creek in Lenox NY, and the summer temperature was taken from TOGS 1.3.1.E.

The water quality standard for Ammonia (as N) was determined by TOGS 1.1.1 to be:

$$\text{Ammonia (as } NH_3) = 0.62 \text{ mg/L}$$

A comparison of the projected instream concentration to the water quality standards indicates no reasonable potential to cause or contribute to a water quality violation. Therefore, WQBELs are unnecessary.

USEPA EFFLUENT LIMITATION GUIDELINE (ELG) CALCULATIONS

Appendix Link

For the applicable categorical limitations under 40 CFR Part 468, the following basis was used to determine the TBEL:

Outfall	002		
40 CFR Part/Subpart	§468, Part A		
Subpart Name	Copper Forming Subcategory		

ELG Pollutant	Process	Daily Max Multiplier	Monthly Avg. Multiplier	Production Rate (Million lbs/d)	Daily Max TBEL (lbs/d)	Monthly Avg. TBEL (lbs/d)
40 CFR Part 468.13 Subpart B – ELGs for New Source Performance Standards (NSPS)						
Chromium, Total (lbs/1,000,000 lbs)	Drawing Spent Lubricant	0.031	0.012	0.0414	0.0645	0.0262
	Alkaline Cleaning Rinse	1.559	0.632	0.0414	0.0007	0.0003
	Alkaline Cleaning Bath	0.017	0.007	0.0414	0.0089	0.0036
	Pickling Rinse	0.216	0.087	0.0414	0.0017	0.0007
	Pickling Bath	0.042	0.017	0.0414	0.0096	0.0039
	Pickling Flume Scrubber	0.231	0.093	0.0414	0.0645	0.0262
				Total TBEL	**0.086**	**0.035**
Notes: TBEL rounded to 2 significant figures in accordance with the 2010 USEPA NPDES Permit Writers Manual (EPA/833-K-10-001)						

ELG Pollutant	Process	Daily Max Multiplier	Monthly Avg. Multiplier	Production Rate (Million lbs/d)	Daily Max TBEL (lbs/d)	Monthly Avg. TBEL (lbs/d)
40 CFR Part 468.13 Subpart B – ELGs for New Source Performance Standards (NSPS)						
Copper, Total (lbs/1,000,000 lbs)	Drawing Spent Lubricant	0.108	0.051	0.0414	0.0045	0.0021
	Alkaline Cleaning Rinse	5.393	2.570	0.0414	0.2233	0.1064
	Alkaline Cleaning Bath	0.059	0.028	0.0414	0.0024	0.0012
	Pickling Rinse	0.748	0.356	0.0414	0.0310	0.0147
	Pickling Bath	0.148	0.070	0.0414	0.0061	0.0029
	Pickling Flume Scrubber	0.801	0.381	0.0414	0.0332	0.0158
				Total TBEL	**0.30**	**0.14**
Notes: TBEL rounded to 2 significant figures in accordance with the 2010 USEPA NPDES Permit Writers Manual (EPA/833-K-10-001).						

ELG Pollutant	Process	Daily Max Multiplier	Monthly Avg. Multiplier	Production Rate (Million lbs/d)	Daily Max TBEL (lbs/d)	Monthly Avg. TBEL (lbs/d)
40 CFR Part 468.13 Subpart B – ELGs for New Source Performance Standards (NSPS)						
Lead, Total (lbs/1,000,000 lbs)	Drawing Spent Lubricant	0.0085	0.0076	0.0414	0.0004	0.0003
	Alkaline Cleaning Rinse	0.421	0.379	0.0414	0.0174	0.0157
	Alkaline Cleaning Bath	0.0046	0.0042	0.0414	0.0002	0.0002
	Pickling Rinse	0.058	0.052	0.0414	0.0024	0.0022
	Pickling Bath	0.011	0.010	0.0414	0.0005	0.0004
	Pickling Flume Scrubber	0.062	0.056	0.0414	0.0026	0.0023
				Total TBEL	**0.023**	**0.021**
Notes: TBEL rounded to 2 significant figures in accordance with the 2010 USEPA NPDES Permit Writers Manual (EPA/833-K-10-001).						

ELG Pollutant	Process	Daily Max Multiplier	Monthly Avg. Multiplier	Production Rate (Million lbs/d)	Daily Max TBEL (lbs/d)	Monthly Avg. TBEL (lbs/d)
40 CFR Part 468.13 Subpart B – ELGs for New Source Performance Standards (NSPS)						
Nickel, Total (lbs/1,000,000 lbs)	Drawing Spent Lubricant	0.046	0.031	0.0414	0.0019	0.0013
	Alkaline Cleaning Rinse	2.317	1.559	0.0414	0.0959	0.0645
	Alkaline Cleaning Bath	0.025	0.017	0.0414	0.0010	0.0007
	Pickling Rinse	0.321	0.216	0.0414	0.0133	0.0089
	Pickling Bath	0.063	0.042	0.0414	0.0026	0.0017
	Pickling Flume Scrubber	0.344	0.231	0.0414	0.0142	0.0096
				Total TBEL	**0.13**	**0.086**
Notes: TBEL rounded to 2 significant figures in accordance with the USEPA 2010 USEPA NPDES Permit Writers Manual (EPA/833-K-10-001).						

ELG Pollutant	Process	Daily Max Multiplier	Monthly Avg. Multiplier	Production Rate (Million lbs/d)	Daily Max TBEL (lbs/d)	Monthly Avg. TBEL (lbs/d)
40 CFR Part 468.13 Subpart B – ELGs for New Source Performance Standards (NSPS)						
Zinc, Total (lbs/1,000,000 lbs)	Drawing Spent Lubricant	0.086	0.035	0.0414	0.0036	0.0014
	Alkaline Cleaning Rinse	4.298	1.769	0.0414	0.1779	0.0732
	Alkaline Cleaning Bath	0.047	0.019	0.0414	0.0019	0.0008
	Pickling Rinse	0.596	0.245	0.0414	0.0247	0.0101
	Pickling Bath	0.118	0.048	0.0414	0.0049	0.0020
	Pickling Flume Scrubber	0.638	0.262	0.0414	0.0264	0.0108
				Total TBEL	**0.24**	**0.10**
Notes: TBEL rounded to 2 significant figures in accordance with the 2010 USEPA NPDES Permit Writers Manual (EPA/833-K-10-001).						

ELG Pollutant	Process	Daily Max Multiplier	Monthly Avg. Multiplier	Production Rate (Million lbs/d)	Daily Max TBEL (lbs/d)	Monthly Avg. TBEL (lbs/d)
40 CFR Part 468.13 Subpart B – ELGs for New Source Performance Standards (NSPS)						
Oil and Grease (lbs/1,000,000 lbs)	Drawing Spent Lubricant	0.85	0.85	0.0414	0.0352	0.0352
	Alkaline Cleaning Rinse	42.140	42.140	0.0414	1.7446	1.7446
	Alkaline Cleaning Bath	0.46	0.46	0.0414	0.0190	0.0190
	Pickling Rinse	5.850	5.850	0.0414	0.2422	0.2422
	Pickling Bath	1.160	1.160	0.0414	0.0480	0.0480
	Pickling Flume Scrubber	6.260	6.260	0.0414	0.2592	0.2592
				Total TBEL	**2.3**	**2.3**
Notes: TBEL rounded to 2 significant figures in accordance with the 2010 USEPA NPDES Permit Writers Manual (EPA/833-K-10-001).						

ELG Pollutant	Process	Daily Max Multiplier	Monthly Avg. Multiplier	Production Rate (Million lbs/d)	Daily Max TBEL (lbs/d)	Monthly Avg. TBEL (lbs/d)
40 CFR Part 468.13 Subpart B – ELGs for New Source Performance Standards (NSPS)						
Total Suspended Solids (lbs/1,000,000 lbs)	Drawing Spent Lubricant	1.275	1.020	0.0414	0.0528	0.0422
	Alkaline Cleaning Rinse	63.210	50.568	0.0414	2.6169	2.0935
	Alkaline Cleaning Bath	0.70	0.56	0.0414	0.0290	0.0232
	Pickling Rinse	8.775	7.020	0.0414	0.3633	0.2906
	Pickling Bath	1.740	1.392	0.0414	0.0720	0.0576
	Pickling Flume Scrubber	9.390	7.512	0.0414	0.3887	0.3110
				Total TBEL	**3.5**	**2.8**
Notes: TBEL rounded to 2 significant figures in accordance with the 2010 USEPA NPDES Permit Writers Manual (EPA/833-K-10-001).						

APPENDIX A: REGULATORY AND TECHNICAL BASIS OF PERMIT AUTHORIZATIONS

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

Regulatory References

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

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

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

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

Outfall and Receiving Water Information

Impaired Waters

The NYS 303(d) List of Impaired/TMDL Waters identifies waters where specific best usages are not fully supported. The state must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) that restrict waterbody uses, in order to restore and protect such

uses. SPDES permits must include effluent limitations necessary to implement a waste load allocation (WLA) of an USEPA-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, and/or in response to updated regulatory requirements. Pollutant monitoring data is also reviewed to determine the presence of additional contaminants that should be included in the permit based on a reasonable potential analysis to cause or contribute to a water quality standards violation.

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law[8] and USEPA interpretation[9] anti-backsliding

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

requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

Antidegradation Policy

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

Effluent Limitations

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

Technology-based Effluent Limitations (TBELs) for Industrial Facilities

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

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

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

Best Professional Judgement (BPJ)

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

Water Quality-Based Effluent Limitations (WQBELs)

In addition to the TBELs, permits must include additional or more stringent effluent limitations and conditions, including those necessary to protect water quality. CWA sections 101 and 301(b)(1)(C), 40

CFR 122.44(d)(1), and 6 NYCRR Parts 750-1.11 require that permits include limitations for all pollutants or parameters which are or may be discharged at a level which may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. Additionally, 6 NYCRR Part 701.1 prohibits the discharge of pollutants that will cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge. Water quality standards can be found under 6 NYCRR Parts 700-704. 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 Department considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

Mixing Zone Analyses

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

"*USEPA Technical Support Document for Water Quality-Based Toxics Control*" (March 1991).

"*USEPA Region VIII's "Mixing Zones and Dilution Policy*" (December 1994).

NYSDEC TOGS 1.3.1, "*Total Maximum Daily Loads and Water Quality-Based Effluent Limitations*" (July 1996).

"*CORMIX v11.0*" (2019).

Critical Flows

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

Reasonable Potential Analysis (RPA)

The Reasonable Potential Analysis (RPA) is a statistical estimation process, outlined in the 1991 USEPA Technical Support Document for Water Quality-based Toxics Control (TSD), Appendix E. This process uses existing effluent quality data and statistical variation methodology to project

the maximum amounts of pollutants that could be discharged by the facility. This projected instream concentration (PIC) is calculated using the appropriate ratio and compared to the water quality standard (WQS). When the RPA process determines the WQS may be exceeded, a WQBEL is required. The procedure for developing WQBELs includes the following steps:

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

2) Identify water quality criteria applicable to these pollutants.

3) Determine if WQBELs are necessary (i.e. reasonable potential analysis (RPA)). The RPA will utilize the procedure outlined in Chapter 3.3.2 of USEPA'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.

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

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

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

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

Whole Effluent Toxicity (WET) Testing:

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

toxicity testing in a SPDES permit and how to implement a toxicity testing program. Per TOGS 1.3.2, WET testing may be required when any one of the following seven criteria are applicable:

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

2. There are uncertainties in the development of TMDLs, WLAs, and WQBELs, caused by inadequate ambient and/or discharge data, high natural background concentrations of pollutants, available treatment technology, and other such factors.

3. There is the presence of substances for which WQBELs are below analytical detectability.

4. There is the possibility of complex synergistic or additive effects of chemicals, typically when the number of metals or organic compounds discharged by the permittee equals or exceeds five.

5. There are observed detrimental effects on the receiving water biota.

6. Previous WET testing indicated a problem.

7. Wastewater treatment facilities which exceed a discharge of 1 MGD. Facilities of less than 1 MGD may be required to test, e.g., POTWs <1 MGD which are managing industrial pretreatment programs.

Minimum Level of Detection

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

Monitoring Requirements

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

Other Conditions

Mercury

The multiple discharge variance (MDV) for mercury was developed in accordance with 6 NYCRR 702.17(h) “to address widespread standard or guidance value attainment issues including the presence of a ubiquitous pollutant or naturally high levels of a pollutant in a watershed.” The first MDV was issued in October 2010, and

subsequently revised and reissued in 2015; each subsequent iteration of the MDV is designed to build off the previous version, to make reasonable progress towards the water quality standard (WQS) of 0.7 ng/L dissolved mercury. The MDV is necessary because human-caused conditions or sources of mercury prevent attainment of the WQS and cannot be remedied (i.e., mercury is ubiquitous in New York waters at levels above the WQS and compliance with a water quality based effluent limitation (WQBEL) for mercury cannot be achieved with demonstrated effluent treatment technologies). The Department has determined that the MDV is consistent with the protection of public health, safety, and welfare. During the effective period of this MDV, any increased risks to human health are mitigated by fish consumption advisories issued periodically by the NYSDOH.

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

Schedules of Compliance

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

Schedule(s) of Additional Submittals

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

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.

APPENDIX B: ACRONYMS

The following list of acronyms is meant to support multiple types of SPDES Fact Sheets and may contain terms not applicable to this specific permit.

1Q10	1-Day, 10-Year Low Flow
7Q10	7-Day, 10-Year Low Flow
30Q10	30-Day, 10-Year Low Flow
A(A)	Aquatic Acute
A(C)	Aquatic Chronic
AL	Action Level
BAT	Best Available Technology Economically Achievable
BCCs	Bioaccumulative Chemicals of Concern
BCT	Best Conventional Pollutant Control Technology
BMP	Best Management Practices
BOD	Biochemical Oxygen Demand
BOD_5	5-Day Biochemical Oxygen Demand
BPJ	Best Professional Judgement
BPT	Best Practicable Technology Currently Available
^oC	Degrees Celsius
BTA	Best Technology Available
CAFO	Concentrated Animal Feeding Operation
CBOD	Carbonaceous Biochemical Oxygen Demand
$CBOD_5$	5-Day Carbonaceous Biochemical Oxygen Demand
CFR	Code of Federal Regulations
CFS	Cubic Feet per Second
CIU	Categorical Industrial User
CMOM	Capacity, Management, Operation, and Maintenance
CSLAP	Citizens Statewide Lake Assessment Program
CSO	Combined Sewer Overflow
CSS	Combined Sewer System
CV	Coefficient of Variation
CWA	Clean Water Act
CWIS	Cooling Water Intake Structure
DEC, NYSDEC	New York State Department of Environmental Conservation
DIM	Department-Initiated Modification
DMR	Discharge Monitoring Report
DNA	Discharge Notification Act
DO	Dissolved Oxygen

DOH, NYSDOH	New York State Department of Health
DOW	NYSDEC Division of Water
DRBC	Delaware River Basin Commission
DWO	Dry Weather Overflow
EBPS	Environmental Benefit Permit Strategy
ECHO	Enforcement and Compliance History On-Line
ECL	Environmental Conservation Law
EDP	Effective Date of Permit
EDPM	Effective Date of Permit Modification
EEQ	Existing Effluent Quality
EFC, NYSEFC	New York Environmental Facilities Corporation
ELAP	Environmental Laboratory Approval Program
ELG	Effluent Limitations Guidelines or Effluent Guidelines
ENB	Environmental Notice Bulletin
EPA, USEPA	U.S. Environmental Protection Agency
ExDP	Expiration Date of Permit
^{o}F	Degrees Fahrenheit
FROSI	Fast Report on Significant Industrial Users
GLCA	General Level Currently Achievable
GLWQA	Great Lakes Water Quality Agreement
GPD	Gallons per Day
GV	Water Quality Guidance Value established by NYSDEC in TOGS 1.1.1
HEW	Human/Aesthetic/Wildlife Protection
IDV	Individual Discharge Variance
I/I	Infiltration and Inflow
IJC	International Joint Commission
ILCA	Individual Level Currently Achievable
ISC	Interstate Sanitation Commission
ISEL	Intermittent Stream Effluent Limitations
lbs/d	Pounds per Day
LTCP	Long-Term Control Plan
MDL	Method Detection Limit
MDV	Multiple Discharge Variance
mg/L	Milligrams per Liter
MGD	Million Gallons per Day
ML	Minimum Level
ml/L	Milliliter per Liter

MMP	Mercury Minimization Program
MOA	Memorandum of Agreement
MS4	Municipal Separate Storm Sewer System
MSGP	Multi-Sector General Permit for Stormwater Associated with Industrial Activity
NAICS	North American Industry Classification System
NCCW	Noncontact Cooling Water
NetDMR	Network Discharge Monitoring Report
ng/L	Nanograms per Liter
NMC	Nine Minimum Controls
NSPS	New Source Performance Standards
NYCRR	New York Code of Rules and Regulations
ORF	Overflow Retention Facility
ORSANCO	Ohio River Valley Water Sanitation Commission
PCB	Polychlorinated biphenyls
PCCM	Post-Construction Compliance Monitoring
PCI or P/C/I	Private/Commercial/Institutional
PEQ	Projected Effluent Quality
PFAS	Per-and Polyfluoroalkyl Substances
PFOA	Perfluorooctanoic Acid
PFOS	Perfluorooctane Sulfonic Acid
PIC	Projected Instream Concentration
PIM	Permittee-Initiated Modification
PMP	Pollutant Minimization Program
PonSAT	Ponded Waterbody Based Effluent Limit Screening Analysis Tool
POSS	Publicly Owned Sewer System
POTW	Publicly Owned Treatment Works
PWL	Priority Waterbodies List
RFI	Request for Information
RIBS	Rotating Intensive Basin Sampling
RP	Reasonable Potential
RPA	Reasonable Potential Analysis
RPD	Reasonable Potential Determination
RPM	Reasonable Potential Multiplier
RSAT	River-Based Effluent Limit Screening Analysis Tool
RWE	Regional Water Engineer
SAPA	State Administrative Procedure Act
SEQR	State Environmental Quality Review

SIC	Standard Industrial Classification
SIU	Significant Industrial User
SNC	Significant Noncompliance
SPCC	Spill Prevention Control and Countermeasure
SPDES	State Pollutant Discharge Elimination System
SPRTK	Sewage Pollution Right to Know Act
SRBC	Susquehanna River Basin Commission
SSO	Sanitary Sewer Overflow
SU	Standard Units
STEP	Septic Tank Effluent Pumping
SWPPP	Stormwater Pollution Prevention Plan
TBELs	Technology-based Effluent Limitations
TKN	Total Kjeldahl Nitrogen
TMDL	Total Maximum Daily Load
TOGS	Technical and Operational Guidance Series
TSD	Technical Support Document
TSS	Total Suspended Solids
TUa	Acute Toxicity Unit
TUc	Chronic Toxicity Unit
ug/L, µg/L	Micrograms per Liter
UOD	Ultimate Oxygen Demand
UPA	Uniform Procedures Act
USGS	United States Geologic Survey
WET	Whole Effluent Toxicity
WIN	Waters Index Number
WIP	Watershed Implementation Plan
WI/PWL	Waterbody Inventory/ Priority Waterbodies List
WLA	Wasteload Allocation
WMDL	Watershed Daily Maximum Load
WQ	Water Quality
WQBELs	Water Quality-Based Effluent Limitations
WQS	Water Quality Standard
WTC	Water Treatment Chemical
WWOP	Wet Weather Operating Plan
WWTF	Wastewater Treatment Facility
WWTP	Wastewater Treatment Plant