



# State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code: <b>4961</b>	NAICS Code: <b>221330, 333611</b>	SPDES Number:	<b>NY0005134</b>
Discharge Class (CL):	<b>03</b>	DEC Number:	<b>2-6202-00032/00004</b>
Toxic Class (TX):	<b>T</b>	Effective Date (EDP):	<b>EDP</b>
Major-Sub Drainage Basin:	<b>13 - 01</b>	Expiration Date (ExDP):	<b>ExDP</b>
Water Index Number:	<b>HR (portion 1)</b>	Item No.: <b>864 - 1</b>	Modification Dates (EDPM):
Compact Area:	<b>IEC</b>		

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:	<b>Consolidated Edison Company of New York, Inc.</b>	Attention:	<b>Anita Ma</b>
Street:	<b>4 Irving Place, 15NE</b>		
City:	<b>New York</b>	State:	<b>NY</b> Zip Code: <b>10003</b>
Email:	<b>MAA@coned.com</b>	Phone:	<b>(718) 204 - 4142</b>

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL							
Name:	<b>59<sup>th</sup> Street Station</b>						
Address / Location:	<b>850 Twelfth Avenue</b>					County:	<b>New York</b>
City:	<b>New York</b>				State:	<b>NY</b>	Zip Code: <b>10019</b>
Facility Location:	Latitude:	<b>40 °</b>	<b>46 '</b>	<b>17 " N</b>	& Longitude:	<b>73 °</b>	<b>59 ' 61 " W</b>
Primary Outfall No.:	<b>002</b>	Latitude:	<b>40 °</b>	<b>46 '</b>	<b>40 " N</b>	& Longitude:	<b>73 ° 59 ' 50 " W</b>
Wastewater Description:	<b>Combined Discharge, Equipment Drains, Leaks, and Overflows, Boiler Drains, Stormwater, and Designated Sub-Outfalls</b>	Receiving Water:	<b>Hudson River</b>	NAICS:	<b>221330</b>	Class:	<b>I</b>

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

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

**DISTRIBUTION:**

- CO BWP - Permit Coordinator
- CO BWC - SCIS
- RWE
- RPA
- EPA Region II

Permit Administrator:			
Address:	<b>625 Broadway Albany, NY 12233-1750</b>		
Signature:		Date:	<b>//</b>

## SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
02A	Package Boiler drains routed to CO2 Blowdown Neutralization System via the Package Boiler heat exchanger; Package Boiler Blowdown	221330	Internal Outfall	Internal Outfall
Receiving Water: Hudson River				Class: I
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
02B	Annex Boiler Blowdown	221330	Internal Outfall	Internal Outfall
Receiving Water: Hudson River				Class: I
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
02D	Waste Neutralization Tanks (Demineralization System)	221330	Internal Outfall	Internal Outfall
Receiving Water: Hudson River				Class: I
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
02E	Tunnel Sump, Steam Condensate, Stormwater, Equipment Drains, Leaks and Overflows, Fire System Test Water, and Floor Trenches/Sumps	221330	Internal Outfall	Internal Outfall
Receiving Water: Hudson River				Class: I
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
02F	Reverse Osmosis Water Treatment Plant Discharge	221330	Internal Outfall	Internal Outfall
Receiving Water: Hudson River				Class: I
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
003	Heat Exchanger Non-Contact Cooling Water	221330	40 ° 46 ' 40 " N	73 ° 59 ' 50 " W
Receiving Water: Hudson River				Class: I

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

## PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
002	Combined Discharge, Equipment Drains* and Leaks, Overflows, Boiler Drains, Stormwater, and Designated Sub-Outfalls	Hudson River	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	Monitor	MGD			Monthly	Calculated		X	6
	Daily Maximum	Monitor				Monthly	Calculated		X	6
pH	Daily Minimum	6.0	SU			Continuous	Recorder		X	1, 2, 3, 7
	Daily Maximum	9.0								
Temperature	Monthly Average	Monitor	°F			Continuous	Recorder		X	4
	Daily Maximum	Monitor				Continuous	Recorder			4
Mercury, Total	Daily Maximum	50	ng/L			Monthly	Grab		X	
WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			3	TUa	Quarterly	See footnote		X	8, 9
WET - Acute Vertebrate	See footnote			3	TUa	Quarterly	See footnote		X	8, 9
WET - Chronic Invertebrate	See footnote			10	TUc	Quarterly	See footnote		X	8, 9
WET - Chronic Vertebrate	See footnote			10	TUc	Quarterly	See footnote		X	8, 9

\* Equipment drains include draining equipment that contains raw water, city water, treated water (demineralized/softened), feedwater, or condensate. Examples would be water tanks/vessels/pipes, steam piping, pumps, water used for hydrostatic testing, etc. Equipment drains do not include the draining of oil or chemical tanks or the draining of oil water separators or settling tank(s).

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
02A	Package Boiler drains routed to CO2 Blowdown Neutralization System via the Package Boiler heat exchanger; Package Boiler Blowdown	Hudson River via 002	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Daily Maximum	Monitor	GPD			Monthly	Calculated		X	6
Total Suspended Solids	Monthly Average	30	mg/L			2/month	Grab		X	5
	Daily Maximum	100				2/month	Grab		X	5

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
02B	Annex Boiler Blowdown	Hudson River via 002	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Daily Maximum	Monitor	GPD			Monthly	Calculated		X	6
Total Suspended Solids	Monthly Average	30	mg/L			2/month	Grab		X	5
	Daily Maximum	100				2/month	Grab		X	5

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
02D	Waste Neutralization Tanks (Demineralization System)	Hudson River via 002	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	Monitor	GPD			Monthly	Calculated		X	6
	Daily Maximum	Monitor				Monthly	Calculated		X	
Total Suspended Solids	Monthly Average	30	mg/L			2/month	Grab		X	
	Daily Maximum	100				2/month	Grab		X	

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
02E	Tunnel Sump, Steam Condensate, Storm Water, Equipment Drains*, Leaks and Overflows, Fire System Test Water and Floor Trenches/Sumps	Hudson River via 002	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	Monitor	GPD			Monthly	Calculated		X	6
	Daily Maximum	Monitor				Monthly	Calculated		X	
Oil & Grease	Daily Maximum	15	mg/L			Weekly	Grab		X	
Total Suspended Solids	Monthly Average	30	mg/L			Weekly	Grab		X	
	Daily Maximum	100				Weekly	Grab		X	

\* Equipment drains include draining equipment that contains raw water, city water, treated water (demineralized/softened), feedwater, or condensate. Examples would be water tanks/vessels/pipes, steam piping, pumps, water used for hydrostatic testing, etc. Equipment drains do not include the draining of oil or chemical tanks or the draining of oil water separators or settling tank(s).

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
02F	Reverse Osmosis Water Treatment Plant Discharge	Hudson River via 002	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	Monitor	GPD			Monthly	Calculated		X	6
	Daily Maximum	Monitor				Monthly	Calculated		X	

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
003	Heat Exchanger Non-Contact Cooling Water Discharge	Hudson River	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Daily Maximum	Monitor	MGD			Monthly	Calculated		X	6
Temperature	Daily Maximum	104	°F			Daily	Instantaneous		X	
Copper, Total	Daily Maximum	Monitor	mg/L			Monthly	Grab	X	X	
Lead, Total	Daily Maximum	Monitor	mg/L			Monthly	Grab	X	X	

**FOOTNOTES:**

1. The following applies to continuous pH monitoring:
  - a. Where a permittee continuously measures the pH of wastewater pursuant to a requirement or option in a State Pollutant Discharge Elimination System (SPDES) permit, the permittee shall maintain the pH of such wastewater within the range set forth in the applicable effluent limitation guidelines, except excursions from the range are permitted subject to the following limitations:
    - i. The total time during which the pH values are outside the requested range of pH values shall not exceed 7 hours and 26 minutes in any calendar year; and
    - ii. No individual excursion from the range of pH shall exceed 60 minutes.
  - b. The Department may adjust the requirements set forth in paragraph (a) of this section with respect to the length of individual excursions from the range of pH values, if a different period of time is appropriate based upon the treatment system, plant configuration or other technical factors.
  - c. For the purpose of this section, an excursion is an unintentional and temporary incident in which the pH value of discharge wastewater exceeds the range set forth in the applicable effluent limitation guidelines.
2. The continuous probe must be located at the lateral center of the tunnel and at the midpoint between mean low tide and the silt layer.
3. In the event of a continuous pH monitor failure, the station shall conduct manual pH readings at the following frequencies:
  - a. During periods of boiler draining, manual pH readings must be taken every thirty minutes until one hour after all draining is completed or until the continuous monitor is returned to service.
  - b. If no boiler draining is being conducted, then manual pH readings must be taken at a frequency of 8 per day at approximately equal intervals (every 3 hours), until the continuous monitor is returned to service.
  - c. All manual readings must be included with the monthly DMR report and the required (5-day) report of noncompliance. \*

4. In the event of a continuous temperature monitor failure, the station shall conduct manual temperature readings at a frequency of four per day or at approximately equal intervals of every 6 hours until the continuous monitor is returned to service. All manual readings must be included with the monthly DMR report and the required (5-day) report of noncompliance. \*

\*Note: As long as appropriate manual readings are conducted in accordance with section 3(a) and (b) and section 4 above, and submitted on DMR, the need for submitting the (5-day) noncompliance report shall be waived.

5. A single sample shall be collected from each boiler. Samples from boilers which blowdown to Outfall 002 shall be combined to form a composite sample that represents the boiler blowdown from Outfall 002.
6. Flow to be reported as specified for each outfall.
7. The total time during which the pH values are outside the requested range of pH values shall not exceed 7 hours and 26 minutes in any calendar month; and no individual excursion from the range of pH shall exceed 60 minutes.
8. **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 Department. The test species shall be *Mysidopsis bahia* (mysid shrimp - invertebrate) and *Cyprinodon variegatus* (sheepshead minnow - vertebrate). Artificial salt water 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 10:1 for acute, and 10:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 4 and 9.

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

The 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](mailto:WET@dec.ny.gov) email address. A summary page of the test results for the invertebrate and vertebrate species indicating  $TU_a$ , 48-hr LC50 for Acute tests and/or  $TU_c$ , NOEC, IC25, and most sensitive endpoints for Chronic tests, should also be included at the beginning of the test report.

WET Testing Action Level Exceedances - If an action level is exceeded then the Department 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 Department 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.

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

#### **ADDITIONAL REQUIREMENTS:**

1. There shall be no visible sheen of oil and grease from Outfall 001, 002, and 003.
2. There shall be no discharge of PCBs from this facility other than as authorized by requirement #4.
3. Notwithstanding any other requirements in this permit, the permittee shall also comply with all the Water Quality Regulations promulgated by the Interstate Environmental Commission.
4. **Protocol for tank drains to be performed at Con Ed steam stations:**

This protocol excludes tanks that Con Edison knows do not contain PCBs.

#### **Tank Drain Prohibitions**

No draining of treatment tanks is allowed: i.e., settling tanks or OWS's.

Tanks may be drained if PCB Aroclors are all non-detectable and mercury levels are less than 50 ng/L without agency notification or approval.

If a top only sample is available and the tank water is unable to be circulated prior to sampling, or if its contents are unable to be transferred to another tank with acceptable sampling locations, the tank cannot be drained.

#### **Definitions:**

Top Sample: A grab sample taken within 12" of the water surface.

Bottom Sample: A grab sample taken within 12" of the bottom of the tank.

*Note: If the available sampling location for a bottom sample is greater than 12" from the bottom of the tank, Con Edison may proceed with the drain as long as it does not drain the tank to a level lower than the sample point from which it was collected.*

#### **Pre-Drain Sampling Requirements:**

Pre-drain water samples must be collected from tanks that are lined with PCB containing materials or tanks suspected to contain PCBs. Pre-drain sampling would also be required for tanks proven PCB free ONLY when it is determined that they came into contact with water from sumps, trenches, floors and walls.

#### **Sampling Procedures:**

- Where available, two samples must be taken. One top sample and one bottom sample.
- If a bottom sample is the only sample point available, taking one bottom sample is acceptable.
- If a top sample is the only sample point available:
  1. Circulate the water in the tank and then collect a top sample; or,
  2. Transfer the contents of the tank to another tank and collect a top and bottom sample.

Pre-drain samples will be analyzed for PCBs and mercury using sufficiently sensitive test procedures approved under 40 CFR Part 136.

All tanks not determined to be PCB free must be drained through a 50-micron filter, regardless of sampling being required or not.

All sampling data obtained for the purpose of tank draining must be submitted with the DMRs for the corresponding month.



## SPECIAL CONDITIONS – BIOLOGICAL MONITORING REQUIREMENTS

All submissions under this section should provide:

- One (1) paper and one (1) electronic copy to the Energy Unit Leader<sup>1</sup>;
- One (1) copy of the cover letter to the Division of Water  
State Pollution Discharge Elimination System (SPDES)  
Compliance Information Section; and
- One (1) copy of the cover letter to the Regional Water Engineer;  
unless otherwise noted.

### Impingement Mortality and Entrainment Characterization Study

1. Within three (3) months of the Effective Date of the Permit (EDP + 3 months), the permittee must submit an approvable plan for an *Impingement Mortality and Entrainment Study* at the 59<sup>th</sup> St. Station. The study plan must include a schedule for implementation, standard operating procedures for data collection, and a final report. At a minimum, the final report must include:
  - a. A taxonomic identification of all fish and shellfish documented to frequent the Hudson River and natural life history information on each of these species.
  - b. An overall estimate of the number of fish and shellfish impinged and entrained (shellfish can be excluded from entrainment) at current operating conditions, and at calculation baseline conditions. For each flow scenario, estimates shall be presented in total numbers of organisms, identified to species, or lowest practical taxon. Estimates for each taxonomic group shall also be subdivided by life stage.

In addition, the *Impingement Mortality and Entrainment Characterization Study* must be generally consistent with the following guidelines:

- c. Impingement Abundance Monitoring
  - i. Duration - two years for facilities with no previous impingement monitoring and for 1 year for facilities with previous impingement monitoring.
  - ii. Intensity - At a minimum, one continuous 24-hour collection will be made in every, seven-day calendar period for a continuous 12-month or 24- month period, depending on previous monitoring as discussed in i) above. The collections will be scheduled to take place within the first two days of each period so that the remainder of the period is available for an alternate collection, should plant operation or equipment malfunction prevent impingement collection on the day initially scheduled. If for any reasons, a collection cannot be made within a given seven-day period, the subsequent collection shall proceed as scheduled. If more than 1,000 fish are collected in 24-hours of sampling, an additional 24-hour collection will be initiated within 72 hours.
  - iii. Traveling screens shall be washed until they are clean prior to the start of the 24-hour collection period.
  - iv. Electrical output in MW, average intake temperature before sampling, average discharge temperature and total station flows shall be recorded on a daily basis, tabulated and included as an appendix in the final report.
  - v. Collection efficiency, that is, the ability of sampling to recover marked fish released in front of the traveling screens and downstream of the trash racks, shall be determined quarterly for each major species. Major species are defined as those occurring at greater than 10% abundance, and species of important recreational or commercial fishing interest such as striped bass, winter flounder, and blue crab.
  - vi. The final report shall include a chapter on the station and site description. In the description of the facility's operation, there will be a completed description of the condenser cooling water system including the number of traveling screens, dimensions, type, mesh size, standard operating procedures, screen washwater sluice configuration and disposition of the screen washings, and the nature and estimated quantities of debris collected at this facility.
  - vii. Water quality measurements will be taken in conjunction with the impingement sampling program. Measurements will include salinity, pH, and dissolved oxygen.
  - viii. The final report shall include a summary table that includes estimates of the total numbers of fishes and shellfishes impinged, by species, for the study period based upon (1) continuous operation of all pumps at full rated flow and (2) actual operational and flow data for the study

<sup>1</sup> Energy Unit Leader, NYSDEC, Bureau of Habitat, 625 Broadway 5<sup>th</sup> Floor, Albany, NY 12233-4756

period. The information and relevant data must be submitted in tabular, graphic, and electronic (Excel or similar) formats.

- d. **Entrainment Abundance Monitoring**
  - i. Duration - two years for facilities with no previous entrainment monitoring and for 1 year for facilities with previous entrainment monitoring.
  - ii. Intensity - At a minimum, one continuous 24-hour collection will be made in every, seven-day calendar period during May 1- August 31 for either 1 or 2 year periods, depending on previous monitoring as discussed in i) above. The collections will be scheduled to take place within the first two days of each period so that the remainder of the period is available for an alternate collection, should plant operation or equipment malfunction and prevent entrainment collection on the day initially scheduled. If for any reasons, a collection cannot be made within a given seven-day period, the subsequent collection shall proceed as scheduled.
  - iii. All samples will be analyzed for ichthyoplankton and juvenile fish.
  - iv. Proposed methods for sample processing, quality control, quality assurance, and splitting will be described in the scope of work submitted for DEC Approval
  - v. The report shall include a summary table that includes estimates of the total numbers of fish and selected invertebrates entrained, by species and life stage, for the study period based upon (1) continuous operation of all pumps at full rated flow and (2) actual operational and flow data for the study period. The information and relevant data must be submitted in tabular, graphic, and electronic (Excel or similar) formats.

Once approved by the Department, the permittee must conduct the *Impingement Mortality and Entrainment Characterization Study* according to the approved schedule. The *Impingement Mortality and Entrainment Characterization Study* and approved schedule will become an enforceable condition of this SPDES permit.

#### **Design and Construction Technology Review**

2. Within six (6) months after the Department's approval of the *Impingement Mortality and Entrainment Study* final report, the permittee must submit an approvable *Design and Construction Technology Review* that includes:
  - a. Tables showing the average monthly and annual net generation of 59<sup>th</sup> St. Station in MWh measured over the last 5 years and the net capacity of the Station in MW.
  - b. An analysis of all feasible technologies and/or operational measures capable of being installed and implemented at 59<sup>th</sup> St. Station. For each feasible alternative include:
    - i. A detailed description of the alternative (including preliminary drawings and site maps, if appropriate);
    - ii. A discussion of the engineering feasibility of the alternative;
    - iii. An assessment of the mitigative benefits in reducing impingement mortality and entrainment abundance for all life stages of fish and shellfish, through utilization of the alternative;
    - iv. A breakdown of all applicable costs including costs associated with capital improvements, operation and maintenance, and construction downtime;
    - v. An estimate of the time required to implement the alternative; and
    - vi. An evaluation of any adverse environmental impacts to aquatic biota, habitat, or water quality that may result from construction, installation, and use of the alternative.
3. Within 1 month of the Department's approval of the *Design and Construction Technology Review*, the permittee must submit, for Department review and consideration, a proposed suite of technologies or operational measures that meets the requirements of 6 NYCRR Part 704.5 and Section 316(b) CWA, 40 CFR Subpart J:
  - a. Alone, or in combination, these technologies or operational measures *minimize* impingement mortality and entrainment of fish and shellfish at 59<sup>th</sup> St. Station;
  - b. The reductions in entrainment and impingement mortality resulting from the proposed technologies and/or operational measures can be no less stringent, and if possible, should be substantially greater than the following performance requirements:
    - i. Entrainment must be reduced by at least 60 percent from the calculation baseline;

- ii. Impingement mortality must be reduced by at least 80 percent from the calculation baseline.

NOTE: Based on this and other relevant information, the Department will select technologies and/or operational measures that meet the requirements of 6 NYCRR Part 704.5 and Section 316(b) CWA, 40 CFR 125 Subpart J and will modify this SPDES permit to require the use of these selected technologies and/or operational measures.

### Technology Installation and Operation Plan

4. Within 3 months of the effective date of the permit modification requiring technologies and/or operational measures to meet requirements of 6 NYCRR Part 704.5 and Section 316(b) CWA, the permittee must submit an approvable *Technology Installation and Operation Plan*. This plan must include:
  - a. a schedule for installing and implementing the technologies and/or operational measures selected to meet requirements of 6 NYCRR Part 704.5 and Section 316(b) CWA ; and
  - b. the methodology for assessing the efficacy of these technologies and operational measures.

### Verification Monitoring Plan

5. Within 3 months of Department approval of the *Technology Installation and Operation Plan*, the permittee must submit an approvable *Verification Monitoring Plan*. This plan must include details of procedures to confirm that the necessary reductions in impingement and entrainment required by this permit are being achieved, and must include the following:
  - a. At a minimum, two years of in-plant impingement and entrainment monitoring to verify the full-scale performance of BTA measures.
  - b. A description of the frequency and duration of monitoring, the parameters to be monitored, and the basis for determining the parameters and the frequency and duration for monitoring.
  - c. A schedule of implementation.
  - d. A draft proposed Standard Operation Procedure (SOP) that describes the sampling protocols for these monitoring studies.

The plan and SOP must be updated as required by the Department. Upon receipt of Department approval the permittee must complete the *Verification Monitoring Plan* in accordance with the approved schedule. The *Verification Monitoring Plan* and approved schedule will become an enforceable condition of this SPDES permit.

6. Within 6 months of the completion of the Verification Monitoring Plan the permittee must submit an approvable report to the Energy Unit Leader that demonstrates compliance with 6 NYCRR Part 704.5 and Section 316(b) CWA.

### Contingency Plan to meet BTA performance goals

7. If upon completion of the Verification Monitoring Study the Department determines that the performance goals contained in Biological Monitoring Condition 3b(i) and (ii) above have not been met, the Department will notify the permittee. Within 3 months of such notification, the permittee shall submit an approvable plan to further reduce entrainment losses at the 59<sup>th</sup> St. Station. Upon Department approval, the plan and schedule shall become enforceable conditions of this permit.

### Additional Reporting Requirements

8. The permittee must maintain records of all data, reports and analysis pertaining to compliance with 6 NYCRR Part 704.5, and Section 316(b) CWA for a period no less than 10 years from the Effective Date of the Permit.

**General Requirement**

9. Modification of the facility cooling water intake must not occur without prior Department approval. The permittee must submit written notification, including detailed descriptions and plans, to the NYS DEC Energy Unit; the Director of the Bureau of Water Compliance Program; and both the Regional Permit Administrator and the Regional Water Engineer, Region 2 at least 60 days prior to any proposed change which would result in the alteration of the permitted operation, location, design, construction or capacity of the cooling water intake structure. The permittee must submit with the written notification a demonstration that the change reflects the best technology available for minimizing adverse environmental impacts pursuant to 6 NYCRR Part 704.5 and Section 316(b) CWA, 40 CFR Subpart 125.94. As determined by NYSDEC, a permit modification application in accordance with 6 NYCRR Part 621 may be required.

**SCHEDULE OF SUBMITTALS**

Outfall(s)	Parameter(s) Affected	Required Action	Due Date
003	N/A	<ol style="list-style-type: none"> <li>1. Submit an approvable <i>Impingement and Entrainment Study Plan</i></li> <li>2. Submit an approvable <i>Design and Construction Technology Review</i></li> <li>3. Submit a proposed suite of technologies or operational measures for Department review and consideration</li> <li>4. Submit an approvable <i>Technology Installation and Operation Plan</i></li> <li>5. Submit an approvable <i>Verification Monitoring Plan</i></li> <li>6. Submit an approvable report to the Energy Unit Leader that demonstrates compliance with 6 NYCRR Part 704.5 and 316(b) of the Clean Water Act</li> </ol>	<p>EDP + 3 months</p> <p>IM&amp;E report approval + 6 months</p> <p>DCTR approval + 1 month</p> <p>EDPM* + 3 months</p> <p>TIOP approval + 3 months</p> <p>VMP approval +6 months</p>

\*From the suite of technologies and/or operational measures submitted for review, the Department will select technologies and/or operational measures that meet the requirements of 6NYCRR Part 704, section 704.5, and Section 316(b) of the Clean Water Act. Subsequent to these selections the Department will modify this permit.

## STORMWATER POLLUTION PREVENTION REQUIREMENTS

### **NO EXPOSURE CERTIFICATION**

The permittee submitted a Conditional Exclusion for No Exposure Form on 9/22/2022, certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and/or stormwater runoff. 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 NYSDEC website.

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## 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 Department as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized Department representatives upon request.
2. **Compliance Deadlines** –The initial BMP plan was received by the Department on October 14, 1980. The BMP plan **shall be reviewed annually** and shall be modified whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. 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](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. At a minimum, the plan shall include the following BMPs:

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

## BMPs FOR INDUSTRIAL FACILITIES (continued)

5. **Stormwater 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<sup>2</sup>. (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](http://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 and/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 and/or isolation of the segment and/or B.A.T. treatment of wastewaters emanating from the segment.
7. **Facilities with Petroleum and/or Chemical Bulk Storage (PBS and CBS) Areas** - Compliance must be maintained with all applicable regulations including those involving releases, registration, handling and storage (6 NYCRR 595-599 and 612-614). Stormwater discharges from handling and storage areas should be eliminated where practical.
  - A. **Spill Cleanup** - All spilled or leaked substances must be removed from secondary containment systems as soon as practical and for CBS storage areas within 24 hours, unless written authorization is received from the Department. The containment system must be thoroughly cleaned to remove any residual contamination which could cause contamination of stormwater and the resulting discharge of pollutants to waters of the State. Following spill cleanup the affected area must be completely flushed with clean water three times and the water removed after each flushing for proper disposal in an on-site or off-site wastewater treatment plant designed to treat such water and permitted to discharge such wastewater. Alternately, the permittee may test the first batch of stormwater following the spill cleanup to determine discharge acceptability. If the water contains no pollutants at concentrations above the applicable effluent limits or Action Levels it may be discharged. Otherwise it must be disposed of as noted above. See *Discharge Monitoring* below for the list of parameters to be sampled for.
  - B. **Discharge Operation** - Stormwater must be removed before it compromises the required containment system capacity. Each discharge may only proceed with the prior approval of the permittee staff person responsible for ensuring SPDES permit compliance. Bulk storage secondary containment drainage systems must be locked in a closed position except when the operator is in the process of draining accumulated stormwater. Transfer area secondary containment drainage systems must be locked in a closed position during all transfers to or from these systems and must not be reopened unless the transfer area is clean of contaminants. Stormwater discharges from secondary containment systems should be avoided during periods of precipitation. A logbook shall be maintained on site noting the date, time and personnel supervising each discharge.

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

## BMPs FOR INDUSTRIAL FACILITIES (continued)

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

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

(i) *Bulk Storage Secondary Containment Systems:*

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

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

(ii) *Transfer Area Secondary Containment Systems:*

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

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

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

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

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



## MERCURY MINIMIZATION PROGRAM (MMP) - Type III

1. General - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below, to reduce mercury effluent levels with the goal of achieving the WQBEL of 0.7 ng/L.
2. MMP Elements - The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements as described in detail below:
  - a. Monitoring - Monitoring at outfall, influent and other locations tributary to compliance points may be performed using either USEPA Method 1631 or another sufficiently sensitive method, as approved under 40 CFR Part 136<sup>3</sup>. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate. Monitoring must be coordinated so that the results can be effectively compared between locations.

Minimum required monitoring is as follows:

- i. Plant Influent and/or Effluent – The permittee must collect samples at the location(s) and frequency as specified in the SPDES permit limitations table.
  - ii. Key Locations and Potential Mercury Sources – The permittee must sample *key locations*, chosen to identify *potential mercury sources*, at least annually.
  - iii. Decreased Monitoring Requirements - Facilities with EEQ at or below 12 ng/L are eligible for the following:
    - 1) Reduced requirements, through a permittee-initiated permit modification
      - a) Conduct influent monitoring, sampling semi-annually, in lieu of monitoring within the collection system, such as at *key locations*; and
      - b) Conduct effluent compliance sampling semi-annually.
    - 2) If a facility with reduced requirements reports discharges above 12 ng/L for two of four consecutive effluent samples, the Department may undertake a Department-initiated modification to remove the allowance of reduced requirements.
    - 3) Under the decreased permit requirements, the facility must continue to conduct an annual status report, as applicable in accordance with 2.c of this MMP, to determine if any waste streams have changed.
  - iv. Additional monitoring must be completed as required elsewhere in this permit (e.g., locations tributary to compliance points).
- b. Control Strategy - The control strategy must contain the following minimum elements:
    - i. Monitoring and Inventory/Inspections -
      - 1) Monitoring shall be performed as described in 2.a above. As mercury sources are found, the permittee must track down and minimize these sources.
      - 2) The permittee must inventory and/or inspect users of its system as necessary to support the MMP.
        - a) Potential mercury sources
          1. The permittee must maintain an inventory of *potential mercury sources*.
          2. The permittee must inspect *potential mercury sources* once every five years. Alternatively, the permittee may develop and implement an outreach program<sup>4</sup> which informs users of their responsibilities as *potential mercury sources*. The permittee must conduct the outreach program at least once every five years. The outreach program should be supported by a subset of site inspections.
          3. A file shall be maintained containing documentation demonstrating compliance with 2.b.i.2)a) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.
      - ii. Equipment and Materials – Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials

<sup>3</sup> Outfall monitoring must be conducted using the methods specified in Table 8 of *DOW 1.3.10*.

<sup>4</sup> For example, the outreach program could include education about sources of mercury and what to do if a mercury source is found.

## MERCURY MINIMIZATION PROGRAM (MMP) – Type III (Continued)

containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.

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

- c. **Status Report** - An annual status report must be completed and maintained on site, in accordance with the [Schedule of Additional Submittals](#), summarizing:
  - i. All MMP monitoring results for the previous reporting period;
  - ii. A list of known and *potential mercury sources*
    - 1) If the permittee meets the criteria for MMP Type IV, the permittee must notify the Department for a permittee-initiated modification;
  - iii. All actions undertaken, pursuant to the control strategy, during the previous reporting period;
  - iv. Actions planned, pursuant to the control strategy, for the upcoming reporting period; and
  - v. Progress towards achieving a dissolved mercury concentration of 0.70 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation and/or installation/modification of a treatment system).

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

3. **MMP Modification** - The MMP must be modified whenever:
  - a. Changes at the facility increase the potential for mercury discharges;
  - b. Effluent discharges exceed the current permit limitation(s); or
  - c. A letter from the Department identifies inadequacies in the MMP.

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

### DEFINITIONS:

**Key location** – a location within the collection/wastewater system (e.g. including but not limited to a specific manhole/access point, tributary sewer/wastewater connection, or user discharge point) identified by the permittee as a potential mercury source. The permittee may adjust key locations based upon sampling and/or best professional judgement.

**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 discharge.
- (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.

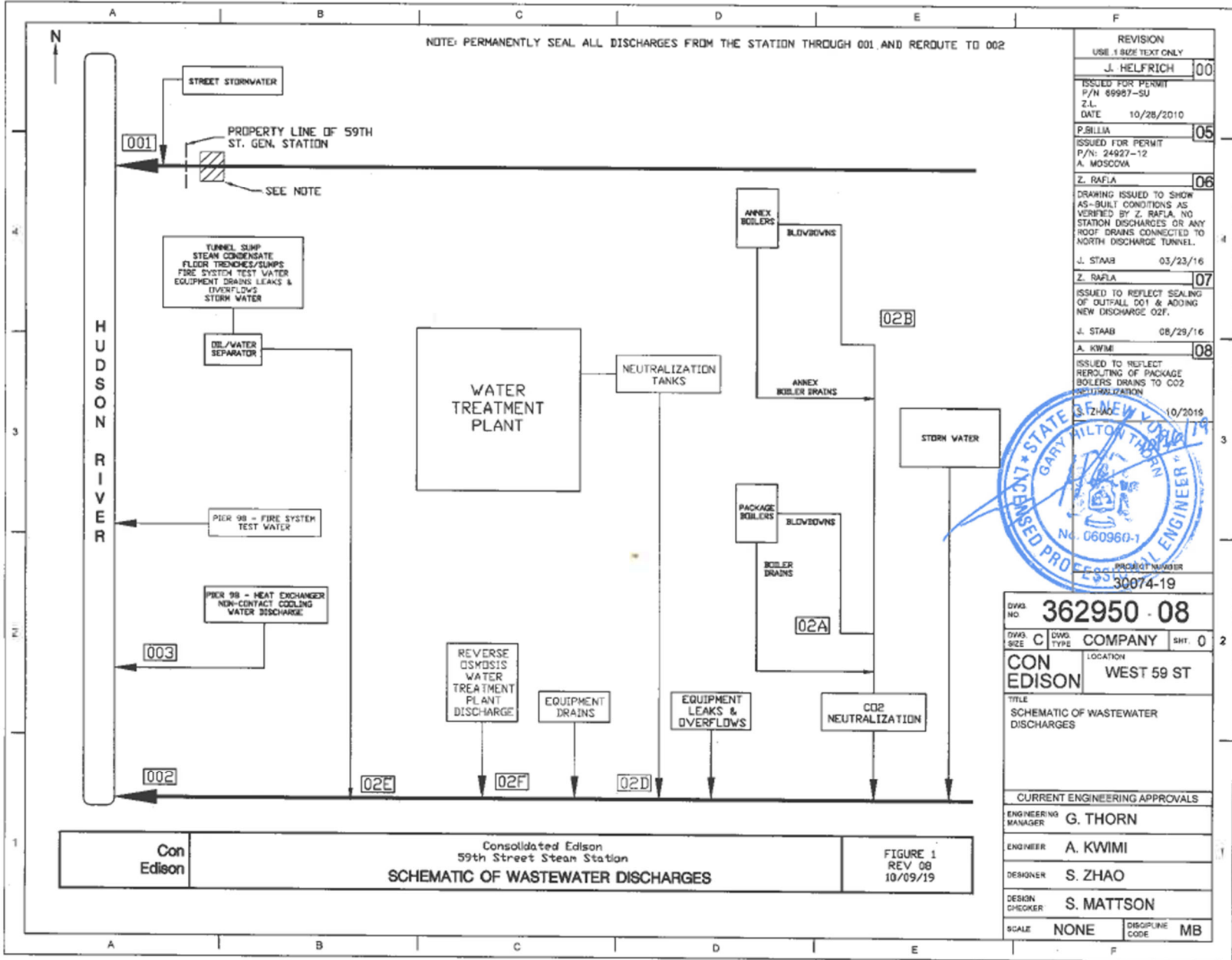
The signs shall have **minimum** dimensions of eighteen inches by twenty-four inches (18" x 24") and shall have white letters on a green background and contain the following information:

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

- (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 Department an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the Department, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.
- H. Water Treatment Chemicals (WTCs)  
New or increased use and discharge of a WTC requires prior Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The Department will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the Department. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.
1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized by the Department.
  2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure excessive levels of WTCs are not used.
  3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The *WTC Notification Form and WTC Annual Report Form* are available from the Department's website at: <http://www.dec.ny.gov/permits/93245.html>

# RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

- A. The monitoring information required by this permit shall be retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent.
- B. Discharge Monitoring Reports (DMRs): Completed DMR forms shall be submitted for each 1 month reporting period in accordance with the DMR Manual available on Department’s website.

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

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

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

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

Department of Environmental Conservation  
Regional Water Engineer, Region 2  
One Hunters Point Plaza, Long Island City, New York, 11101-5407 Phone: (718) 482-4933

- 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
	<u>BMP PLAN</u> The permittee shall review the completed BMP plan, submitted to this Department on October 14, 1980, on an annual basis. The BMP plan shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) actual releases indicate the plan is inadequate, or (c) a letter from the Department identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions must be submitted to the Regional Water Engineer within 30 days.	EDP + 6 Months, Annually thereafter on January 28 <sup>th</sup>
002	<u>WHOLE EFFLUENT TOXICITY (WET) TESTING</u> 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 your WET DMRs and sent to the <a href="mailto:WET@dec.ny.gov">WET@dec.ny.gov</a> email address.	Within 60 days following the end of each monitoring period
002	<u>WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM</u> The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
002	<u>MERCURY MINIMIZATION PLAN</u> The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	<b><i>Maintained Onsite</i></b> EDP + 12 months, annually thereafter

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

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

# **SPDES Permit Fact Sheet**

## **Consolidated Edison Company of New York, Inc.**

### **59th Street Station**

### **NY0005134**

Draft



Department of  
Environmental  
Conservation



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Draft

## Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) permit renewal with changes requested by the permittee has been drafted for the 59th Street Station. The changes to the permit are summarized below:

- **General**
  - Updated permit format, definitions, and general conditions
  - Updated Toxic Class (TX) from N to T to reflect inclusion of mercury limit for Outfall 002
  - Updated Water Index Number (WIN) from HR 6.5 to HR (portion 1) to reflect appropriate WIN under 6 NYCRR 864.6
  - Added Item No. (864 – 1) to cover page of permit
  - Updated permittee attention and contact information
  - Updated primary outfall from Outfall 001 (permanently closed) to Outfall 002
  - Removed Additional Requirements (Special Conditions) #3, #4, #5, #6, and #9
  - Updated Additional Requirements (Special Conditions) #8 to reflect sufficiently sensitive test procedures under 40 CFR 136
  - Added Special Conditions – Biological Monitoring Requirements to permit
  - Added MMP Type III requirements
  - Updated treatment schematic to reflect request included in permittee-initiated modification
  - Added Schedule of Additional Submittals for BMP Plan; Whole Effluent Toxicity (WET) Testing; Water Treatment Chemical (WTC) Annual Report Form; and Mercury Minimization Plan
- **Outfall 001**
  - Removed Outfall 001 permit limits table as outfall has been permanently closed
- **Outfall 002 (and internal outfalls)**
  - Added WET testing action levels to Outfall 002 with appropriate footnotes
  - Added Mercury, Total limit of 50 ng/L to Outfall 002
  - Updated Outfall 02A language from “Boiler Blowdown” to “Package Boiler drains routed to CO2 Blowdown Neutralization System via the Package Boiler Heat Exchanger” to reflect request included in permittee-initiated modification
  - Added Outfall 02F (reverse osmosis water treatment plant discharge) with appropriate effluent limitations to reflect request included in permittee-initiated modification
- **Outfall 003**
  - Added influent and effluent monitoring for Copper, Total
  - Added influent and effluent monitoring for Lead, Total

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

## Administrative History

5/1/2011 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 4/30/2016. The 2011 permit, along with all subsequent modifications, has formed the basis of this permit.

10/29/2015 The permittee submitted a timely and sufficient renewal application.

- 3/7/2016 Permit was modified to include continuous pH and temperature monitoring, updated outfall descriptions, fire suppression system testing discharges, addition of an outfall from demineralization plant, and conditions regarding boiler draining.
- 4/1/2016 Permit was modified to correct monitoring locations and sampling frequency for Outfall 002 and 02D.
- 5/1/2016 The current permit was extended pursuant to SAPA<sup>1</sup>.
- 10/30/2019 The permittee submitted a request to modify the permit to reroute the Station's package boiler drains through the CO<sub>2</sub> blowdown neutralization system via the package boiler heat exchanger.
- 11/2/2020 The Department issued a Request for Information (RFI) to modify and renew the SPDES permit due to the permittee requesting to reroute the Station's package boiler drains through the CO<sub>2</sub> blowdown neutralization system via the package boiler heat exchanger.
- 1/29/2021 The permittee submitted an NY-2C permit application.

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

## Facility Information

This is an industrial facility (SIC code(s) 4961) that produces steam, for sendout for customer use, which is produced by boilers that are fired by gas or oil. The facility also has a combustion turbine for generating electricity for peak loads. The primary source of revenue for this facility is steam. Wastewater consists of process wastewater, stormwater, and non-contact cooling water.

### *Cooling Water Intake Structure (CWIS) Biological Monitoring*

The facility currently uses a once-through cooling system to withdraw water from the Hudson River using a cooling water intake structure and is subject to the requirements of 6 NYCRR 704.5. Appendix A contains the Biological Fact Sheet with details on the permit requirements related to the CWIS.

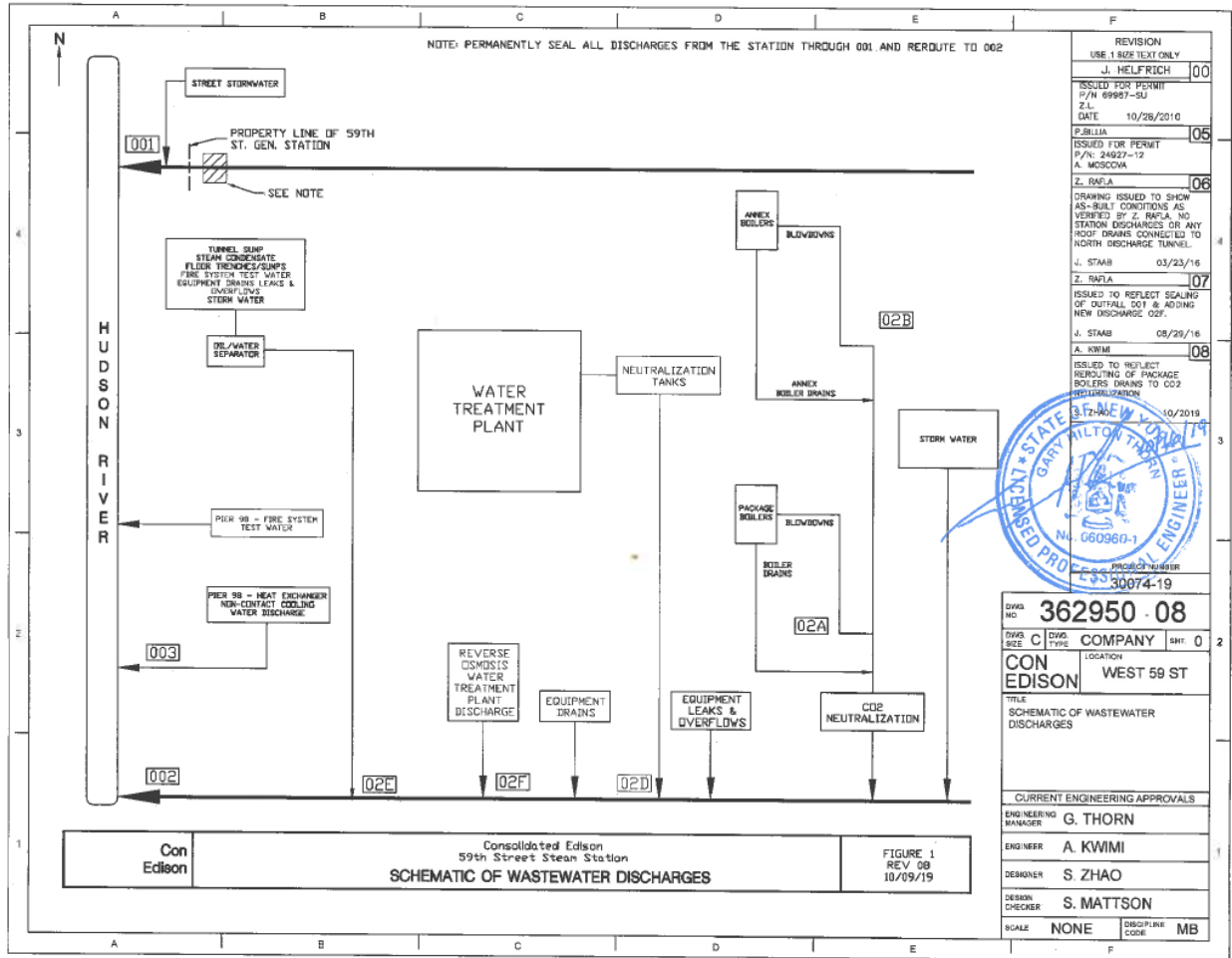
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<sup>1</sup> State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(l)

### Site Overview







### Enforcement History

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

### Existing Effluent Quality

The [Pollutant Summary Table](#) presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports and the application submitted by the permittee for the period 7/31/2016 to 6/30/2021. [Appendix Link](#)

### Interstate Water Pollution Control Agencies

Outfall(s) 002 and 003 are located within the Interstate Environmental Commission (IEC) compact area. [Appendix Link](#)

## Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001		<b>Former Outfall 001 – Removing from Permit</b>	
002	4961	Combined Discharge of Boiler Blowdowns, Waste Neutralization Tanks, Tunnel Sump Steam Condensate, Floor Trenches, Fire System Test Water, Equipment Leaks & Overflow, Stormwater, Equipment Drains	Hudson River, Class I
02A	4961	Package Boiler Drains Routed to CO2 Neutralization System Through Package Boiler Heat Exchanger; Package Boiler Blowdown	Internal Outfall to Outfall 002
02B	4961	Annex Boiler Blowdown	Internal Outfall to Outfall 002
02D	4961	Waste Neutralization Tank Discharge	Internal Outfall to Outfall 002
02E	4961	Tunnel Sump Steam Condensate, Floor Trenches, Fire System Test Water, Equipment Leaks & Overflow, Stormwater	Internal Outfall to Outfall 002
02F	4961	Reverse Osmosis Water Treatment Plant Discharge	Internal Outfall to Outfall 002
003	4961	Heat Exchanger Non-Contact Cooling Water	Hudson River, Class I

**Reach Description:** The Hudson River (portion 1) is in the Lower Hudson River basin and is an estuary. The segment of the Hudson River at the point of discharge is classified as I (6 NYCRR 864.6 – Table I – Item 1). This classification is located from Battery to New York-Bronx County line within the boundaries of New York State.

See the [Outfall and Receiving Water Summary Table](#) and [Appendix](#) for additional information.

### Impaired Waterbody Information

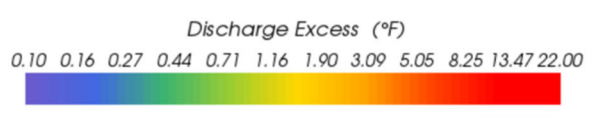
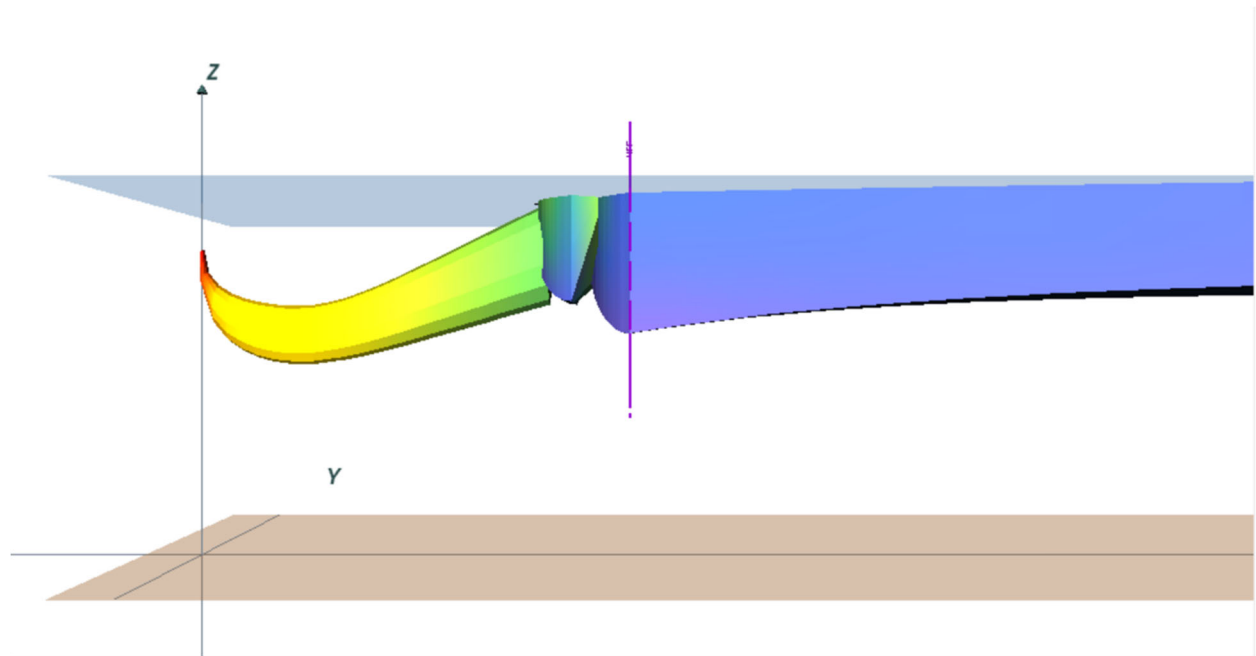
The Hudson River segment (PWL No. 1301-0006) was first listed on the 1998 [New York State Section 303\(d\) List](#) of Impaired/TMDL Waters as impaired due to PCBs and other toxics from contaminated sediment. The segment continues to be listed as of the 2018 NYS Section 303(d) List. A TMDL has not been developed to address the impairment and, therefore, there are no applicable wasteload allocations (WLAs) for this facility.

### Critical Receiving Water Data & Mixing Zone

Consistent with TOGS 1.3.1, the outfall information submitted in the application and detailed mixing zone form was used to develop a CORMIX mixing zone model to establish dilution ratios for the water quality analysis for Outfall 003 which is a subsurface once-through cooling water



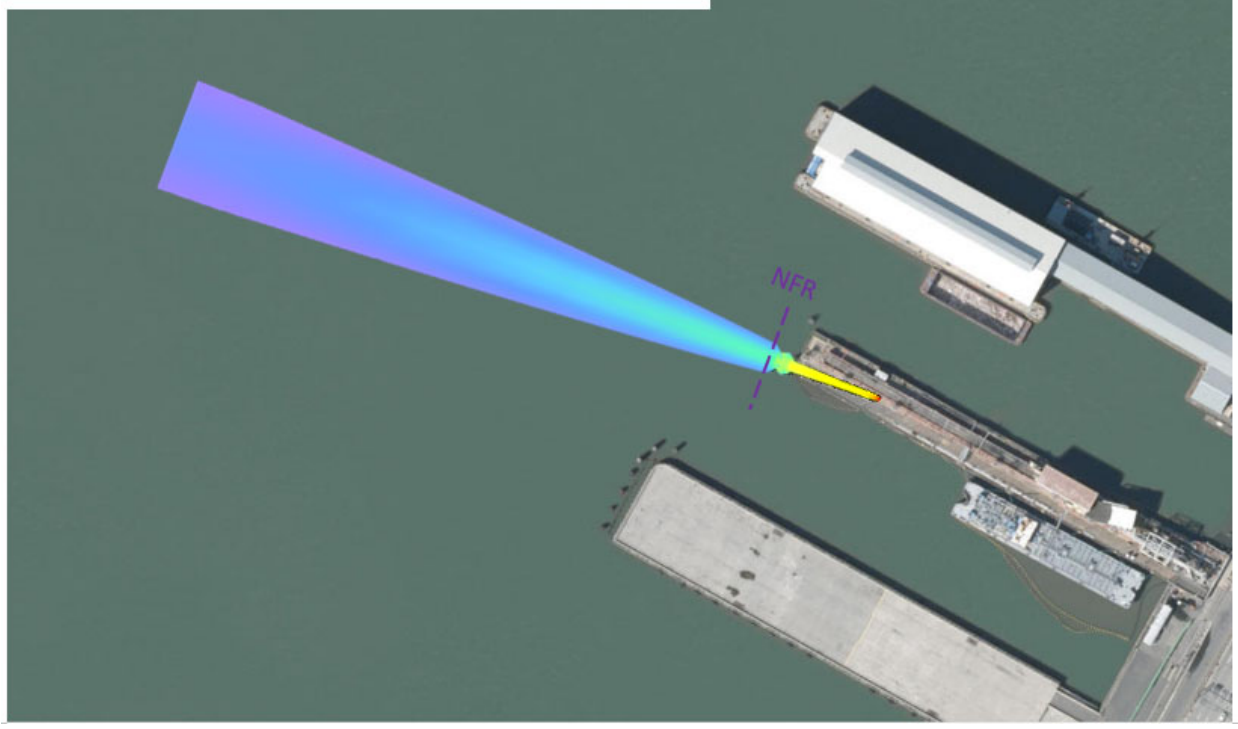
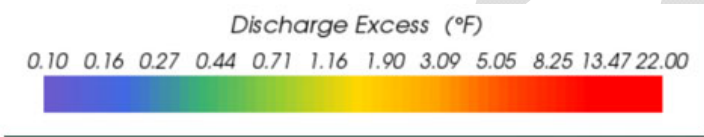
discharge. The model showed the mixing is dominated by either the positive buoyancy of the discharge or the upward vertical orientation of the discharge port leading to surface interaction.



**CORMIX.IndSPDES.NY0005134.2022-09-12.CurrentLimit104FCriticalCondi**

Flow Class: IPV3      Origin: Ambient Bottom  
 CORMIX1 Simulation  
 Distortion Scale: Y:X = 2.8    Z:X = 4  
 Visualization up to X = 295 m (out of ROI X = 295 m)

- Plume Centerline
- Regulatory Mixing Zone (RMZ)
- End of Near Field Region (NFR)
- Comix Module Boundary (MOD)





Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
002	10:1	10:1	10:1	TOGS 1.3.1
003	57.4:1	74.8:1	74.8:1	CORMIX

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

## Permit Requirements

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

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

Best Practicable Control Technology Currently Available (BPT), Best Conventional Pollutant Control Technology (BCT), Best Available Technology Economically Achievable (BAT), and New Source Performance Standards (NSPS) limitations are based on [Effluent Limitation Guidelines](#) developed by USEPA for specific industries<sup>2</sup>. For this facility there are no promulgated effluent guidelines. [Appendix Link](#)

<sup>2</sup> As promulgated under 40 CFR Parts 405 - 471

### 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 presence of substances in the effluent for which ambient water quality criteria do not exist.
- 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 outside of the Great Lakes basin, the permit requires chronic WET testing. WET testing action levels of 3 TU<sub>a</sub> and 10 TU<sub>c</sub> have been included in the permit for each species. The acute action levels for each species represent the acute dilution ratio times a factor of 0.3. The chronic action levels represent the chronic dilution ratio. Samples will be collected quarterly during years ending in 4 and 9.

### Anti-backsliding

The limitations contained in the permit are at least as stringent as the previous permit limits and there are no instances of backsliding. [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)<sup>3</sup> determination. [Appendix Link](#)

### Discharge Notification Act Requirements

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

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

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

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

### Stormwater Pollution Prevention Requirements

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

On 9/22/2022, the permittee submitted a Conditional Exclusion for No Exposure Form, certifying that all industrial activities and materials are completely sheltered from exposure. This condition must be maintained for the exclusion to remain applicable. The schedule of submittals includes a due date for re-certification every five years as required by 40 CFR 122.26(g)(iii). This requirement is new.

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<sup>3</sup> As prescribed by 6 NYCRR Part 617

## Mercury<sup>4</sup>

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](#)

Since the facility is outside of the Great Lakes and is an EPA Major, Class 03 Industrial, the permit includes requirements for the implementation of MMP Type III. This requirement is new.

Based on 1 data point(s) of 19.9 ng/L, collected as part of the NY-2C application, the facility is expected to meet the new daily max permit limit of 50 ng/L (with monthly sampling frequency). The limit represents the general level currently achievable (GLCA). The data collected will be used to establish an additional 12-month rolling average effluent limit during the next permit review.

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

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

## Schedule(s) of Additional Submittals

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

- BMP Plan
- Whole Effluent Toxicity (WET) Testing
- Water Treatment Chemical (WTC) Annual Report Form
- Mercury Minimization Plan

## Special Conditions

Special Conditions #1, #2, and #8, contained in the previous permit, continue to be applicable to the permit due to the processes being performed at the facility. Special Condition #7, contained in the previous permit, continues to be applicable to the permit as the facility is located within the Interstate Environmental Commission (IEC) compact area (6 NYCRR 750-2.1(d)).

Special Condition #3, contained in the previous permit, is not included in this draft permit because the requirement to submit Water Treatment Chemical Notification Forms is required under the General Requirements section of this draft permit.

Special Conditions #4, #5, and #6, contained in the previous permit, are not included in this draft permit because the permittee will be required to install BTA.

Special Condition #9, contained in the previous permit, is not included in this draft permit as Outfall 001 has been permanently closed and no longer exists on-site.

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<sup>4</sup> In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.

## 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	40° 46' 40" N	73° 59' 50" W	Hudson River	I	H (portion 1) PWL: 1301-0006	13 / 01	-	Not Applicable (TOGS 1.3.1, for ponded or tidal waterbodies)			Monitor	10:1	10:1	10:1
02A	Internal Outfall	Internal Outfall	-	-	-	-	-	-	-	-	-	-	-	-
02B	Internal Outfall	Internal Outfall	-	-	-	-	-	-	-	-	-	-	-	-
02D	Internal Outfall	Internal Outfall	-	-	-	-	-	-	-	-	-	-	-	-
02E	Internal Outfall	Internal Outfall	-	-	-	-	-	-	-	-	-	-	-	-
02F	Internal Outfall	Internal Outfall	-	-	-	-	-	-	-	-	-	-	-	-
003	40° 46' 40" N	73° 59' 50" W	Hudson River	I	H (portion 1) PWL: 1301-0006	13 / 01	-	Not Applicable (TOGS 1.3.1, for ponded or tidal waterbodies)			Monitor	54.7:1	74.8:1	74.8:1

## POLLUTANT SUMMARY TABLE

### Outfall 001 (discontinued)

Outfall #	Description of Wastewater: Stormwater and Flood Pumps														
	Type of Treatment: N/A														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>5</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
<b>General Notes:</b> Existing discharge data from 7/31/2016 to 6/30/2021 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	MGD	Daily Max	Monitor	-	-	Monitor	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	<b>Discontinued</b>	
		Monthly Avg	Monitor	-	-	Monitor	750-1.13 Monitor								
No flow rate data was reported due to a lack of discharge over the entire 5-year period. Outfall 001 has been permanently closed by the permittee. Therefore, this limit is being discontinued.															
pH	SU	Minimum	6.0	-	-	6.0	TOGS 1.2.1	The normal range shall not be extended by more than one-tenth (0.1) of a pH unit.				703.3	-	<b>Discontinued</b>	
		Maximum	9.0	-	-	9.0									
No pH data was reported due to a lack of discharge over the entire 5-year period. Outfall 001 has been permanently closed by the permittee. Therefore, this limit is being discontinued.															
Temperature	°F	Daily Max	Monitor	-	-	Monitor	750-1.13 Monitor	Narrative (Estuary): The water temperature at the surface of an estuary shall not be raised to more than 90F at any point				704.2	-	<b>Discontinued</b>	
		No temperature data was reported due to a lack of discharge over the entire 5-year period. Outfall 001 has been permanently closed by the permittee. Therefore, this limit is being discontinued.													

<sup>5</sup> Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	002	Description of Wastewater: Combined Discharge, Equipment Drains, Leaks, and Overflows, Boiler Drains, Stormwater, and Designated Sub-Outfalls													
		Type of Treatment: N/A													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>6</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
<b>General Notes:</b> Existing discharge data from 7/31/2016 to 6/30/2021 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	MGD	Daily Max	Monitor	1.9 Actual Max	60/0	Monitor	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Monitor
		Monthly Avg	Monitor	0.20 Actual Avg	60/0	Monitor	750-1.13 Monitor								
Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.															
pH	SU	Minimum	6.0	6.1 Actual Min	60/0	6.0	TOGS 1.2.1	The normal range shall not be extended by more than one-tenth (0.1) of a pH unit.					703.3	-	TBEL
		Maximum	9.0	8.7 Actual Max	60/0	9.0	TOGS 1.2.1								
Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution an effluent limitation equal to the TBEL is reasonably protective of the WQS.															
Temperature	°F	Daily Max	Monitor	90 Actual Max	60/0	Monitor	750-1.13 Monitor	Narrative (Estuary): The water temperature at the surface of an estuary shall not be raised to more than 90F at any point					704.2	-	Monitor
		Monthly Avg	Monitor	59.1 Actual Avg	59/0	Monitor	750-1.13 Monitor								
Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions. This requirement is continued from the previous permit.															
Mercury, Total	ng/L	Daily Max	-	19.9	1/0	-	-	-	-	0.7	H(FC)	50	GLCA	-	DOW 1.3.10
	See <a href="#">Mercury section of this factsheet</a> .														
<b>Additional Pollutants Detected</b>															
Chromium, Total	mg/L	-	-	0.0007	1/0	-	-	-	0.0004	0.05	A(C)	No Reasonable Potential	-	-	No Limitation
	Chromium, Total was detected in the effluent as reported in the NY-2C application. No water quality standard exists for this parameter for Class I waterbodies. The WQS of Chromium (hexavalent), which applies to the acid-soluble form and is a subset of Chromium, Total, has been listed above. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified. No limitation is being added to the permit.														

<sup>6</sup> Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	Description of Wastewater: Combined Discharge, Equipment Drains, Leaks, and Overflows, Boiler Drains, Stormwater, and Designated Sub-Outfalls														
	Type of Treatment: N/A														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>6</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Selenium, Total	mg/L	-	-	0.307	1/0	-	-	-	-	-	-	-	-	-	<b>No Limitation</b>
	Selenium, Total was detected in the effluent as reported in the NY-2C application. No water quality standard exists for this parameter for Class I waterbodies. Therefore, no limitation is being added to the permit.														
Chloroform	ug/L	-	-	12	1/0	-	-	-	-	-	-	-	-	-	<b>No Limitation</b>
	Chloroform was detected in the effluent as reported in the NY-2C application. No water quality standard exists for this parameter for Class I waterbodies. Therefore, no limitation is being added to the permit.														

Outfall 02A

Outfall #	Description of Wastewater: Package boiler drains routed to CO2 blowdown neutralization system via the package boiler heat exchanger														
	Type of Treatment: N/A														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>7</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
<b>General Notes:</b> Existing discharge data from 7/31/2016 to 6/30/2021 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	41674 Actual Max	58/0	<b>Monitor</b>	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	<b>Monitor</b>
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
Total Suspended Solids	mg/L	Daily Max	100	3.96	24/34	<b>100</b>	BPJ	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.					703.2	-	<b>TBEL</b>
		Monthly Avg	30	4.05	3/55	<b>30</b>	BPJ								
	Effluent limitation guidelines (ELGs) as defined in 40 CFR Part 423 were previously applied to the discharge of this facility. However, the applicability defined in 40 CFR 423.10 states that ELGs only "apply to discharges resulting from the operation of a generating unit by an establishment whose generation of electricity is the predominant source of revenue or principal reason for operation..." This facility's predominant source of revenue comes from steam production for sendout to customers and therefore, the ELGs do not apply. However, the existing limitations will continue to be applied to be protective of water quality.														

<sup>7</sup> Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)



Outfall #	02B	Description of Wastewater: Boiler Blowdown													
		Type of Treatment: N/A													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>8</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
<b>General Notes:</b> Existing discharge data from 7/31/2016 to 6/30/2021 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	144175 Actual Max	48/0	<b>Monitor</b>	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	<b>Monitor</b>	
		Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.													
Total Suspended Solids	mg/L	Daily Max	100	6.50	18/29	<b>100</b>	BPJ	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	<b>TBEL</b>	
		Monthly Avg	30	8.539	4/43	<b>30</b>	BPJ								
Effluent limitation guidelines (ELGs) as defined in 40 CFR Part 423 were previously applied to the discharge of this facility. However, the applicability defined in 40 CFR 423.10 states that ELGs only "apply to discharges resulting from the operation of a generating unit by an establishment whose generation of electricity is the predominant source of revenue or principal reason for operation..." This facility's predominant source of revenue comes from steam production for sendout to customers and therefore, the ELGs do not apply. However, the existing limitations will continue to be applied to be protective of water quality.															

<sup>8</sup> Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	02D	Description of Wastewater: Waste Neutralization Tanks (Demineralization System)													
		Type of Treatment: N/A													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>9</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
<b>General Notes:</b> Existing discharge data from 7/31/2016 to 6/30/2021 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	295931 Actual Max	60/0	<b>Monitor</b>	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	<b>Monitor</b>	
		Monthly Avg	Monitor	-	-	<b>Monitor</b>	750-1.13 Monitor								
Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.															
Total Suspended Solids	mg/L	Daily Max	100	28.85	59/0	<b>100</b>	BPJ	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	<b>TBEL</b>	
		Monthly Avg	30	13.79	54/5	<b>30</b>	BPJ								
Effluent limitation guidelines (ELGs) as defined in 40 CFR Part 423 were previously applied to the discharge of this facility. However, the applicability defined in 40 CFR 423.10 states that ELGs only "apply to discharges resulting from the operation of a generating unit by an establishment whose generation of electricity is the predominant source of revenue or principal reason for operation..." This facility's predominant source of revenue comes from steam production for sendout to customers and therefore, the ELGs do not apply. However, the existing limitations will continue to be applied to be protective of water quality.															

<sup>9</sup> Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	02E	Description of Wastewater: Tunnel Sump, Steam Condensate, Stormwater, Equipment Drains, Leaks, and Overflows, Fire System Test Water, and Floor Trenches/Sumps													
		Type of Treatment: N/A													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>10</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
<b>General Notes:</b> Existing discharge data from 7/31/2016 to 6/30/2021 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	50000 Actual Max	60/0	<b>Monitor</b>	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.	703.2	-	<b>Monitor</b>				
		Monthly Avg	Monitor	4890.55 Actual Avg	60/0	<b>Monitor</b>	750-1.13 Monitor								
Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.															
Oil & Grease	mg/L	Daily Max	15	10	1/59	<b>15</b>	TOGS 1.2.1	Narrative: No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.	703.2	-	<b>TBEL</b>				
		Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution an effluent limitation equal to the TBEL is reasonably protective of the WQS.													
Total Suspended Solids	°F	Daily Max	100	18.15	59/1	<b>100</b>	BPJ	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.	703.2	-	<b>TBEL</b>				
		Monthly Avg	30	5.77	52/8	<b>30</b>	BPJ								
Effluent limitation guidelines (ELGs) as defined in 40 CFR Part 423 were previously applied to the discharge of this facility. However, the applicability defined in 40 CFR 423.10 states that ELGs only "apply to discharges resulting from the operation of a generating unit by an establishment whose generation of electricity is the predominant source of revenue or principal reason for operation..." This facility's predominant source of revenue comes from steam production for sendout to customers and therefore, the ELGs do not apply. However, the existing limitations will continue to be applied to be protective of water quality.															

<sup>10</sup> Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	02F	Description of Wastewater: Reverse Osmosis water treatment plant discharge													
		Type of Treatment: N/A													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>11</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
<b>General Notes:</b> Outfall 02F is a new outfall proposed by the permittee for reverse osmosis water treatment plant discharge. All applicable water quality standards and TBELs were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	-	-	-	<b>Monitor</b>	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	<b>Monitor</b>
		Monthly Avg	-	-	-	<b>Monitor</b>	750-1.13 Monitor								
Flow will be monitored for informational purposes and to calculate pollutant loadings.															
Total Dissolved Solids	-	-	-	-	-	-	-	-	-	-	-	-	-	-	<b>No Limitation</b>
While Total Dissolved Solids is a pollutant of concern for reverse osmosis treatment, no water quality standard exists for this pollutant for Class I waterbodies. Therefore, no limitation is being added to the permit.															

<sup>11</sup> Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	Description of Wastewater: Heat Exchanger Non-Contact Cooling Water														
	Type of Treatment: N/A														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>12</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
<b>General Notes:</b> Existing discharge data from 7/31/2016 to 6/30/2021 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	MGD	Daily Max	Monitor	4.32 Actual Max	26/0	Monitor	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	Monitor	
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
Temperature	°F	Daily Max	104	101 Actual Max	26/0	-	-	-	Narrative (Estuary): The water temperature at the surface of an estuary shall not be raised to more than 90F at any point.			704.2	-	TBEL	
	The discharge is a subsurface thermal discharge consisting of heat exchanger non-contact cooling water (NCCW). To continue to achieve the narrative water quality standards specified in 6 NYCRR Part 704, the permit contains an effluent temperature limit of 104 °F. This requirement is being continued from the previous permit. In accordance with TOGS 1.3.1, the Department performed a CORMIX analysis reflecting both the critical effluent flow rate of 4.32 MGD and critical ambient conditions reflecting the period of approximately one hour after slack tide. The CORMIX analysis confirmed that the previous thermal limit, which is continuing in this permit, meets the water quality criteria per 6 NYCRR 704.2(b)(5) and, thus, meets the thermal criteria specified in 6 NYCRR 704.1.														
<b>Additional Pollutants Detected</b>															
Copper, Total	mg/L	-	-	0.021	1/0	Monitor	750-1.13 Monitor	0.021	0.021	0.0034	A(C)	-	-	-	Monitor
	Copper, Total was detected in the effluent as reported in the NY-2C application. The existing effluent quality is representative of the ambient conditions. Based on information provided by the permittee, it is presumed that the detected Copper, Total reported in the NY-2C application is resulting from its presence in the intake water and not occurring because of a treatment process, of which there are none for Outfall 003, or from the materials that make up the heat exchanger. Therefore, no WQBEL is specified. Monitoring of the influent and effluent will be included in the permit to determine whether there is a net increase of Copper, Total in the Hudson River.														
Lead, Total	mg/L	-	-	0.007	1/0	Monitor	750-1.13 Monitor	0.007	0.007	0.008	A(C)	-	-	-	Monitor
	Lead, Total was detected in the effluent as reported in the NY-2C application. The existing effluent quality is representative of the ambient conditions. Based on information provided by the permittee, it is presumed that the detected Lead, Total reported in the NY-2C application is resulting from its presence in the intake water and not occurring because of a treatment process, of which there are none for Outfall 003, or from the materials that make up the heat exchanger. Therefore, no WQBEL is specified. Monitoring of the influent and effluent will be included in the permit to confirm that there is no net increase of Lead, Total in the Hudson River.														
Selenium, Total	mg/L	-	-	0.313	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Selenium, Total was detected in the effluent as reported in the NY-2C application. No water quality standard exists for this parameter for Class I waterbodies. Therefore, no limitation is being imposed.														

<sup>12</sup> Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

## Appendix A: Biological Fact Sheet

### **Biological Fact Sheet - Cooling Water Intake Structure** **Bureau of Ecosystem Health, Energy Unit**

**Name of Facility:** 59<sup>th</sup> Street Generating Station  
**Owner/Operator:** Consolidated Edison Company of NY Inc.  
**SPDES #:** NY0005314  
**Location:** New York County, New York  
City of New York  
Hudson River

#### **1. Description of Facility**

The Consolidated Edison's 59<sup>th</sup> Street Station (59<sup>th</sup> St.) is a facility that produces steam for third party use. In addition, the facility operates as a "peaking" electric generating facility. The facility uses a cooling water intake structure (CWIS) capable of withdrawing up to 17.28 million gallons per day (MGD) of water from the Hudson River to meet facility cooling needs. River water is used in a closed loop heat exchanger system. Once the river water has been used in the cooling process, it is permitted to be discharged back to the Hudson River at a maximum temperature of 104°F.

#### **2. Ecological Resource**

The Hudson River in the vicinity of 59th St. is classified as Class I Saline Surface Water. The best usages of Class I waters are secondary contact recreation and fishing. These waters shall be suitable for fish, shellfish, and wildlife propagation and survival. Although no biological studies have previously been conducted at 59th St., some of the fish species that could be expected to occur in the vicinity of the CWIS include Atlantic tomcod, bay anchovy, Atlantic menhaden, alewife, blueback herring, Northern pipefish, windowpane flounder, winter flounder, weakfish, striped bass, and shortnose and Atlantic sturgeon. In addition to these fish species, lobster and blue crab may also occur.

#### **3. Discussion of Best Technology Available**

According to 6 NYCRR 704.5 - *Intake structures* and Section 316(b) of the federal Clean Water Act (CWA), the location, design, construction, and capacity of cooling water intake structures must reflect the "best technology available" (BTA) for minimizing adverse environmental impact. The identification of BTA is a technology driven determination; however, the final decision may also consider cost.

#### **4. Determination of Best Technology Available**

After evaluating all the available alternatives capable of being implemented at 59<sup>th</sup> St., the Department will determine the technology or combination of technologies and/or operational measures that will meet the requirements of 6 NYCRR 704.5 and §316(b) CWA.

#### **5. Monitoring Requirements**

Biological Monitoring requirement #1 requires Consolidated Edison to conduct an impingement and entrainment characterization study to identify organisms impinged and entrained at the 59<sup>th</sup> St. CWIS. Once the Department makes the BTA determination for 59<sup>th</sup> St., Biological Monitoring requirement #5 requires Consolidated Edison to conduct a verification monitoring study, ensuring that the required reductions in impingement and entrainment are met.

#### **6. Legal Requirements**

The requirements for the cooling water intake structure in this State Pollutant Discharge Elimination System permit are consistent with the policies and requirements embodied in the New York State Environmental Conservation Law, in particular - Sections.1-0101.1.; 1-0101.2.; 1-0101.3.b., c.; 1-0303.19.; 3-0301.1.b., c., i.,

s. and t.; 11-0107.1; 11-0303.; 11-0535.2; 11-1301.; 11-1321.1.; 17-0105.17.; 17-0303.2., 4.g.; 17-0701.2., 6 NYCRR 704.5; Section 316(b) CWA, and the rules thereunder, specifically 40 CFR Parts 122 and 125.

## **8. Summary of Draft Permit Changes**

### **Additions**

Biological Monitoring Requirement 1	Requires permittee to conduct an Impingement and Entrainment Characterization study
Biological Monitoring Requirement 2	Requires permittee to submit a Design and Construction Technology Review
Biological Monitoring Requirement 3	Requires permittee to submit a Proposed Suite of Technologies and Operational Measures
Biological Monitoring Requirement 4	Requires permittee to submit a Technology Installation and Operation Plan
Biological Monitoring Requirement 5	Requires permittee to conduct a Verification Monitoring Study
Biological Monitoring Requirement 6	Requires permittee to submit a Verification Monitoring Study Report
Biological Monitoring Requirement 7	Provides for a contingency plan if reductions in impingement and entrainment are not met
Biological Monitoring Requirement 8	Requires permittee to maintain records for 10 years
Biological Monitoring Requirement 9	Prohibits modification to the CWIS without prior Departmental approval

## **9. References**

6 NYCRR 701.13 Class I saline surface waters.

6 NYCRR 704.5 Intake Structures

33 U.S.C. 1251 §316(b) <https://www.epa.gov/sites/default/files/2017-08/documents/federal-water-pollution-control-act-508full.pdf>

40 CFR Parts 122 and 125 <https://www.epa.gov/npdes/npdes-regulations>

Consolidated Edison Response to a Request for Information. October 1, 2021.

Document prepared by Colleen Kimble and last revised on September 26, 2022.

## Appendix B: Regulatory and Technical Basis of Permit Authorizations

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

### Regulatory References

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

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

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

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

### Outfall and Receiving Water Information

#### Impaired Waters

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



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

### Interstate Water Pollution Control Agencies

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

### Existing Effluent Quality

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

### Permit Requirements

#### Basis for Effluent Limitations

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

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

#### Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(l) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this factsheet. Consistent with current case law<sup>13</sup> and USEPA interpretation<sup>14</sup> anti-backsliding requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

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

<sup>14</sup> U.S. EPA, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; 65 Fed. Reg. 31682, 31704 (May 18, 2000); Proposed Water Quality Guidance for the Great Lakes System, 58 Fed. Reg. 20802, 20837 & 20981 (April 16, 1993)

## 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. Water quality standards can be found under 6 NYCRR Parts 700-704. The limitations must be stringent enough to ensure that water quality standards are met and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1,

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

#### Mixing Zone Analyses

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

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

#### Critical Flows

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

#### Reasonable Potential Analysis (RPA)

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

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

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

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

A Watershed Maximum Daily Load (WMDL) may be developed by the Department to account for the cumulative effect of multiple discharges of conservative toxic pollutants to ensure water quality standards are met in downstream segments. The WMDL uses a simple dilution model, assuming full mix in the receiving stream, to calculate the maximum allowable pollutant load that can be discharged and still meet water quality standards during critical low flow in downstream segments such as those with sensitive receptors (e.g. public water supply) or higher water classification. WQBELs are established to ensure that the cumulative mass load from point source discharges does not exceed the maximum allowable load to ensure permit limits are protective of water quality.

#### *Whole Effluent Toxicity (WET) Testing:*

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

1. There is the presence of substances in the effluent for which ambient water quality criteria do not exist.
2. There are uncertainties in the development of TMDLs, WLAs, and WQBELs, caused by inadequate ambient and/or discharge data, high natural background concentrations of pollutants, available treatment technology, and other such factors.
3. There is the presence of substances for which WQBELs are below analytical detectability.
4. There is the possibility of complex synergistic or additive effects of chemicals, typically when the number of metals or organic compounds discharged by the permittee equals or exceeds five.
5. There are observed detrimental effects on the receiving water biota.
6. Previous WET testing indicated a problem.
7. POTWs which exceed a discharge of 1 MGD. Facilities of less than 1 MGD may be required to test, e.g., POTWs <1 MGD which are managing industrial pretreatment programs.

#### *Minimum Level of Detection*

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

is possible that the calculated limitation will fall below the ML established by the approved analytical method(s). In these instances, the calculated limitation is included in the permit with a compliance level set equal to the ML of the most sensitive method.

### Monitoring Requirements

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

### Requirements for Combined Sewer Overflows (CSOs)

Pollution from combined sewer overflows is controlled with implementation of SPDES permit conditions in accordance with the Division of Water CSO Control strategy (TOGS 1.6.3) and the USEPA CSO Control Policy issued April 11, 1994.

CWA Section 402(q) requires that each permit for a discharge from a municipal combined storm and sanitary sewer shall conform to EPA's Combined Sewer Overflow Control Policy.<sup>[1]</sup> The CSO Control Policy identifies specific requirements for Phase I and Phase II permits. Phase I permits must include requirements for the implementation of the Nine Minimum Controls (NMCs) and development of the Long-Term CSO Control Plan (LTCP).

The 15 CSO Best Management Practices (BMPs) required by NYS under TOGS 1.6.2 are equivalent to the "Nine Minimum Control Measures" required under the USEPA National Combined Sewer Overflow policy (33 USC section 1342(q)). BMPs are technology-based requirements developed in accordance with best professional judgement. These are largely non-structural measures which are designed to maximize pollutant capture and removal from the combined sewer system and the POTW as a whole.

Phase II permits must include requirements to implement the technology-based controls including the NMCs determined on a BPJ basis, as well as requirements which ensure that the selected CSO controls are implemented, operated, and maintained as described in the long-term CSO control plan (LTCP). These requirements are critical to meeting the objectives of the Policy, including to bring all CSO discharge points into compliance with the technology-based and water quality-based requirements of the CWA, and to minimize the water quality, aquatic biota, and human health impacts from CSOs.

Additionally, the 1994 CSO Control Policy requires permits include a requirement for CSO communities who have developed an approved LTCP to reassess overflows to sensitive areas in those cases where elimination or relocation of the overflows is not physically possible and economically achievable. The reassessment should be based on consideration of new or improved techniques to eliminate or relocate overflows or changed circumstance that influence economic achievability.

### 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

<sup>[1]</sup> Available at <https://www.epa.gov/sites/production/files/2015-10/documents/owm0111.pdf>

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.

### Pollutant Minimization Programs

Pollutant Minimization Programs are included when a pollutant is being discharged from the facility at detectable levels and the ML for the most sensitive method is greater than the calculated WQBEL. These programs typically include an on-going potential source identification, evaluation, and prioritization program to demonstrate progress towards meeting the goal of the WQBEL. Pollutant Minimization Plan requirements are based on 40 CFR Part 132 Appendix F Procedure 8, 6 NYCRR 750-1.13(a) and 750-1.14(f), and TOGS 1.2.1.

### Mini Industrial Pretreatment Program

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

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