

# State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code: <b>4911</b>	NAICS Code:	: 221121		SPDES Number:	NY0250929
Discharge Class (CL):	01			DEC Number:	3-5518-00672
Toxic Class (TX):	Т			Effective Date (EDP):	EDP
Major-Sub Drainage Basin:	17 - 02			Expiration Date (ExDP):	ExDP
Water Index Number:	ER-3-22-4	Item No.:	935 – 19.1	Madification Dates (EDDM).	
Compact Area:	IEC			Modification Dates (EDPM):	

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

PERMITTEE NAME	PERMITTEE NAME AND ADDRESS											
Name: Consolidated Edison Company of NY, Inc  Attention: James Kelly, Section Manager												
Street:	4 Irving Place, 15th Floor	NE		James Keny, Section Manager								
City:	New York		State:	NY	Zip Code:	10003						
Email:	kellyja@coned.com		Phone:									

is authorized to discharge from the facility described below:

FACILITY NAME, A	FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL																	
Name:	Dunw	oodie C	entral Sub	stat	ioi	n	Y											
Address / Location:	Marco	and Sm	art Street				1					C	ou	nty:	Wes	stc	hest	er
City:	Yonke	onkers State NY										Zi	Zip Code:		: 10704			
Facility Location:		Latitude		40	0	56	,	19.9	" N	&	Longitude	: .	73	0	51	,	26.0	" W
Primary Outfall No.:	001	<b>001</b> Latitude: <b>40</b> ° <b>56</b> ' <b>18</b>								&	Longitude	: .	73	0	51	,	28	" W
Wastewater Description: Treated Stormwater Water: Bronx River					er		NAICS	<b>S</b> :	221121	Class	: (	С	Stai	nda	ard:	С		

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

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

#### **DISTRIBUTION:**

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

**BWP Permit Writer** 

**RWE** 

**RPA** 

EPA Region II (Region2\_NPDES@epa.gov)

County Health Dept.

Administrator:		
Address:	625 Broadway Albany 12233-1750	y, NY
Signature		Date

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## **DEFINITIONS**

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

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# PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Treated Stormwater	Storm Drain to Bronx River	EDP	ExDP

PARAMETER	EFF	LUENT L	IMITATIO	N		MONITORING REQUIREMENTS					
TANAMETER						0	0	Loca	ation	FN	
	Туре	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.		
Flow	Daily Maximum	Monitor	MGD	-	-	Quarterly	Estimate		Х	1	
-11	Daily Minimum	6.5	SU	-	-	Overste silv	Crah		V	1	
pН	Daily Maximum	8.5	SU	-	-	Quarterly	Grab		Х	1	
Total Suspended Solids (TSS)	Daily Maximum	40	mg/L	-	(	Quarterly	Grab		Х	1	
Oil & Grease	Daily Maximum	15	mg/L	-	-	Quarterly	Grab		X	1	
Benzene	Daily Maximum	Monitor	μg/L	-	-	Quarterly	Grab		Χ	1	
Toluene	Daily Maximum	Monitor	μg/L	-	1	Quarterly	Grab		Χ	1	
Xylenes (Total)	Daily Maximum	Monitor	μg/L	ı	-	Quarterly	Grab		Χ	1	
Ethylbenzene	Daily Maximum	Monitor	μg/L	-	-	Quarterly	Grab		Χ	1	
ACTION LEVEL PARAMETERS	Туре	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN	
PCBs, Total	Daily Maximum	65	ng/L	-	-	Quarterly	Grab		Х	1, 2	

### **FOOTNOTES:**

- 1. 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>).
- 2. Action Levels: If the action level is exceeded, the additional monitoring requirement is triggered, and the permittee shall undertake a short-term, high-intensity, monitoring program for PCBs. Samples identical to those required for routine monitoring purposes shall be taken during each of at least three consecutive discharges and analyzed. If levels higher than the action levels are confirmed, the permittee shall evaluate the treatment system operation and identify and employ actions to reduce concentrations present in the discharge. The permit may also be reopened by the DEC for consideration of revised action levels or effluent limits. Action level monitoring results and the effectiveness of the actions taken shall be summarized and submitted with the monthly operating report [or DMR] data.

# STORMWATER POLLUTION PREVENTION REQUIREMENTS

Stormwater discharges at this facility cannot obtain coverage under the current Multi-Sector General Permit (MSGP) (GP-0-23-001). However, the permit includes select requirements consistent with the MSGP.

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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. <u>General</u> The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage. The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the DEC as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized DEC representatives upon request.
- 2. <u>Compliance Deadlines</u> The BMP plan <u>shall be reviewed annually</u> and shall be modified whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, <u>as an attachment to the December Discharge Monitoring Report (DMR)</u>, that the annual review has been completed. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.
- 3. Facility Review The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases. The review shall address all substances present at the facility that are identified in the SPDES application Form NY-2C (available at <a href="https://www.dec.ny.gov/docs/permits\_ej\_operations\_pdf/form2c.pdf">https://www.dec.ny.gov/docs/permits\_ej\_operations\_pdf/form2c.pdf</a>) or that are required to be monitored for by the
- 4. <a href="1">13 Minimum BMPs:</a> Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in *Developing Your Stormwater Pollution Prevention Plan A Guide for Industrial Operators*, February 2009, EPA 833-B-09-002. As a minimum, the plan shall include the following BMPs:

1. BMP Pollution Prevention Team

2. Reporting of BMP Incidents

3. Risk Identification & Assessment

4. Employee Training

5. Inspections and Records

6. Security

SPDES permit. Particular attention shall be given to the following substance(s): PCBs

7. Preventive Maintenance

8. Good Housekeeping

9. Materials/Waste Handling, Storage, & Compatibility

10. Spill Prevention & Response

11. Erosion & Sediment Control

12. Management of Runoff

13. Street Sweeping

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# 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 area¹. (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 <a href="https://www.dec.ny.gov/chemical/43133.html">www.dec.ny.gov/chemical/43133.html</a>) prior to soil disturbance. Note that submission of the NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges. SWPPPs must be developed for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly implemented.

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

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

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# BMPs FOR INDUSTRIAL FACILITIES (continued)

C. <u>Discharge Screening</u> - 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. <u>Discharge Monitoring</u> 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. <u>Discharge Reporting</u> 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. <u>Prohibited Discharges</u> 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.

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# BMPs FOR INDUSTRIAL FACILITIES (continued)

8. Airports: The requirements listed under this section apply to stormwater discharges associated with industrial activity from air transportation facilities including air transportation (scheduled and non-scheduled); air courier services; airports; flying fields (except those maintained by aviation clubs); air terminal services including air traffic control (except government); aircraft storage at airports; aircraft upholstery repair; airfreight handling at airports; airport hangar rental; airport leasing, if operating airport; airport terminal services; hangar operation; airport, aircraft service and maintenance including aircraft cleaning and janitorial service; aircraft servicing /repairing except on a factory basis; vehicle maintenance shops; material handling facilities; equipment clearing operations; and airport/aircraft deicing and anti-icing. [Note: For the purpose of this section, the term "deicing" is defined as the process to remove frost, snow, or ice and "anti-icing" is the process which prevents the accumulation of frost, snow, or ice.] Only those portions of the facility that are either involved in vehicle maintenance (including vehicle rehabilitation, mechanical repairs, painting, fueling, and lubrication), equipment cleaning operations, or deicing/anti-icing operations are addressed under this section. Tenants and other entities that apply or otherwise use deicing or anti-icing materials shall provide all necessary information to the permittee for the permittee to complete all requirements under this section.

Additional Requirements for the BMP Plan: BMPs shall be developed for areas of the facility occupied by tenants of the airport and shall be integrated with the BMP plan for the entire airport. For the purposes of this permit, tenants of the airport facility include airline passenger or cargo companies, fixed based operators and other parties who have contracts with the airport authority to conduct business operations on airport property and whose operations result in stormwater discharges associated with industrial activity. The BMP plan shall include, at a minimum, the following items.

#### A. Site description

- (i) <u>Site map</u> The site map shall identify where any of the following activities may be exposed to precipitation/surface runoff: aircraft and runway deicing/anti-icing operations; fueling stations; aircraft, ground vehicle and equipment maintenance/cleaning areas; and storage areas for aircraft, ground vehicles and equipment awaiting maintenance.
- (ii) <u>Summary of potential pollutant sources</u> A narrative description of the potential pollutant sources from the following activities: aircraft, runway, ground vehicle and equipment maintenance and cleaning; aircraft and runway deicing/anti-icing operations (including apron and centralized aircraft deicing/anti-icing stations, runways, taxiways and ramps). Facilities which conduct deicing/anti-icing operations shall maintain a record of the types (including the Material Safety Data Sheets (MSDS)) and monthly quantities of deicing/anti-icing chemicals used, either as measured amounts, or in the absence of metering, as estimated amounts. This includes all deicing/anti-icing chemicals, not just glycols and urea (e.g., potassium acetate). Tenants and fixed-base operators who conduct deicing/anti-icing operations shall provide the above information to the airport authority for inclusion in the BMP for the entire facility.
- B. <u>Stormwater controls</u> The BMP plan must include pertinent elements of the SWPPP for industrial activities, including but not limited to:

## (i) Good housekeeping

- (a) <u>Aircraft, ground vehicle and equipment maintenance areas</u> The permittee must describe and implement measures that prevent or minimize the contamination of stormwater runoff from all areas used for aircraft, ground vehicle and equipment maintenance (including the maintenance conducted on the terminal apron and in dedicated hangars). The following practices (or their equivalents) shall be considered: performing maintenance activities indoors; maintaining an organized inventory of materials used in the maintenance areas; draining all parts of fluids prior to disposal; preventing the practice of hosing down the apron or hangar floor; using dry cleanup methods; and collecting the stormwater runoff from the maintenance area and providing treatment or recycling.
- (b) <u>Aircraft, ground vehicle and equipment cleaning areas</u> Permittees shall ensure that cleaning of equipment is conducted in designated areas only and clearly identify these areas on the ground and delineate them on the site map. The permittee must describe and implement measures that prevent or minimize the contamination of the stormwater runoff from cleaning areas.
- (c). <u>Aircraft, ground vehicle and equipment storage areas</u> The storage of aircraft, ground vehicles and equipment awaiting maintenance must be confined to designated areas (delineated on the site map). The following BMPs (or their equivalents) shall be considered: indoor storage of aircraft and ground vehicles; the use of drip pans for the collection of fluid leaks; and perimeter drains, dikes or berms surrounding storage areas.

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# BMPs FOR INDUSTRIAL FACILITIES (continued)

(d) Material storage areas - Storage vessels of all materials (e.g., used oils, hydraulic fluids, spent solvents, and waste aircraft fuel) must be maintained in good condition, so as to prevent or minimize contamination of stormwater, and plainly labeled (e.g., "used oil," "Contaminated Jet A," etc.). The permittee must describe and implement measures that prevent or minimize contamination of precipitation/runoff from storage areas. The following BMPs or their equivalents shall be considered: indoor storage of materials centralized storage areas for waste materials; and installation of berms/dikes around storage areas.

- (e) Airport fuel system and fueling areas The permittee must describe and implement measures that prevent or minimize the discharge of fuels to the storm sewer/surface waters resulting from fuel servicing activities or other operations conducted in support of the airport fuel system. The following BMPs (or their equivalents) shall be considered: implementing spill and overflow practices (e.g., placing absorptive materials beneath aircraft during fueling operations); using dry cleanup methods; and collecting the stormwater runoff.
- (ii) <u>Source reduction</u> The permittee shall consider alternatives to the use of urea and glycol-based airfield deicing/anti-icing chemicals to reduce the aggregate amount of airfield deicing/anti-icing. The permittee shall require the tenants and other entities who apply or otherwise use deicing or anti-icing materials to consider alternatives to the use of urea and glycol-based deicing/anti-icing chemicals to reduce the aggregate amount of deicing/anti-icing chemicals used and lessen the environmental impact. Chemical options to replace ethylene glycol, propylene glycol and urea include: potassium acetate; magnesium acetate; calcium acetate; anhydrous potassium acetate.
  - (a) Runway deicing operations The Permittee shall evaluate present application rates to ensure against excessive over application by analyzing application rates and adjusting as necessary, consistent with considerations of flight safety. Also the following BMP options shall be considered (or their equivalents): metered application of chemicals; prewetting dry chemical constituents prior to application; installation of runway ice detection systems; implementing anti-icing operations as a preventive measure against ice buildup.
  - (b) Aircraft deicing/anti-icing operations The Permittee shall require tenants and other entities who apply or otherwise use deicing or anti-icing materials to determine whether excessive application of deicing/anti-icing chemicals occurs, and adjust as necessary, consistent with considerations of flight safety. This evaluation should be carried out by the personnel most familiar with the particular aircraft and flight operations in question (versus an outside entity such as the airport authority). The use of alternative deicing/anti-icing agents as well as containment measures for all applied chemicals shall be considered. Also, the following BMP options (or their equivalents) shall be considered for reducing deicing fluid use: forced-air deicing systems; computer-controlled fixed-gantry systems; infrared technology; hot water; varying glycol content to air temperature; enclosed-basket deicing trucks; mechanical methods; solar radiation; hangar storage; aircraft covers; and thermal blankets. The use of ice-detection systems and airport traffic flow strategies and departure slot allocation systems shall also be considered.
- (iii) <u>Management of runoff</u> Where deicing/anti-icing operations occur, the permittee, tenants and other entities who apply or otherwise use deicing or anti-icing materials shall describe and implement a program to control or manage contaminated runoff to reduce the amount of pollutants being discharged from the site. The following BMPs (or their equivalents) shall be considered: establishing a dedicated deicing facility with a runoff collection/recovery system; using vacuum/collection trucks; storing contaminated stormwater/deicing fluids in tanks and releasing controlled amounts to a publicly owned treatment works; collecting contaminated runoff in a wet pond for biochemical decomposition (be aware of attracting wildlife that may prove hazardous to flight operations); and directing runoff into vegetative swales or other infiltration measures. The plan shall consider the recovery of deicing/anti-icing materials when these materials are applied during non-precipitation events (e.g., covering storm sewer inlets, using booms, installing absorptive interceptors in the drains, etc.) to prevent these materials from later becoming a source of stormwater contamination. Used deicing fluid should be recycled whenever possible.
- (iv) Routine facility inspections The inspection frequency shall be specified in the plan. At a minimum, inspections shall be conducted once per month during deicing/anti-icing season (e.g., October through April for most airports). If deicing occurs before or after this period, the inspections shall be expanded to include all months during which deicing chemicals may be used. Also, if significantly or deleteriously large quantities of deicing chemicals are being spilled or discharged, or if water quality impacts have been reported, the inspection frequency shall be increased to weekly until such time as the chemical spills/discharges or impacts are reduced to acceptable levels.
- (v) Comprehensive site compliance evaluation The annual site compliance evaluations shall be conducted by qualified facility personnel during periods of actual deicing operations, if possible. If not practicable during active deicing or if the weather is too inclement, the evaluations shall be conducted when deicing operations are likely to occur and the materials and equipment for deicing are in place.

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# MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

On 11/29/2023, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10.

- 1. <u>General</u> The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below.
- 2. <u>MMP Elements</u> 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<sup>2</sup> as described in detail below:
  - a. <u>Conditional Exclusion Certification</u> A certification (Appendix D of *DOW 1.3.10*), signed in accordance with 750-1.8 Signature of SPDES forms, must be submitted once every five (5) years to the Regional Water Engineer and to the Bureau of Water Permits certifying that Outfall 001 for the facility is neither a mercury source nor receives flows from a mercury source. Criteria to determine if a facility has a mercury source are as follows:
    - The facility is or receives discharge from 1) individually permitted combined sewer overflow (CSOs)<sup>3</sup> communities and/or 2) Type II sanitary sewer overflow (SSO)<sup>4</sup> facilities;
    - One or more effluent samples which exceed 12 ng/L, including samples taken as a result of the SPDES application process;
    - Internal or tributary waste stream samples exceed the GLCA effluent limitation <u>AND</u> the final effluent samples are less than the GLCA due primarily to dilution by uncontaminated or less contaminated waste streams. Both components of this criterion may include samples taken as a result of the SPDES application process;
    - A permit application or other information indicates that mercury is handled on site and could be discharged through outfalls;
    - Outfalls which contain legacy mercury contamination;
    - The facility's collection system receives discharges from a dental and/or categorical industrial user (CIU)<sup>5</sup> that may discharge mercury;
    - The facility accepts hauled wastes; or,
    - The facility is defined as a categorical industry that may discharge mercury. This may also include dentists, universities, hospitals, or laboratories which have their own SPDES permit.
  - b. Control Strategy The control strategy must contain the following minimum elements:
    - i. <u>Equipment and Materials</u> Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.
    - ii. <u>Bulk Chemical Evaluation</u> 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.

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

<sup>&</sup>lt;sup>3</sup> CSO permits are included under the 05 and 07 permit classifications.

<sup>&</sup>lt;sup>4</sup> These are overflow retention facilities (ORFs) and are included under the 05 and 07 permit classifications.

<sup>&</sup>lt;sup>5</sup> CIUs include those listed under Federal Regulation in 40 CFR Part 400.

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# MERCURY MINIMIZATION PROGRAM (MMP) - Type IV (Continued)

- c. <u>Status Report</u> An **annual** status report must be developed and maintained on site, in accordance with the <u>Schedule of Additional Submittals</u>, summarizing:
  - i. Review of criteria to determine if the facility has a potential mercury source;
    - a. If the permittee no longer meets the criteria for MMP Type IV, the permittee must notify the DEC for a permittee-initiated permit modification;
  - ii. All actions undertaken, pursuant to the control strategy, during the previous year; and
  - iii. Actions planned, pursuant to the control strategy, for the upcoming year.

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

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

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

#### **DEFINITIONS:**

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

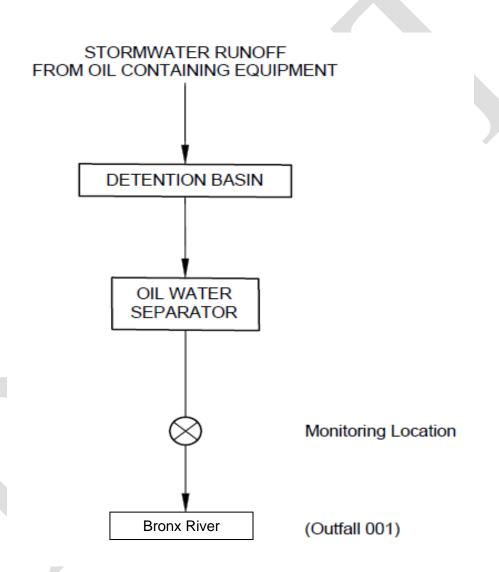
# DISCHARGE NOTIFICATION REQUIREMENTS

The permittee has obtained a waiver for the installation of signs at all outfalls. The waiver was submitted and accepted on 04/09/2024.

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 this permit, each DMR shall be maintained (either electronically or as a hard copy) on record for a period of five years.

## 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:



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## 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 Duty to reapply 2. 6 NYCRR 750-1.16(a) 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) Permit actions 5. 6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h) 6. Property rights 6 NYCRR 750-2.2(b) 7. Duty to provide information 6 NYCRR 750-2.1(i) 8. Inspection and entry 6 NYCRR 750-2.1(a) & 2.3

#### C. Operation and Maintenance

 1. Proper Operation & Maintenance
 6 NYCRR 750-2.8

 2. Bypass
 6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7

 3. Upset
 6 NYCRR 750-1.2(a)(94) & 2.8(c)

#### D. Monitoring and Records

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

#### E. Reporting Requirements

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 Monitoring reports 6 NYCRR 750-2.5(e) 4. Compliance schedules 6 NYCRR 750-1.14(d) 5. 24-hour reporting 6. 6 NYCRR 750-2.7(c) & (d) Other noncompliance 7. 6 NYCRR 750-2.7(e) 8. Other information 6 NYCRR 750-2.1(f)

#### F. Sludge Management

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

### G. SPDES Permit Program Fee

The permittee shall pay to the DEC an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the DEC, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.

## H. Water Treatment Chemicals (WTCs)

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

- WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized by the DEC.
- 2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure excessive levels of WTCs are not used.
- 3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The WTC Notification Form and WTC Annual Report Form are available from the DEC's website at: <a href="http://www.dec.ny.gov/permits/93245.html">http://www.dec.ny.gov/permits/93245.html</a>

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# 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. <u>Discharge Monitoring Reports (DMRs)</u>: Completed DMR forms shall be submitted for each 3 month reporting period in accordance with the DMR Manual available on DEC's website.

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by DEC. Instructions on the use of NetDMR can be found at <a href="https://www.dec.ny.gov/chemical/103774.html">https://www.dec.ny.gov/chemical/103774.html</a>. Hardcopy paper DMRs will only be accepted if a waiver from the electronic submittal requirements has been granted by DEC to the facility.

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

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

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

Department of Environmental Conservation Regional Water Engineer, Region 3 220 White Plains Road, Suite 110, Tarrytown, New York, 10591 Email: SPDESApp@dec.ny.gov

Phone: (518) 402-8111

Email: DOW.r3@dec.ny.gov Phone: (914) 803-8157



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## 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	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
001	EMERGING CONTAMINANT SHORT-TERM MONITORING The permittee shall collect grab samples of the effluent from the facility's treatment system(s) associated with the identified outfall for 1,4-Dioxane (1,4-D) utilizing EPA Method 8270D SIM or 8270E SIM. The samples must represent normal discharge conditions and treatment operations and shall be obtained on a monthly basis for at least 3 consecutive months.  The results shall be reported through the "Emerging Contaminants Survey for Industrial Facilities" found at: <a href="https://www.dec.ny.gov/chemical/127939.html">https://www.dec.ny.gov/chemical/127939.html</a> .	EDP + 6 months
	The permittee shall initiate track down of potential sources by completing the "Emerging Contaminants Investigation Checklist for Industrial Facilities" available at the above link.  The DEC may periodically request updates or additional monitoring to check progress on track down investigations. Elements of the checklist may be used as permit conditions in future permit modifications.	Within 90 days of DEC written notification
001	BMP PLAN The permittee shall submit and annually review the completed BMP plan. The BMP plan shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions must be submitted to the Regional Water Engineer within 30 days.	EDP + 6 Months, Annually thereafter on January 28 <sup>th</sup>
001	MERCURY MINIMIZATION STATUS REPORT The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	Maintained Onsite EDP + 6 months, annually thereafter
001	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite an annual mercury minimization plan in accordance with the requirements of this permit.	Maintained Onsite EDP +6 months, annually thereafter
001	MERCURY - CONDITIONAL EXCLUSION CERTIFICATION  Permittee must submit a mercury conditional exclusion certification every five years in order to maintain MMP Type IV status.	11/29/2028 and every 5 years thereafter
001	STORMWATER NO EXPOSURE CERTIFICATION  Permittee must recertify every five years a condition of no exposure to stormwater in order to continue to qualify for the no exposure exclusion. The No Exposure Certification Form can be found on the DEC website.	10/20/2028 and every 5 years thereafter

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

E. Monitoring and analysis shall be conducted using sufficiently sensitive test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

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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.



Facility: Dunwoodie Central Substation SPDES Number: NY0250929

USEPA Non-Major/Class 01 Industrial

Date: July 31, 2024 v.1.21 Permit Writer: Christopher Ciccarelli Water Quality Reviewer: Christopher Ciccarelli Full Technical Review

# **SPDES Permit Fact Sheet Consolidated Edison Company** of New York **Dunwoodie Central Substation** NY0250929



Facility: Dunwoodie Central Substation

SPDES Number: NY0250929

USEPA Non-Major/Class 01 Industrial

Date: July 31, 2024 v.1.21
Permit Writer: Christopher Ciccarelli
Water Quality Reviewer: Christopher Ciccarelli

Full Technical Review

# Summary of Permit Changes

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

- Updated permit format, definitions, and general conditions
- Receiving waterbody updated to Bronx River from Sprain Brook.
- Updated SIC Code to better reflect facility operations.
- Added Monitor requirement for Flow.
- Added pH Range Limit of 6.5 8.5.
- Added Daily Max limit of 40 mg/L for Total Suspended Solids.
- Reporting units for Benzene, Ethylbenzene, Toluene, and Xylenes changed from mg/L to µg/L.
- Changed PCB requirements from Monitor to Action Level.
- Added requirement for Mercury Minimization Program.
- Added requirement for emerging contaminant monitoring.
- · Added requirement for Industrial BMP Plan.
- Added Discharge Notification Act Requirements.

This fact sheet summarizes the information used to determine the effluent limitations (limits) and other conditions contained in the permit. General background information including the regulatory basis for the effluent limitations and other conditions are in the <a href="Appendix">Appendix</a> linked throughout this fact sheet.

# Administrative History

7/1/1994

The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 7/1/1999. The 1994 permit has formed the basis of this permit.

The permit was administratively renewed in 1999 and again in 2004, 2009, 2014, 2019, and 2024. The current permit administrative renewal is effective until 6/30/2029.

7/25/2023

Department issued a Request for Information (RFI) to modify and renew the SPDES permit due to the facility's EBPS score<sup>1</sup>. At the time of the RFI, the facility had an EBPS score of 257.

11/22/2023

The Consolidated Edison Company of New York submitted a NY-2C permit application.

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

# **Facility Information**

This is an industrial facility (SIC code 4911) that is an electrical substation. This facility is not a steam electric power generating facility, therefore the Effluent Limitation Guidelines from 40CFR 423 do not apply. Effluent consists of stormwater from the site. The current treatment system was constructed to provide settling and oil-water separation and includes the following treatment units:

<sup>&</sup>lt;sup>1</sup> Pursuant to 6 NYCRR 750-1.18 and NYS Environmental Benefit Permit Strategy (EBPS)

Permittee: Consolidated Edison Company of New York Facility: Dunwoodie Central Substation SPDES Number: NY0250929

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Settling in detention basin

- Oil-water separator

## Site Overview



Date: July 31, 2024 v.1.21 Permit Writer: Christopher Ciccarelli

Full Technical Review

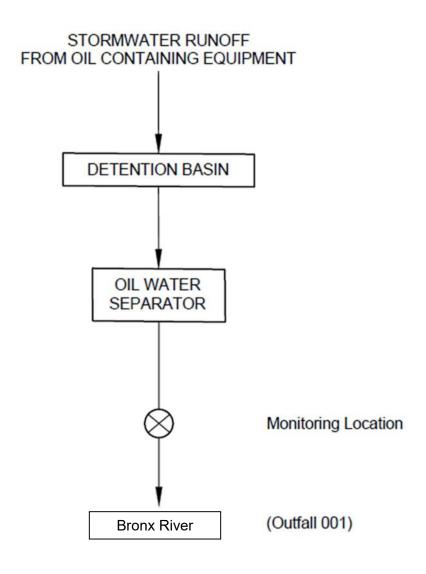
Water Quality Reviewer: Christopher Ciccarelli

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# **Enforcement History**

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

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## **Existing Effluent Quality**

The <u>Pollutant Summary Table</u> presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports and the application, as well as the original lab report from York Analytical Laboratories submitted by the permittee for the period 12/31/2018 to 9/30/2023.

## Interstate Water Pollution Control Agencies

Outfall 001 is 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	4911	Stormwater	Bronx River, Class C

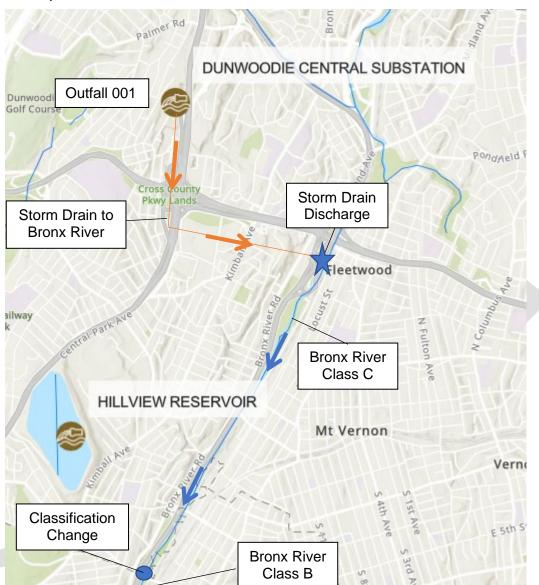
**Reach Description:** The Bronx River (935-19.1) is tributary to the East River. The segment of river at the point of discharge is Class C. The classification changes to B 2.1 miles downstream of the discharge.

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

No

## Impaired Waterbody Information

The Bronx River segment (PWL No. 1702-0107) was first listed on the 2002 and 2004 New York State Section 303(d) List of Impaired/TMDL Waters as impaired due to oxygen demand and fecal coliform from urban/storm runoff. 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

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

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## Permit Requirements

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

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

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

## Whole Effluent Toxicity (WET) Testing

None of the seven criteria that are indicative of potential toxicity are applicable to this facility; therefore, WET testing is not included in the permit. Appendix Link

## 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 new.

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

## Best Management Practices (BMPs) for Industrial Facilities

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

## Stormwater Pollution Prevention Requirements

Stormwater discharges at this facility require coverage under an individual SPDES permit and are not eligible to obtain coverage under the current Multi-Sector General Permit (MSGP) (GP-0-23-001). However, the permit includes select requirements consistent with the MSGP. This requirement is new.

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

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

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## Mercurv<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. <u>Appendix Link</u>

The facility is located outside the Great Lakes watershed and is an industrial State Significant, Class 01. On 11/29/2023, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10 and the effluent measured <12 ng/L. Therefore, consistent with DOW 1.3.10, the permit includes requirements for the implementation of MMP Type IV and does not include mercury effluent limitations. The <a href="Schedule of Additional Submittals">Schedule of Additional Submittals</a> includes a mercury minimization plan annual status report (maintained onsite), and re-certification of the exclusion every five years. As part of the re-certification, the effluent must be sampled and continue to measure <12 ng/L. This requirement is new.

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

- Additional monitoring of key locations, as defined in the MMP.
- Control strategy for implementation of the MMP
- Annual status report (maintained onsite)

## **PCB** Minimization Program

A Pollutant Minimization Program (PMP) is required to be implemented for permits that contain pollutants that have Water Quality Standards that are lower than the ML for the parameter method. On 11/29/2023, the permittee submitted a Stormwater No Exposure Certification confirming that no industrial activities are exposed to precipitation. PCBs have not been detected in the facility effluent in the last 5 years. The Permit will not include a PCBMP.

Appendix Link

## **Emerging Contaminant Monitoring**

Emerging Contaminants, such as Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), and 1,4-Dioxane (1,4-D), have been used in a wide variety of consumer and industrial product as well as in manufacturing processes for decades. These contaminants do not break down easily, therefore their presence in wastewater can remain a concern for years following their discontinued use. As the science surrounding these contaminants is still evolving, additional monitoring is needed to better understand potential sources and background levels. For more information on emerging contaminants, please see the NYSDEC Division of Water web page: https://www.dec.ny.gov/chemical/127939.html.

Pursuant to 6 NYCRR Part 750-1.13(b), the permit includes a short-term monitoring program listed in the Schedule of Additional Submittals to evaluate the influent and effluent discharge levels of Per-and Polyfluoroalkyl Substances (PFAS) or 1,4-Dioxane. This monitoring program is consistent with PFAS guidance released in EPA guidance memos dated April 28, 2022, and December 5, 2022.

The Department will review the monitoring results and pursuant to 6 NYCRR 750-2.1(i) may notify the permittee of the need for further monitoring to identify potential sources as specified in the Emerging Contaminants Investigation Checklist for Industrial Facilities to determine whether cause exists to modify the permit to incorporate a pollutant minimization program per 6 NYCRR 750-1.14(f).

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

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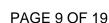
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The Department will consider this information and progress made to track down and reduce or eliminate the source of the identified pollutants in determining if a permit modification is needed.

## Schedule(s) of Additional Submittals

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

- Emerging Contaminant Monitoring
- BMP Plan
- Mercury Minimization Program Annual Status Report (maintained onsite)
- Mercury Minimization Plan
- Mercury Conditional Exclusion Certification
- Stormwater No Exposure Certification



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

					Water Index No. /	Major /					Critical	Dil	ution R	atio
Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Priority Waterbody Listing (PWL) No.	Súb	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Effluent Flow (MGD)	A(A)	A(C)	HEW
001	40° 56' 18" N	73° 51' 28" W	Bronx River	С	935-19.1 PWL: 1702-0107	17/02	206 <sup>5</sup>	-	-	-	-	1:1	1:1	1:1

## POLLUTANT SUMMARY TABLE

## Outfall 001

Outfall #	001	Description	of Waste	ewater: Sto	rmwater ru	unoff from o	il containing equi	pment							
Outfall #	001	Type of Tre	atment: C	Dil-Water Se	eparator										
			Existin	ng Discharg	e Data	7	ΓBELs	Water Quality Data & WQBELs							
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality <sup>6</sup>	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc.	Ambient Bkgd. Projected Instream Conc.		WQ Type Calc. WQBEL		Basis for WQBEL	ML	Basis for Permit Requirement
							ined from Discha andard and WQE						led by the p	ermittee	. All applicable
Flow Rate	GPD		Monitor	<10,000	1/0	-	-		: No alterati			e waters for	703.2	-	Monitor
1 low reaco	Flow w	ill be monitor	ed to help	inform futu	re permitti	ng decision	S.								
рН	SU Minimum - 7.48 Actual Min 1/0 6.0 40 CFR 7.07												702.2	_	WQBEL
		Maximum	-	7.48 Actual Max	1/0	9.0	133.102	7.8 <sup>7</sup>	-	6.5 – 8.5	Range	6.5 - 8.5	703.3	-	WWDEL
	Given the available dilution, an effluent limitation equal to the WQS is appropriate.														

<sup>&</sup>lt;sup>5</sup> Ambient hardness was calculated from RIBs station 17-BRNX-5.6, located ~3.5 miles downstream, using 3 samples collected from 2004 - 2019.

<sup>&</sup>lt;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)

<sup>&</sup>lt;sup>7</sup> Ambient pH calculated from RIBs station 17-BRNX-9.2, located ~1.0 mile downstream of the outfall, using 3 samples collected from 2008 - 2014.

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Outfall #	001	Description	of Waste	water: Sto	rmwater ru	unoff from o	il containing equi	pment							
Outrail #	001	Type of Tre	atment: C	Dil-Water Se	eparator										
			Existin	g Discharg	e Data	-	TBELs		Wa	ter Quality	Data & WO	QBELs			
Effluent Parameter	Units	Averaging Period	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	ML	Basis for Permit Requirement
Temperature (Winter)	°C	-		19 Actual	1/0	-	-	19	Narrative (Non-Trout): The water temperature at the surface of a stream shall not be raised to more than 90F at any point and shall not be raised or lowered to more than 5F over the temperature that existed before the addition				704.2	-	No Limitation
	Wastev	Vastewater effluent consists only of stormwater therefore no monitoring or limit is required for temperature.													
Total Organic	mg/L	-	-	2.9 Actual	1/0	-	1	-			-		-	-	No Limitation
Carbon (TOC)		A single detection for Total Organic Carbon was reported with the NY-2C Application. There is no WQ Std. or TBEL for TOC, therefore no limitation or required.												or mon	itoring is
Total Suspended Solids	mg/L	Monthly Avg	-	Non- Detect	0/1	40	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	TBEL
Solius	Consis	tent with TO	GS 1.2.1, T	BELs refle	ct the avai	lable treatm	nent technology l	sted in Att	achment C		J				•
Nitrogen, Ammonia	mg/L	Monthly Avg	-	0.081 Actual	1/0	- 7	-	0.082	0.50	1.2	A(C)	No Reasonable Potential	<u>703.5</u>	-	No Limitation
(as N)							application. A cor			ng effluent	quality to th		dicates no	reasona	ble potential to
Total Mercury	ng/L	Daily Max	-	1 Actual	1/0	-	-	_	-	0.7	H(FC)	-	<u>703.5</u>	-	No Limitation
Total Mcroury	See Me	ercury section	n of this fa	ct sheet.											
Permitted Para	ameters														
Benzene	mg/L	Daily Max	Monitor	<0.001	0/19	-	-	-	-	0.010	H(FC)	No Reasonable Potential	<u>703.5</u>	-	Monitor
							a. A comparison on tinue. The pern					d. indicates no	reasonab	le poten	tial to cause or

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Outfall #	001	Description of Wastewater: Stormwater runoff from oil containing equipment													
Outfall #		Type of Treatment: Oil-Water Separator													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs							
			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	ML	Basis for Permit Requirement
Ethylbenzene	mg/L	Daily Max	Monitor	<0.001	0/19	-	-	·	2	0.017	A(C)	No Reasonable Potential	TOGS 1.1.1	-	Monitor
							data. A compari of Ethylbenzene							le potent	ial to cause or
Xylenes (mix of m+o+p)	mg/L	Daily Max	Monitor	<0.001	0/19	- 1		-	-	0.065	A(C)	No Reasonable Potential	<u>703.5</u>	-	Monitor
	Xylenes have no detections in the last 5 years of sampling data. A comparison of the existing effluent quality to the WQ Std. indicates no reasonable potential to cause or contribute to a WQ Std. violation. Monitoring of Xylenes will continue. The permit is being changed to report in µg/L.														ial to cause or
Toluene	mg/L	Daily Max	Monitor	<0.001	0/19	-			-	6	H(FC)	No Reasonable Potential	<u>703.5</u>	-	Monitor
	Toluene has no detections in the last 5 years of sampling data. A comparison of the existing effluent quality to the WQ Std. indicates no reasonable potential to cause or contribute to a WQ Std. violation. Monitoring of Toluene will continue. The permit is being changed to report in µg/L.														l to cause or
Polychlorinated	ng/L	Daily Max	Monitor	<65	0/19	-	-	-	-	0.001	H(FC)	0.001	<u>703.5</u>	65	Action Level
	Polychlorinated biphenyls (PCBs) have never been detected in the facility effluent. The ML is greater than the WQS for PCBs, therefore an action level will be applied to ensure any detection for PCBs is addressed properly by the permittee. The permit is being changed to report in ng/L.														
Oil and Grease	mg/L	Daily Max	15	Non- Detect	0/19	15	TOGS 1.2.1	-	industrial v	vastes, or		e to sewage, es, nor visible ease.	<u>703.2</u>	-	TBEL
	Consist	Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C.													

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# Appendix: Regulatory and Technical Basis of Permit Authorizations

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

## Regulatory References

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

- Clean Water Act (CWA) 33 section USC 1251 to 1387
- Environmental Conservation Law (ECL) Articles 17 and 70
- Federal Regulations
  - o 40 CFR, Chapter I, subchapters D, N, and O
- State environmental regulations
  - o 6 NYCRR Part 621
  - o 6 NYCRR Part 750
  - o 6 NYCRR Parts 700 704 Best use and other requirements applicable to water classes
  - o 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 guick guide to the references used within the fact sheet:

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

## Outfall and Receiving Water Information

## **Impaired Waters**

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

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

## Permit Requirements

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

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

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

## Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law<sup>8</sup> and USEPA interpretation<sup>9</sup> anti-backsliding requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

<sup>&</sup>lt;sup>8</sup> American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)

<sup>&</sup>lt;sup>9</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)

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### **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 <u>USEPA Effluent Limitation Guideline Calculations</u> Table.

#### Best Professional Judgement (BPJ)

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

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

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

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

### Mixing Zone Analyses

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

"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,

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

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

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

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

## Whole Effluent Toxicity (WET) Testing:

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

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

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approved under 40 CFR Part 136. The ML represents the lowest level that can be measured within specified limitations of precision and accuracy during routine laboratory operations on most effluent matrices. When establishing effluent limitations for a specific parameter (based on technology or water quality requirements), it is possible that the calculated limitation will fall below the ML established by the approved analytical method(s). In these instances, the calculated limitation is included in the permit with a compliance level set equal to the ML of the most sensitive method.

## Monitoring Requirements

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

### Other Conditions

## Mercury

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

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

There have been a number of changes to DOW 1.3.10, December 2020 (e.g., the criteria for mercury sources, the MMP Decision tree, and the MMPs themselves) which could result in less stringent effluent limitations. There are now criteria to determine if a facility has sources of mercury. Additionally, the types of MMPs have been restructured. MMP Type IV is appropriate for facilities that are not sources of mercury. A similar MMP type was not included in the 2010 or 2015 versions of DOW 1.3.10. DOW 1.3.10, Figure 1, is a decision tree, which includes the criteria used to determine if a facility has source of mercury and which MMP is appropriate for a facility.

## 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.

Facility: Dunwoodie Central Substation

SPDES Number: NY0250929

USEPA Non-Major/Class 01 Industrial

Date: July 31, 2024 v.1.21
Permit Writer: Christopher Ciccarelli
Water Quality Reviewer: Christopher Ciccarelli
Full Technical Review

## 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.

