



Department of
Environmental
Conservation

State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	4911	NAICS Code:	221112	SPDES Number:	NY0005932
Discharge Class (CL):	01			DEC Number:	1-4722-00107/00013
Toxic Class (TX):	T			Effective Date (EDP):	EDP
Major-Sub Drainage Basin:	17 - 02			Expiration Date (ExDP):	ExDP
Water Index Number:	LIS-PJH	Item No.:	925 - 68	Modification Dates (EDPM):	
Compact Area:	IEC				

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

PERMITTEE NAME AND ADDRESS					
Name:	National Grid Generation LLC			Attention:	Matthew Jensen
Street:	175 East Old Country Road				
City:	Hicksville			State:	NY Zip Code: 11801
Email:	Matthew.jensen@nationalgrid.com			Phone:	(516) 545 – 3107

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL									
Name:	Port Jefferson Power Station								
Address / Location:	700 Beach Street						County:	Suffolk	
City:	Port Jefferson				State:	NY	Zip Code:	11777	
Facility Location:	Latitude:	40 °	57 '	0 " N	& Longitude:	73 °	4 '	40 " W	
Primary Outfall No.:	001	Latitude:	40 °	57 '	2 " N	& Longitude:	73 °	4 '	43 " W
Wastewater Description:	Screenwash	Receiving Water:	Port Jefferson Harbor			NAICS:	221112	Class:	SA Standard: SA

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

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

DISTRIBUTION:

BWP Permit Coordinator (permit.coordinator@dec.ny.gov)
BWP Permit Writer
RWE
RPA
EPA Region II (Region2_NPDES@epa.gov)

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

DRAFT

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SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
002	Yard Stormwater	221112	40 °	57 '	5 " N	73 °	4 '	40 " W
Receiving Water: Port Jefferson Harbor						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
003	Intake Bay Dewatering	221112	40 °	57 '	4 " N	73 °	4 '	40 " W
Receiving Water: Port Jefferson Harbor						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
005	Yard Stormwater	221112	40 °	57 '	4 " N	73 °	4 '	39 " W
Receiving Water: Port Jefferson Harbor						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
006	Heating Steam Condensate	221112	40 °	57 '	3 " N	73 °	4 '	38 " W
Receiving Water: Port Jefferson Harbor						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
007	Stormwater	221112	40 °	57 '	3 " N	73 °	4 '	38 " W
Receiving Water: Port Jefferson Harbor						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
07A	Wastewater Holding Tank	221112	40 °	57 '	3 " N	73 °	4 '	40 " W
Receiving Water: Port Jefferson Harbor through Outfall 025						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
07B	Waste/Oil Sludge Tank Secondary Containment Stormwater	221112	40 °	57 '	3 " N	73 °	4 '	40 " W
Receiving Water: Port Jefferson Harbor through Outfall 025						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
07C	Oil Water Separator Secondary Containment Stormwater	221112	40 °	57 '	3 " N	73 °	4 '	40 " W
Receiving Water: Port Jefferson Harbor through Outfall 025						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
008	Roof and Yard Drainage	221112	40 °	57 '	2 " N	73 °	4 '	36 " W
Receiving Water: Port Jefferson Harbor						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
009	Main Circulating Cooling Water	221112	40 °	57 '	1 " N	73 °	4 '	34 " W
Receiving Water: Port Jefferson Harbor						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
020	Condensed Steam	221112	40 °	57 '	3 " N	73 °	4 '	36 " W
Receiving Water: Port Jefferson Harbor						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
021	Condensed Steam	221112	40 °	57 '	3 " N	73 °	4 '	36 " W
Receiving Water: Port Jefferson Harbor						Class: SA		

Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
022	Condensed Steam	221112	40 °	57 '	3 " N	73 °	4 '	36 " W
Receiving Water: Port Jefferson Harbor						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
023	Condensed Steam	221112	40 °	57 '	3 " N	73 °	4 '	36 " W
Receiving Water: Port Jefferson Harbor						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
024	Roof Stormwater Drains from Administration Building	221112	40 °	57 '	3 " N	73 °	4 '	37 " W
Receiving Water: Port Jefferson Harbor						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
025	Wastewater Treatment Facility	221112	40 °	57 '	4 " N			
Receiving Water: Port Jefferson Harbor						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
025A	Ammonia Tank Secondary Containment Stormwater	221112	40 °	57 '	2 " N	73 °	4 '	43 " W
Receiving Water: Port Jefferson Harbor through Outfall 025						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
025B	Ammonia Truck Unloading Facility Stormwater	221112	40 °	57 '	2 " N	73 °	4 '	36 " W
Receiving Water: Port Jefferson Harbor through Outfall 025						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
026	IC Fuel Oil Tank Secondary Containment Stormwater	221112	40 °	56 '	53 " N	73 °	4 '	49 " W
Receiving Water: Groundwater						Class: GA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
027	IC Fuel Truck Unloading Facility Stormwater	221112	40 °	56 '	53 " N	73 °	4 '	49 " W
Receiving Water: Groundwater						Class: GA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
028	LiquiMag Tank Secondary Containment Stormwater	221112	40 °	57 '	2 " N	73 °	4 '	43 " W
Receiving Water: Port Jefferson Harbor through Outfall 025						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
029	LiquiMag Truck Unloading Facility Stormwater	221112	40 °	57 '	2 " N	73 °	4 '	43 " W
Receiving Water: Port Jefferson Harbor through Outfall 025						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
030	Acid & Caustic Tank Secondary Containment Stormwater	221112	40 °	57 '	2 " N	73 °	4 '	43 " W
Receiving Water: Port Jefferson Harbor through Outfall 025						Class: SA		
Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
031	Acid & Caustic Truck Unloading Facility Stormwater	221112	40 °	57 '	2 " N	73 °	4 '	43 " W
Receiving Water: Port Jefferson Harbor through Outfall 025						Class: SA		

Outfall	Wastewater Description	NAICS Code	Outfall Latitude				Outfall Longitude			
032	Transformer Secondary Containment Stormwater	221112	40	°	57	'	0	"	N	73 ° 4 ' 38 " W
Receiving Water: Port Jefferson Harbor through Outfall 025									Class: SA	
Outfall	Wastewater Description	NAICS Code	Outfall Latitude				Outfall Longitude			
033	Transformer Secondary Containment Stormwater	221112	40	°	57	'	1	"	N	73 ° 4 ' 37 " W
Receiving Water: Port Jefferson Harbor through Outfall 025									Class: SA	
Outfall	Wastewater Description	NAICS Code	Outfall Latitude				Outfall Longitude			
034	Yard Stormwater	221112	40	°	57	'	2	"	N	73 ° 4 ' 36 " W
Receiving Water: Port Jefferson Harbor									Class: SA	

DEFINITIONS

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

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
002	Yard Stormwater	Port Jefferson Harbor	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Daily Maximum	Monitor	GPD			Monthly	Estimate		X	
pH	Daily Minimum	6.0	SU			Monthly	Grab		X	
	Daily Maximum	9.0								
Oil & Grease	Daily Maximum	15	mg/L			Monthly	Grab		X	
Total Suspended Solids (TSS)	Daily Maximum	50	mg/L			Monthly	Grab		X	

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
005	Yard Stormwater	Port Jefferson Harbor	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Daily Maximum	Monitor	GPD			Monthly	Estimate		X	
pH	Daily Minimum	6.0	SU			Monthly	Grab		X	
	Daily Maximum	9.0								
Oil & Grease	Daily Maximum	15	mg/L			Monthly	Grab		X	
Total Suspended Solids (TSS)	Daily Maximum	50	mg/L			Monthly	Grab		X	

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
007	Stormwater	Port Jefferson Harbor	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Daily Maximum	Monitor	GPD			Monthly	Estimate		X	
pH	Daily Minimum	6.0	SU			Monthly	Grab		X	
	Daily Maximum	9.0								
Oil & Grease	Daily Maximum	15	mg/L			Monthly	Grab		X	
Total Suspended Solids (TSS)	Daily Maximum	50	mg/L			Monthly	Grab		X	

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
008	Roof and Yard Drainage	Port Jefferson Harbor	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Daily Maximum	Monitor	GPD			Monthly	Estimate		X	
pH	Daily Minimum	6.0	SU			Monthly	Grab		X	
	Daily Maximum	9.0								
Oil & Grease	Daily Maximum	15	mg/L			Monthly	Grab		X	
Total Suspended Solids (TSS)	Daily Maximum	50	mg/L			Monthly	Grab		X	

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
009	Main Circulating Cooling Water	Port Jefferson Harbor	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	Monitor	MGD			Monthly	Calculated		X	
	Daily Maximum	Monitor								
pH	Daily Minimum	6.0	SU			Monthly	Grab		X	
	Daily Maximum	9.0								
Discharge Temperature	Daily Maximum	110	°F			Continuous	Metered		X	1
Intake-Discharge Temperature Difference	Daily Maximum	30	°F			Continuous	Metered	X	X	1
Net Addition of Heat	Daily Maximum	2.8 x 10E9	BTU/hr			Hourly	Calculated		X	
Total Residual Chlorine	Daily Maximum	0.075	mg/L			Continuous	Metered		X	2, 3

FOOTNOTES:

1. The permittee may exceed this limit by no more than 10°F for no more than 1% of the time in a year.
2. The period of chlorination shall be limited to two hours per day per unit. The individual units shall be treated separately.
3. Sampling and reporting for total residual chlorine is only necessary if chlorine is used for disinfection, elsewhere in the treatment process, or the facility otherwise has reasonable potential to discharge chlorine. Otherwise, the permittee shall report NODI-9 on the DMR.

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
025	Wastewater Treatment Facility	Port Jefferson Harbor	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	Monitor	GPD			Continuous	Recorded		X	
	Daily Maximum	Monitor								
pH	Daily Minimum	6.0	SU			Continuous	Recorded		X	1
	Daily Maximum	9.0								
Oil & Grease	Daily Maximum	15	mg/L			Weekly	Grab		X	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L			Weekly	Grab		X	
	Daily Maximum	50								
Ammonia (as N)	Daily Maximum	Monitor	mg/L			Monthly	Grab		X	
Total Iron	Daily Maximum	1.0	mg/L			Weekly	Grab		X	2
Total Copper	Daily Maximum	0.5	mg/L			Weekly	24 hr. Comp.		X	2,3,4
Total Vanadium	Monthly Average	10.0	mg/L			Weekly	24 hr. Comp.		X	3
	Daily Maximum	15.0							3,4	
Total Zinc	Daily Maximum	1.0	mg/L			Monthly	24 hr. Comp.		X	3
Total Chromium	Daily Maximum	0.2	mg/L			Monthly	24 hr. Comp.		X	3,4
Total Nickel	Daily Maximum	Non-Detect	mg/L			Monthly	24 hr. Comp.		X	3
Total Manganese	Daily Maximum	2.0	mg/L			Monthly	24 hr. Comp.		X	
Benzene	Daily Maximum	50	µg/L			Monthly	Grab		X	
Toluene	Daily Maximum	50	µg/L			Monthly	Grab		X	
Total Xylenes	Daily Maximum	50	µg/L			Monthly	Grab		X	
Ethylbenzene	Daily Maximum	45	µg/L			Monthly	Grab		X	

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			3	TUa	Quarterly	See footnote		X	5, 6
WET - Acute Vertebrate	See footnote			3	TUa	Quarterly	See footnote		X	5, 6
WET - Chronic Invertebrate	See footnote			10	TUc	Quarterly	See footnote		X	5, 6
WET - Chronic Vertebrate	See footnote			10	TUc	Quarterly	See footnote		X	5, 6

FOOTNOTES:

- The total time during which pH values are outside the required range shall not exceed 7 hours and 26 minutes in any calendar month and no individual excursion from the range of pH values shall exceed 60 minutes.

2. Grab samples for these parameters shall be obtained immediately following a boiler wash operation.
3. These parameters shall be monitored only when a discharge of metal cleaning wastewaters or ash sluicing waters occur. At a minimum, at least one composite sample of these parameters shall be made unless there is no discharge of these wastewaters during this period. A composite sample of less than 24 hours duration shall be taken if the discharge occurs for less than 24 hours.
4. Boiler wash, metal cleaning, or ash sluicing operation discharges are allowed for no more than 1% of the time in a year with no circulating water pumps operating.

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

Testing Requirements – Chronic WET testing is required, but report both the acute and chronic results. Testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the DEC. The test species shall be *Americamysis bahia* (mysid shrimp - invertebrate) and *Cyprinodon variegatus* (sheepshead minnow - vertebrate). Artificial salt water should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 10:1 for acute, and 10:1 for chronic.

Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 5 and 0.

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

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

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

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

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
026	IC Fuel Oil Tank Secondary Containment	Groundwater	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Daily Maximum	Monitor	GPD			Monthly	Estimate		X	
pH	Daily Minimum	6.5	SU			Monthly	Grab		X	1
	Daily Maximum	8.5								
Oil & Grease	Daily Maximum	15	mg/L			Monthly	Grab		X	1
Benzene	Daily Maximum	0.8	µg/L			Quarterly	Grab		X	1, 2
Toluene	Daily Maximum	5	µg/L			Quarterly	Grab		X	1, 2
Xylene, ortho-	Daily Maximum	5	µg/L			Quarterly	Grab		X	1, 2
Xylene, meta- and para-	Daily Maximum	10	µg/L			Quarterly	Grab		X	1, 2
Ethylbenzene	Daily Maximum	5	µg/L			Quarterly	Grab		X	1, 2

FOOTNOTES:

1. Discharge from the containment areas can be initiated only after six or more hours have passed since the cessation of the storm event to enable facility personnel to determine the presence of oil or floating substances unless unusual and significant circumstances warrant otherwise. The facility shall maintain a logbook recording date, time, and signature of the person authorizing each discharge from the containment areas. If there is a visible sheen or floating globules of oil on the stormwater within any of the secondary containment areas, it must be reported to the DEC immediately, and reasonable efforts must be made to remove the contamination prior to discharge. Alternately, the discharge(s) may be directed to the WWTP, in which case these restrictions do not apply, and monitoring is not required.
2. Quarterly samples shall be collected in calendar quarters (Q1 – January 1st to March 31st; Q2 – April 1st to June 30th; Q3 – July 1st to September 30th; Q4 – October 1st to December 31st).

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
027	IC Fuel Truck Unloading Facility Stormwater	Groundwater	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Daily Maximum	Monitor	GPD			Monthly	Estimate		X	
pH	Daily Minimum	6.5	SU			Monthly	Grab		X	1
	Daily Maximum	8.5								
Oil & Grease	Daily Maximum	15	mg/L			Monthly	Grab		X	1
Benzene	Daily Maximum	0.8	µg/L			Quarterly	Grab		X	1, 2
Toluene	Daily Maximum	5	µg/L			Quarterly	Grab		X	1, 2
Xylene, ortho-	Daily Maximum	5	µg/L			Quarterly	Grab		X	1, 2
Xylene, meta- and para-	Daily Maximum	10	µg/L			Quarterly	Grab		X	1, 2
Ethylbenzene	Daily Maximum	5	µg/L			Quarterly	Grab		X	1, 2

FOOTNOTES:

- Discharge from the containment areas can be initiated only after six or more hours have passed since the cessation of the storm event to enable facility personnel to determine the presence of oil or floating substances unless unusual and significant circumstances warrant otherwise. The facility shall maintain a logbook recording date, time, and signature of the person authorizing each discharge from the containment areas. If there is a visible sheen or floating globules of oil on the stormwater within any of the secondary containment areas, it must be reported to the DEC immediately, and reasonable efforts must be made to remove the contamination prior to discharge. Alternately, the discharge(s) may be directed to the WWTP, in which case these restrictions do not apply, and monitoring is not required.
- Quarterly samples shall be collected in calendar quarters (Q1 – January 1st to March 31st; Q2 – April 1st to June 30th; Q3 – July 1st to September 30th; Q4 – October 1st to December 31st).

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Screenwash	Port Jefferson Harbor	EDP	ExDP
003	Intake Bay Dewatering	Port Jefferson Harbor	EDP	ExDP
006	Heating Steam Condensate	Port Jefferson Harbor	EDP	ExDP
07A	Wastewater Holding Tank	Port Jefferson Harbor through Outfall 025	EDP	ExDP
07B	Waste/Oil Sludge Tank Secondary Containment Stormwater	Port Jefferson Harbor through Outfall 025	EDP	ExDP
07C	Oil Water Separator Secondary Containment Stormwater	Port Jefferson Harbor through Outfall 025	EDP	ExDP
020	Condensed Steam	Port Jefferson Harbor	EDP	ExDP
021	Condensed Steam	Port Jefferson Harbor	EDP	ExDP
022	Condensed Steam	Port Jefferson Harbor	EDP	ExDP
023	Condensed Steam	Port Jefferson Harbor	EDP	ExDP
024	Roof Stormwater Drains from Administration Building	Port Jefferson Harbor	EDP	ExDP
025A	Ammonia Tank Secondary Containment Stormwater	Port Jefferson Harbor through Outfall 025	EDP	ExDP
025B	Ammonia Truck Unloading Facility Stormwater	Port Jefferson Harbor through Outfall 025	EDP	ExDP
028	LiquiMag Tank Secondary Containment	Port Jefferson Harbor through Outfall 025	EDP	ExDP
029	LiquiMag Truck Unloading Facility Stormwater	Port Jefferson Harbor through Outfall 025	EDP	ExDP
030	Acid & Caustic Tank Secondary Containment Stormwater	Port Jefferson Harbor through Outfall 025	EDP	ExDP
031	Acid & Caustic Truck Unloading Facility Stormwater	Port Jefferson Harbor through Outfall 025	EDP	ExDP
032	Transformer Secondary Containment Stormwater	Port Jefferson Harbor through Outfall 025	EDP	ExDP
033	Transformer Secondary Containment Stormwater	Port Jefferson Harbor through Outfall 025	EDP	ExDP
034	Yard Stormwater	Port Jefferson Harbor	EDP	ExDP
No Monitoring Required.				

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
NA	Tank Test Water	Long Island Sound	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow Rate	Daily Maximum	Monitor	GPD			Each Discharge	Instantaneous		X	1
Oil & Grease	Daily Maximum	15	mg/L			Each Discharge	Grab		X	1
Total Residual Chlorine	Daily Maximum	0.1	mg/L			Each Discharge	Grab		X	1, 2
Benzene	Daily Maximum	20	µg/L			Each Discharge	Grab		X	1
Toluene	Daily Maximum	20	µg/L			Each Discharge	Grab		X	1
Xylenes	Daily Maximum	20	µg/L			Each Discharge	Grab		X	1
Ethylbenzene	Daily Maximum	20	µg/L			Each Discharge	Grab		X	1

FOOTNOTES:

1. Tanks being hydrostatically tested must be free of product and cleaned. The Regional Water Manager must be informed at least two business days prior to the discharge of tank test water.

Any discharge of tank test water must be done under the direct supervision of plant personnel. Samples from the tank must be taken prior to discharge from various levels within the tank (top, middle, bottom). If sampling shows conformance with effluent limitations, discharge may be initiated. If effluent limitations are not attained, additional measures must be implemented to attain compliance prior to initiation of discharge.

A visual check of the discharge must be made for the presence of oil and floating substances. Data associated with tank test water shall be kept, along with log of visual observations, for a period of five years and be made available to DEC personnel upon request.

The discharge of tank test water must be done in a manner that minimizes erosion of soil or sediment and does not cause flooding in the area of discharge. It must be done in a manner that minimizes the impact on the fisheries.

2. Required when a chlorinated supply such as that from a municipal system is used for tank testing purposes.

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SPECIAL CONDITIONS – BIOLOGICAL MONITORING REQUIREMENTS

All submissions under this section should provide:

- One (1) electronic copy to the Energy Unit Leader¹;
- One (1) copy of the cover letter to the Division of Water
State Pollution Discharge Elimination System (SPDES)
Bureau of Water Compliance; and
- One (1) copy of the cover letter to the Regional Water Engineer;
unless otherwise noted.

Best Technology Available (BTA) measures

1. By the effective date of permit (EDP), the permittee will:
 - a. Continuously rotate and wash the ristroph-type traveling screens when operating any cooling water circulating pump. Any fish, shellfish or other organisms collected or trapped at the intake structure shall be returned to Port Jefferson Harbor.
 - b. The facility must continue to operate the variable speed drive capability pumps and employ pump shutdowns in a manner that will minimize the amount of cooling water used, while allowing the facility to function effectively
 - c. The facility shall be operated at less than fifteen (15) percent of its electric generating capacity factor. This condition shall be measured as a five-year average following the EDP.

Reductions in Impingement and Entrainment Mortality

2. The permittee will continue to meet the required reductions in impingement and entrainment mortality. These reductions can be no less stringent, and if possible, should be substantially greater than the following conditions:
 - a. 80 percent reduction in entrainment mortality, including through-plant entrainment survival, from calculation baseline; and
 - b. 95 percent reduction of impingement mortality from calculation baseline.
3. The permittee must submit monthly flow reduction and outage compliance reports to the DEC Energy Unit Leader containing the following data:
 - a. Unit operation including daily minimum, maximum and total energy generation in MWh per Unit;
 - b. Cooling water usage including daily minimum, maximum and total flow in MGD; and
 - c. Percent reduction in daily cooling water use from the calculation baseline.

All submitted data must be provided in both tabular form and electronically, in Microsoft Excel™ spreadsheet format.
4. Six (6) months prior to ExDP and every 5 years thereafter, the permittee must submit an approvable *Cumulative Reductions Report* that includes:
 - a. A description and detailed analysis of the cumulative reductions from calculation baseline in impingement and entrainment mortality achieved during the prior five years. The reductions may be based on desktop analysis of current water usage and the most recent site-specific biological data.
 - b. All submitted data must be provided in both tabular form and electronically, in Microsoft Excel™ spreadsheet format.

¹ Energy Unit Leader 5th floor 625 Broadway, Albany NY 12233

Contingency Plan to meet Conditions Identified in Biological Monitoring Requirement 2

5. If upon review of the *Cumulative Reductions Report*, the DEC determines that the reductions in Requirement 2a. and 2b. have not been achieved, the DEC shall notify the permittee, and within three months of notification, the permittee shall submit a plan that identifies any additional measures needed to achieve or exceed a 80 percent reduction in entrainment mortality and a 95 percent reduction in impingement mortality. The plan shall contain a schedule for installing and implementing technologies and/or operational measures to achieve compliance with the reductions contained in Requirement 2a. and 2b. Upon DEC approval, the plan and schedule shall become enforceable conditions of this permit.

Additional Reporting Requirements

6. The permittee must maintain records of all data, reports and analysis pertaining to compliance with 6NYCRR Part 704, Commissioner Policy-52, and Section 316(b) CWA for a period no less than 10 years from EDP.

General Requirement

7. Modification of the facility cooling water intake must not occur without prior DEC approval. The permittee must submit written notification, including detailed descriptions and plans, to the DEC Energy Unit; the Director of the Bureau of Water Compliance; and both the Regional Permit Administrator and the Regional Water Engineer, Region 1, at least 60 days prior to any proposed change which would result in the alteration of the permitted operation, location, design, construction, or capacity of the cooling water intake structure. The permittee must submit with the written notification a demonstration that the change reflects the best technology available for minimizing adverse environmental impacts pursuant to 6 NYCRR §704.5, Commissioner Policy-52, and Section 316(b) of the Clean Water Act. As determined by DEC, a permit modification application in accordance with 6 NYCRR Part 621 may be required.

Schedule of Compliance

The permittee shall comply with the following schedule:

Outfall Number(s)	Compliance Action	Due Date
009	B1. Continue to implement BTA measures	EDP
	B2. Identifies required reductions in impingement and entrainment mortality	EDP
	B3. Submit monthly reports documenting flow reduction and generation cap compliance.	Monthly starting at EDP
	B4. Submit an approvable <i>Cumulative Reductions Report</i> to the Energy Unit Leader that demonstrates compliance with 6 NYCRR Part 704.5, CP-52, and 316(b) of the Clean Water Act	EDP + 4.5 years and every 5 years thereafter
	B5. Submit a Contingency Plan to propose conditions to achieve reductions in Requirement 2a and 2b	Within 3 months of DEC notification

SPECIAL CONDITIONS

1. There shall be no discharge to groundwater of wastewater resulting from station operation, except for the permitted discharge of uncontaminated stormwater at Outfalls 026 and 027 and the discharge of excess steam.
2. There shall be no discharge to groundwaters or surface waters of oil tank bottom water, sanitary waste, or PCBs from this facility.
3. The permittee shall submit annually reports to the DEC's offices in Albany and Stony Brook (Region 1) by the 28th of the month following the end of the reporting period. This report must include:
 - a. A log of the daily minimum, average, and maximum station electrical output;
 - b. A log of the daily minimum, average, and maximum cooling water usage (either directly or indirectly, measured or calculated);
 - c. A log of the daily minimum, average, and maximum intake and discharge temperatures;
 - d. Values reported in a, b, and c shall be based upon measurements taken on an hourly basis;
4. Notwithstanding any other requirement in this permit, the permittee shall also comply with all of the Water Quality Regulations promulgated by the Interstate Environmental Commission (IEC), including Section 1.01 and 2.05(f) as they relate to Oil and Grease.
 - a. All waters of the Interstate Environmental District shall be of such quality and condition that they will be free from Oil and Grease, to the extent that Oil and Grease shall be noticeable on the water or deposited along the shore or on aquatic substrata, in quantities detrimental to the natural biota; nor shall Oil and Grease be present in quantities that would render the waters in question unsuitable for use in accordance with their respective classifications. All wastes shall be of a character that will not violate, or cause violation of, the requirements contained in this paragraph.
 - b. In addition to the requirements for Total Suspended Solids (TSS) contained elsewhere in this permit, the requirements for TSS for the IEC shall be met.
5. In all instances, chlorine use shall be:
 - a. Kept to the minimum amount which will maintain plant operating efficiency; and
 - b. Eliminated when intake water temperature is below 40°F unless failure to apply chlorine below 40°F is shown to adversely affect plant operating efficiency.
6. The waste treatment facility sludge impoundment area shall be inspected and properly maintained following each cleaning to uphold the integrity of the concrete basin and waterstop lining.
7. Information regarding residuals management, as identified in 6 NYCRR Part 750-2.8(e)(3) & (4), shall be reported semi-annually to the DEC offices in Albany and Stony Brook.
8. The thermal discharge from the facility shall assure the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife in and on Port Jefferson Harbor and Long Island Sound in accordance with 6 NYCRR Part 704.1(a). The permittee's thermal discharge may not exceed Part 704.2(b)(4)(1) which states that the discharge shall not cause the receiving water temperature to be raised more than 4°F from October to June nor more than 1.5°F from July through September over that which existed before the addition of heat of artificial origin except within a mixing zone of 26.6 x 106 sq. ft. (611 acres).
9. The bottom surface of the Holding Pond liner shall be inspected at least once every three years. Annual inspections shall be conducted of the following components of the Holding Pond and Surge Pond system: earthen dikes; visible sections of the liners; outlet structure; degritter structure; sludge impoundment area; clarifier tank; and other miscellaneous items that can be inspected. The results of this annual inspection must be included in an Engineering Report to be submitted to the DEC Regional Water Manager and the Suffolk County Department of Health Services for review. If at any time it is suspected that the liner system has been compromised, the DEC Regional Water Manager and the Suffolk County Department of Health Services must be notified and a complete inspection of the bottom surface of the Holding Pond must be conducted, and repairs made as required.
10. Any fish, shellfish, or other organism collected or trapped at the intake structure shall be returned to Port Jefferson Harbor, except during periods when organisms are collected for scientific research.

11. The traveling screens for any operating cooling water circulating pump must be rotated and washed continuously whenever the screens are operable.

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. **General** - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage. The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the DEC as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized DEC representatives upon request.
2. **Compliance Deadlines** – The initial BMP plan was received by the DEC on February 16, 2007. The BMP plan **shall be reviewed annually** and shall be modified whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.
3. **Facility Review** - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases. The review shall address all substances present at the facility that are identified in the SPDES application Form NY-2C (available at https://www.dec.ny.gov/docs/permits_ej_operations_pdf/form2c.pdf) or that are required to be monitored for by the SPDES permit.
4. **13 Minimum BMPs:** Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in *Developing Your Stormwater Pollution Prevention Plan A Guide for Industrial Operators*, February 2009, EPA 833-B-09-002. As a minimum, the plan shall include the following BMPs:

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

BMPs FOR INDUSTRIAL FACILITIES (continued)

5. **Stormwater Pollution Prevention Plans (SWPPPs) Required for Discharges of Stormwater from Construction Activity to Surface Waters** - A SWPPP shall be developed prior to commencing any construction activity that will result in soil disturbance of one or more acres of uncontaminated area². (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 DEC only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at www.dec.ny.gov/chemical/43133.html) prior to soil disturbance. Note that submission of the NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges. SWPPPs must be developed for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly implemented.
6. **Required Sampling For "Hot Spot" Identification** - Development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutant "hot spot" identification. The economic achievability of effluent limits will not be considered until plant site "hot spot" sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology. For the purposes of this permit condition a "hot spot" is a segment of an industrial facility (including but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem pollutants to the wastewater and/or stormwater collection system of that facility. For the purposes of this definition, problem pollutants are substances for which treatment to meet a water quality or technology requirement may, considering the results of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at the compliance monitoring location so as to allow for an economically justifiable removal and/or isolation of the segment and/or B.A.T. treatment of wastewaters emanating from the segment.

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

MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

On 2/1/2024, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10.

1. **General** - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below.
2. **MMP Elements** - The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements³ as described in detail below:
 - a. **Conditional Exclusion Certification** - A certification (Appendix D of *DOW 1.3.10*), signed in accordance with 750-1.8 Signature of SPDES forms, must be submitted once every five (5) years to the Regional Water Engineer and to the Bureau of Water Permits certifying that the facility is neither a mercury source nor receives flows from a mercury source. Criteria to determine if a facility has a mercury source are as follows:
 - The facility is or receives discharge from 1) individually permitted combined sewer overflow (CSOs)⁴ communities and/or 2) Type II sanitary sewer overflow (SSO)⁵ facilities;
 - One or more effluent samples which exceed 12 ng/L, including samples taken as a result of the SPDES application process;
 - Internal or tributary waste stream samples exceed the GLCA effluent limitation **AND** the final effluent samples are less than the GLCA due primarily to dilution by uncontaminated or less contaminated waste streams. Both components of this criterion may include samples taken as a result of the SPDES application process;
 - A permit application or other information indicates that mercury is handled on site and could be discharged through outfalls;
 - Outfalls which contain legacy mercury contamination;
 - The facility's collection system receives discharges from a dental and/or categorical industrial user (CIU)⁶ that may discharge mercury;
 - The facility accepts hauled wastes; or,
 - The facility is defined as a categorical industry that may discharge mercury. This may also include dentists, universities, hospitals, or laboratories which have their own SPDES permit.
 - b. **Control Strategy** - The control strategy must contain the following minimum elements:
 - i. **Equipment and Materials** – Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.
 - ii. **Bulk Chemical Evaluation** – For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. If possible, the permittee must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.
3. **Status Report** - An **annual** status report must be developed and maintained on site, in accordance with the [Schedule of Additional Submittals](#), summarizing:
 - i. Review of criteria to determine if the facility has a potential mercury source;
 - a. If the permittee no longer meets the criteria for MMP Type IV, the permittee must notify the DEC for a permittee-initiated permit modification;

³Neither 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.

⁴CSO permits are included under the 05 and 07 permit classifications.

⁵These are overflow retention facilities (ORFs) and are included under the 05 and 07 permit classifications.

⁶CIUs include those listed under Federal Regulation in 40 CFR Part 400.

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

- 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).

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

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

DEFINITIONS:

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

DISCHARGE NOTIFICATION REQUIREMENTS

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

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

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. : _____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

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

OR:

DEC Division of Water Regional Office Address:

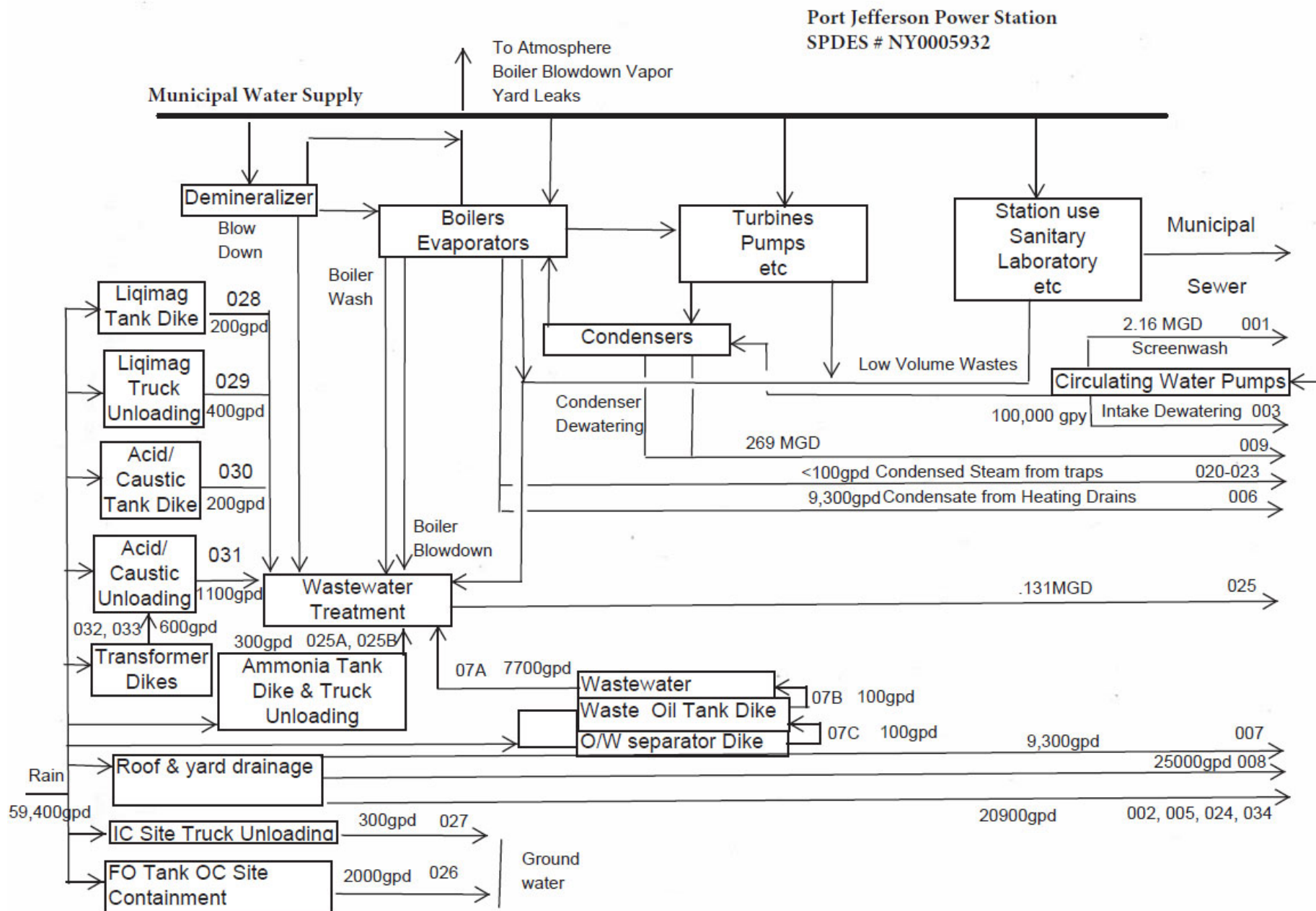
DEC Division of Water Regional Phone: () - ### - #####

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

MONITORING LOCATIONS

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

Effluent: Sampling must occur after treatment, but prior to discharge



GENERAL REQUIREMENTS

- A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through H as follows:
- B. General Conditions
- | | |
|--|---|
| 1. Duty to comply | 6 NYCRR 750-2.1(e) & 2.4 |
| 2. Duty to reapply | 6 NYCRR 750-1.16(a) |
| 3. Need to halt or reduce activity not a defense | 6 NYCRR 750-2.1(g) |
| 4. Duty to mitigate | 6 NYCRR 750-2.7(f) |
| 5. Permit actions | 6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h) |
| 6. Property rights | 6 NYCRR 750-2.2(b) |
| 7. Duty to provide information | 6 NYCRR 750-2.1(i) |
| 8. Inspection and entry | 6 NYCRR 750-2.1(a) & 2.3 |
- C. Operation and Maintenance
- | | |
|-----------------------------------|--------------------------------------|
| 1. Proper Operation & Maintenance | 6 NYCRR 750-2.8 |
| 2. Bypass | 6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7 |
| 3. Upset | 6 NYCRR 750-1.2(a)(94) & 2.8(c) |
- D. Monitoring and Records
- | | |
|---------------------------|--|
| 1. Monitoring and records | 6 NYCRR 750-2.5(a)(2), 2.5(a)(6), 2.5(c)(1), 2.5(c)(2), & 2.5(d) |
| 2. Signatory requirements | 6 NYCRR 750-1.8 & 2.5(b) |
- E. Reporting Requirements
- | | |
|---|-----------------------------------|
| 1. Reporting requirements for non-POTWs | 6 NYCRR 750-2.5, 2.6, 2.7, & 1.17 |
| 2. Anticipated noncompliance | 6 NYCRR 750-2.7(a) |
| 3. Transfers | 6 NYCRR 750-1.17 |
| 4. Monitoring reports | 6 NYCRR 750-2.5(e) |
| 5. Compliance schedules | 6 NYCRR 750-1.14(d) |
| 6. 24-hour reporting | 6 NYCRR 750-2.7(c) & (d) |
| 7. Other noncompliance | 6 NYCRR 750-2.7(e) |
| 8. Other information | 6 NYCRR 750-2.1(f) |
- F. Sludge Management
- The permittee shall comply with all applicable requirements of 6 NYCRR Part 360.
- G. SPDES Permit Program Fee
- The permittee shall pay to the DEC an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the DEC, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.
- H. Water Treatment Chemicals (WTCs)
- New or increased use and discharge of a WTC requires prior DEC review and authorization. At a minimum, the permittee must notify the DEC in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The DEC will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed prior authorization from the DEC. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.
1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized by the DEC.
 2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and, the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure excessive levels of WTCs are not used.
 3. The permittee shall submit a completed WTC Annual Report Form each year that they use and discharge WTCs. This form shall be submitted in electronic format and attached to either the December DMR or the annual monitoring report required below. The *WTC Notification Form* and *WTC Annual Report Form* are available from the DEC's website at: <http://www.dec.ny.gov/permits/93245.html>

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 DEC or its designated agent.

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

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.

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

D. Schedule of Additional Submittals:

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
025	<u>EMERGING CONTAMINANT SHORT-TERM MONITORING</u> The permittee shall collect grab samples of both the influent and effluent from the facility's treatment system(s) associated with the identified outfall for 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: Emerging Contaminants In NY's Waters - NYSDEC. 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 and/or additional monitoring to check progress on track down investigations. Elements of the checklist may be used as permit conditions in future permit modifications.	EDP + 6 months Within 90 days of DEC written notification

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
	<u>BMP PLAN</u> The permittee shall annually review the completed BMP plan, submitted to this DEC on 02/16/2007, on an annual basis. The BMP plan shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions must be submitted to the Regional Water Engineer within 30 days.	EDP + 6 Months, Annually thereafter on January 28 th
025	<u>WHOLE EFFLUENT TOXICITY (WET) TESTING</u> WET testing shall be performed as required in the footnote of the permit limits table. The toxicity test report including all information requested of this permit shall be attached to your WET DMRs and sent to the WET@dec.ny.gov email address.	Within 60 days following the end of each monitoring period
	<u>WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM</u> The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	
	<u>MERCURY - CONDITIONAL EXCLUSION CERTIFICATION</u> Permittee must submit a mercury conditional exclusion certification every five years in order to maintain MMP Type IV status.	2/1/2029 and every 5 years thereafter
	<u>THERMAL DISCHARGE STUDY</u> [Note: These are two-stage studies, see below. First stage is to complete and submit the Thermal Criteria Study (A) Report. The second stage requirement for a Thermal Standard Study (B) is contingent upon the results from Study A.] A. Thermal Criteria Study Requirement The permittee must submit a Thermal Discharge Study Workplan (Workplan), approvable as defined in 6 NYCRR 750-1.2(a)(8), to outline the scope of work to demonstrate compliance with the thermal discharge criteria contained in 6 NYCRR 704.2. The Workplan must include a brief history of the facility; a summary of past thermal studies; a proposed study protocol; and a schedule for conducting field studies, thermal modeling, and submission of an approvable Thermal Criteria Study Report (Report). The field study shall be conducted by the permittee. The final Report shall be submitted to DEC. The Thermal Discharge Study must: (a) be designed to describe all applicable criteria contained in 6 NYCRR 704.2 and evaluate compliance with those criteria, including a comparison of the permitted mixing zone and thermal plume maps from past thermal studies to those reflecting current conditions; (b) be conducted under critical ambient temperature when all units are operating during summer, winter, or other critical climatological conditions (all ambient and discharge temperatures must be recorded to the nearest degree Fahrenheit); (c) include an analysis of past ambient data to determine any temperature trends in the receiving water; (d) perform three (3) additional modeling projection runs in response to air temperature	EDP + 1 year DEC Approval of Workplan + 1 year Completion of field study + 3 months

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
	increases in increments of 2 degrees Fahrenheit starting with the baseline worst-case scenario (the baseline worst-case scenario may include but is not limited to: the critical ambient temperature, climatological, seasonal conditions, etc.). All runs shall be made under maximum thermal discharge loading conditions. The final Report must include the technical material obtained during the study and provide all assumptions, calculations, and models used in deriving the Daily Maximum Discharge Temperature and size of the mixing zone. B. Thermal Standard Study Requirement Following DEC review of the final Thermal Criteria Study Report, if any of the thermal criteria identified in 6 NYCRR 704.2 are exceeded, the permittee will be notified by the DEC that they will be required to either: (1) bring the thermal discharge into compliance with the exceeded criteria; or (2) submit an application for a variance to the thermal criteria according to the procedures detailed in 6 NYCRR 704.4. If the permittee requests a thermal variance, additional studies may be required, such as an investigation of impact assessment for receiving water biota or an evaluation of compliance with the thermal standard contained in 6 NYCRR 704.1 and Section 316(a) of the Clean Water Act. If a thermal variance is approved, the permittee must request renewal of the variance during each subsequent permit renewal. The permittee must be prepared to provide documentation supporting the need for the variance if the DEC requests such documentation. If, during the renewal request, the DEC determines that there are signs of impairment as a result of the discharge, then the DEC may require additional treatment of, or a change in, the thermal discharge. The Workplan and final Report (3 copies of each) shall be submitted to: DEC Division of Water (spdesapp@dec.ny.gov).	

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

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

SPDES Permit Fact Sheet

National Grid Generation, LLC

Port Jefferson Power Station

NY0005932



**Department of
Environmental
Conservation**

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Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) EBPS permit renewal has been drafted for the Port Jefferson Power Station. The changes to the permit are summarized below:

- **General**
 - Updated permit format, definitions, and general conditions.
 - Added Stormwater Pollution Prevention Requirements.
 - Updated Special Condition #1 and removed Special Conditions #5, #13, and #14.
 - Added MMP Type IV.
 - Added Schedule of Additional Submittals which includes Emerging Contaminant Short-Term Monitoring; Updated BMP Plan; Whole Effluent Toxicity (WET) Testing; Water Treatment Chemical (WTC) Annual Report Form; Mercury Conditional Exclusion Certification, and Thermal Discharge Study.
- **Outfall 007**
 - Updated outfall description from “Stormwater and Outfalls 07A, 07B, and 07C” to “Stormwater”.
- **Outfall 07A**
 - Effluent limits and monitoring are being discontinued as Outfall 07A is an internal outfall routed through Outfall 025 for ultimate discharge and all pollutants expected from it are encompassed in the external outfall.
- **Outfall 07B**
 - Effluent limits and monitoring are being discontinued as Outfall 07B is an internal outfall routed through Outfall 025 for ultimate discharge and all pollutants expected from it are encompassed in the external outfall.
- **Outfall 07C**
 - Effluent limits and monitoring are being discontinued as Outfall 07C is an internal outfall routed through Outfall 025 for ultimate discharge and all pollutants expected from it are encompassed in the external outfall.
- **Outfall 008**
 - Discontinued Chromium, Total action level of 0.2 mg/L as this outfall is no longer used for evaporator blowdown.
 - Discontinued Copper, Total effluent limit of 0.05 mg/L as this outfall is no longer used for evaporator blowdown.
 - Discontinued Cyanide, Total effluent limit of 0.01 mg/L as this outfall is no longer used for evaporator blowdown.
- **Outfall 009**
 - Updated “Daily Average” flow rate to “Monthly Average”.
 - Revised Total Residual Chlorine limit from 0.13 mg/L to 0.075 mg/L.
 - Removed footnote #5 as it is no longer applicable.
 - Added Total Residual Chlorine footnote.
- **Outfall 025**
 - Chromium, Total is being reduced from a Daily Maximum of 0.5 mg/L to 0.2 mg/L in accordance with 40 CFR 423.
 - Nickel, Total is being reduced from 2.0 mg/L to “No Detectable Amount” in accordance with 40 CFR 423.
 - Ethylbenzene is being reduced from 50 µg/L to 45 µg/L.
 - Added WET testing action levels of 3 TUa and 10 TUC for acute and chronic, respectively.
 - Added WET testing and quarterly sampling footnote.
- **Outfall 025A**
 - Effluent limits and monitoring are being discontinued as Outfall 025A is an internal outfall routed through Outfall 025 for ultimate discharge and all pollutants expected from it are encompassed in the external outfall.

- **Outfall 025B**
 - Effluent limits and monitoring are being discontinued as Outfall 025B is an internal outfall routed through Outfall 025 for ultimate discharge and all pollutants expected from it are encompassed in the external outfall.
- **Outfall 026**
 - Added Daily Minimum and Daily Maximum pH limit of 6.5 and 8.5 SU respectively.
 - Added quarterly sampling footnote.
- **Outfall 027**
 - Added Daily Minimum and Daily Maximum pH limit of 6.5 and 8.5 SU respectively.
 - Added quarterly sampling footnote.
- **Outfall 028**
 - Effluent limits and monitoring are being discontinued as Outfall 028 is an internal outfall routed through Outfall 025 for ultimate discharge and all pollutants expected from it are encompassed in the external outfall.
- **Outfall 029**
 - Effluent limits and monitoring are being discontinued as Outfall 029 is an internal outfall routed through Outfall 025 for ultimate discharge and all pollutants expected from it are encompassed in the external outfall.
- **Outfall 030**
 - Effluent limits and monitoring are being discontinued as Outfall 030 is an internal outfall routed through Outfall 025 for ultimate discharge and all pollutants expected from it are encompassed in the external outfall.
- **Outfall 031**
 - Effluent limits and monitoring are being discontinued as Outfall 031 is an internal outfall routed through Outfall 025 for ultimate discharge and all pollutants expected from it are encompassed in the external outfall.
- **Outfall 032**
 - Effluent limits and monitoring are being discontinued as Outfall 032 is an internal outfall routed through Outfall 025 for ultimate discharge and all pollutants expected from it are encompassed in the external outfall.
- **Outfall 033**
 - Effluent limits and monitoring are being discontinued as Outfall 033 is an internal outfall routed through Outfall 025 for ultimate discharge and all pollutants expected from it are encompassed in the external outfall.

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

Administrative History

- | | |
|-----------|---|
| 8/1/2011 | The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 7/31/2016. The 2011 permit has formed the basis of this permit. |
| 7/31/2016 | The current permit was extended pursuant to SAPA ¹ . |
| 4/27/2021 | Department issued a Request for Information (RFI) to modify and renew the SPDES permit due to the facility's EBPS score ² . At the time of the RFI, the facility had an EBPS score of 244. |
| 7/27/2021 | The National Grid Generation, LLC submitted an NY-2C permit application. |

¹ State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(I)

² Pursuant to 6 NYCRR 750-1.18 and NYS Environmental Benefit Permit Strategy (EBPS)

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

Facility Information

Steam Electric Power Generating Point Source Category. U.S. EPA developed ELGs for the Steam Electric Power Point Generating Point Source Category at 40 CFR Part 423, which are applicable to “*discharges resulting from the operation of a generating unit by an establishment whose generation of electricity is the predominant source of revenue or principal reason for operation, and whose generation of electricity results primarily from a process utilizing fossil-type fuel (coal, oil, or gas), fuel derived from fossil fuel (e.g., petroleum coke, synthesis gas), or nuclear fuel in conjunction with a thermal cycle employing the steam water system as the thermodynamic medium.*” These standards apply to discharges associated with both the combustion turbine and steam turbine portions of a combined cycled generating unit.

Port Jefferson Power Station is an industrial facility that operates 4 gas and oil-fired steam turbine generators (STGs) to generate electricity for distribution and sale and is subject to categorical effluent limitations (ELGs). Municipal water is purified and used to generate steam. Cooling water is withdrawn from and returned to Port Jefferson Harbor. Details on the existing facility are provided below:

Item	Facility
Electric Power Generating System	Four fossil fueled units, two steam turbines, and two LM6000
Date of Operation	Unit #3: Put into service in 1958 and converted to dual-fuel in 1996. Rated at 175 MWe and burns either #6 oil or natural gas as a fuel. Unit #4: Put into service in 1960 and converted to dual-fuel in 1997. Rated at 175 MWe and burns either #6 oil or natural gas as a fuel. Three combustion turbines on-site. GT-1 which began operation in 1966 is rated at 16 MWe and burns #2 fuel oil. GT-2 & 3 began operation in 2002 and are limited to a combined output of 79.9 Mwe and burn either natural gas or #2 fuel oil.
Effluent Limitation Guidelines	N/A; no wastes generated that are covered under 40 CFR 423
Generating Capacity	Unit #3: 175 MWe Unit #4: 175 MWe GT-1: 16 MWe GT-2 & 3 (combined): 79.9 MWe Total: 445.9 MWe
Fuel Type	Natural Gas, #6 fuel oil, #2 fuel oil
Water Supply	Suffolk County Municipal Water and private intake
Cooling Water Intake Structure (CWIS)	288 MGD See also CWIS Section
Outfall Description	Outfall 001 – Screenwash. Located in the northeastern corner of the site. Diameter: 1.66 ft. Horizontal.

Outfall 002 – Yard Stormwater. Located in the northeastern corner of the site. Diameter: 1.5 ft. Horizontal outfall, submerged.

Outfall 003 – Intake Bay Dewatering. Located within structure.

Outfall 005 – Yard Stormwater. Discharges onto the harbor bank where water flows down the rocks into the harbor.

Outfall 006 – Heating Steam Condensate. Discharges in the rocks on the harbor bank where water flows down the rocks into the harbor.

Outfall 007 – Stormwater and Outfalls 07A, 07B, and 07C. Discharges on the harbor bank. Water flows down rocks into the harbor.

Outfall 07A – Wastewater Holding Tank. Internal outfall. Receives wastewater from Outfall 07B and 07C that combines with waste from Outfall 07A and then is sent to Outfall 025.

Outfall 07B – Waste Oil/Sludge Tank Secondary Containment Stormwater. Internal outfall. Pumped to Outfall 07A.

Outfall 07C – Oil Water Separator Secondary Containment Stormwater. Internal outfall. Pumped to Outfall 07A.

Outfall 008 – Roof and Yard Drainage. Located on the bank, therefore there is no depth of water. Drainage runs down rocks into harbor.

Outfall 009 – Main Circulating Cooling Water. Discharge releases into southeastern section of the facility. Outfall is 255 ft².

Outfall 020 – Condensed Steam. Discharge of condensed steam from steam traps on a steam line used for maintenance purposes. The amount of water discharged is extremely small and falls onto the dock prior to dripping down into the harbor.

Outfall 021 – Condensed Steam. Discharge of condensed steam from steam traps on a steam line used for maintenance purposes. The amount of water discharged is extremely small and falls onto the dock prior to dripping down into the harbor.

Outfall 022 – Condensed Steam. Discharge of condensed steam from steam traps on a steam line used for maintenance purposes. The amount of water discharged is extremely small and falls onto the dock prior to dripping down into the harbor.

Outfall 023 – Condensed Steam. Discharge of condensed steam from steam traps on a steam line used for maintenance purposes. The amount of water discharged is extremely small and falls onto the dock prior to dripping down into the harbor.

Outfall 024 – Roof Stormwater Drains from Administration Building. Discharge occurs underneath the dock below low tide line.

Outfall 025 – Wastewater Treatment Facility. Located in the northeast corner of the site. Diameter: 8 in.

	Outfall 025A – Ammonia Tank Secondary Containment Stormwater. Internal outfall. Outfall 025B – Ammonia Truck Unloading Facility Stormwater. Internal outfall. Outfall 026 – IC Fuel Oil Tank Secondary Containment Stormwater. Outfall 027 – IC Fuel Truck Unloading Facility Stormwater. Outfall 028 – LiquiMag Tank Secondary Containment Stormwater. Internal outfall. Outfall 029 – LiquiMag Truck Unloading Facility Stormwater. Internal outfall. Outfall 030 – Acid & Caustic Tank Secondary Containment Stormwater. Internal outfall. Outfall 031 – Acid & Caustic Tank Unloading Facility Stormwater. Internal outfall. Outfall 032 – Transformer Secondary Containment Stormwater. Internal outfall. Outfall 033 – Transformer Secondary Containment Stormwater. Internal outfall. Outfall 034 – Yard Stormwater. Located in the southeastern section of the facility. Diameter: 8 in. Water is discharged onto the harbor bank and runs down rocks into the harbor.
Water Treatment:	Metal cleaning wastes, leachate, stormwater, demineralization system waste, and ultrafiltration backwash are treated and discharged from Outfall 025. Treatment consists of acid, lime, polymer, and mixing; chemical precipitation; and neutralization. Solids are subject to gravity thickening, belt press filtration, and on-site landfill placement. Till removed offsite.
Low-volume Waste	No low-volume waste is generated at the facility.
Ash Handling	Ash is hauled off-site to GreenTree Landfill.
Metal Cleaning	No metal cleaning wastes generated.
Air Pollution Controls	Electrostatic Precipitators – Particulate control Separated Over Fire Air – NOx control
Cooling System	Once through – intake to condensers to discharge
Material Storage Areas	(4) Fuel oil storage tanks
Stormwater associated with industrial activity 40 CFR 122.26	Stormwater associated with industrial activity Sector O – Steam Electric Generating applies. Stormwater from yard is removed from site by outfalls and is tested each month per SPDES permit requirements. The stormwater is untreated and exits into Port Jefferson Harbor. Stormwater from secondary containment is

	either sampled as per the SPDES permit and pumped to ground if within permit limits or is pumped to the wastewater treatment plant.
Miscellaneous:	Hydrostatic test of fuel tanks is done with well water. They are sampled to verify they are clean and drained into tank dike area.

Cooling Water Intake Structure (CWIS) Biological Monitoring

The facility currently uses a once-through cooling system to withdraws water from Port Jefferson Harbor using a shoreline intake structure and is subject to the performance goals of Commissioner's Policy 52 (CP-52). [Appendix A](#) contains the Biological Fact Sheet with details on the permit requirements related to the CWIS.



Enforcement History

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

Existing Effluent Quality

The [Pollutant Summary Table](#) presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports and the application submitted by the permittee for the period 1/31/2018 to 12/31/2022. [Appendix Link](#)

Interstate Water Pollution Control Agencies

Outfall(s) 001, 002, 003, 005, 006, 007, 07A, 07B, 07C, 008, 009, 020, 021, 022, 023, 024, 025, 025A, 025B, 026, 027, 028, 029, 030, 031, 032, 033, and 034 are located within the Interstate Environmental Commission (IEC) compact area. [Appendix Link](#)

Additional Site-Specific Concerns

The facility is located in a sole source aquifer. As required by ECL 17-0828, the permittee submitted a completed *Application Supplement B: Discharges within Sole Source Aquifers* form identifying the following water purveyors within a three-mile radius of the facility: Suffolk County Water Authority.

Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	ELG applicability	Receiving Water
001	4911	Screenwash	N/A	Port Jefferson Harbor, Class SA
002	4911	Yard Stormwater	N/A	Port Jefferson Harbor, Class SA
003	4911	Intake Bay Dewatering	N/A	Port Jefferson Harbor, Class SA
005	4911	Yard Stormwater	N/A	Port Jefferson Harbor, Class SA
006	4911	Heating Steam Condensate	N/A	Port Jefferson Harbor, Class SA
007	4911	Stormwater and Outfalls 07A, 07B, and 07C	N/A	Port Jefferson Harbor, Class SA
07A	4911	Wastewater Holding Tank	N/A	Internal to Outfall 025
07B	4911	Waste Oil/Sludge Tank Secondary Containment Stormwater	N/A	Internal to Outfall 025
07C	4911	Oil Water Separator Secondary Containment Stormwater	N/A	Internal to Outfall 025
008	4911	Roof and Yard Drainage	N/A	Port Jefferson Harbor, Class SA
009	4911	Main Circulating Cooling Water	N/A	Port Jefferson Harbor, Class SA
020	4911	Condensed Steam	N/A	Port Jefferson Harbor, Class SA
021	4911	Condensed Steam	N/A	Port Jefferson Harbor, Class SA
022	4911	Condensed Steam	N/A	Port Jefferson Harbor, Class SA
023	4911	Condensed Steam	N/A	Port Jefferson Harbor, Class SA

024	4911	Roof Stormwater Drains from Administration Building	N/A	Port Jefferson Harbor, Class SA
025	4911	Wastewater Treatment Facility	N/A	Port Jefferson Harbor, Class SA
025A	4911	Ammonia Tank Secondary Containment Stormwater	N/A	Internal to Outfall 025
025B	4911	Ammonia Truck Unloading Facility Stormwater	N/A	Internal to Outfall 025
026	4911	IC Fuel Oil Tank Secondary Containment Stormwater	N/A	Groundwater, Class GA
027	4911	IC Fuel Truck Unloading Facility Stormwater	N/A	Groundwater, Class GA
028	4911	LiquiMag Tank Secondary Containment Stormwater	N/A	Internal to Outfall 025
029	4911	LiquiMag Truck Unloading Facility Stormwater	N/A	Internal to Outfall 025
030	4911	Acid & Caustic Tank Secondary Containment Stormwater	N/A	Internal to Outfall 025
031	4911	Acid & Caustic Truck Unloading Facility Stormwater	N/A	Internal to Outfall 025
032	4911	Transformer Secondary Containment Stormwater	N/A	Internal to Outfall 025
033	4911	Transformer Secondary Containment Stormwater	N/A	Internal to Outfall 025
034	4911	Yard Stormwater	N/A	Port Jefferson Harbor, Class SA

Reach Description: Port Jefferson Harbor is situated in Long Island Sound. The segment of the Port Jefferson Harbor at the point of discharge is classified as SA (6 NYCRR 925.6 – Table I – Item 68) and encompasses the harbor entrance portion south to a line running between LILCO bulkhead and beach house at the end of Beach Road, Belle Terre (excluding Setauket Harbor and Conscience Bay).

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

Impaired Waterbody Information

The Port Jefferson Harbor segment (PWL No. 1702-0015) was listed on the 2007 [New York State Section 303\(d\) List](#) (Category 4a) of Impaired/TMDL Waters as impaired due to pathogens from municipal/urban stormwater runoff. In 2007, a TMDL was approved for the Port Jefferson Harbor segment. The TMDL addressed the following pollutants: pathogens. In 2018, the TMDL was withdrawn as data had shown that implementation would not have caused water quality standards to be achieved.

Critical Receiving Water Data & Mixing Zone

The facility discharges to Port Jefferson Harbor, which is a tidal waterbody and therefore a chronic dilution ratio of 10:1 is applicable. The acute dilution ratio of 10:1 was also applied.

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
002	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
003	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
005	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
006	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
007	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
008	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
009	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
020	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
021	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
022	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
023	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
024	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
025	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)
034	10:1	10:1	10:1	TOGS 1.3.1 (for ponded or tidal waterbodies)

Additionally, the facility discharges to groundwater, Class GA, via Outfalls 026 and 027. The effluent limitations for Outfalls 026 and 027 were developed with no dilution, based on groundwater quality standards found in 6 NYCRR 703.5 and TOGS 1.1.1 (Part I) and groundwater effluent standards contained in 6 NYCRR 703.6 and TOGS 1.1.1 (Part II).

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

Permit Requirements

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

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

Best Practicable Control Technology Currently Available (BPT), Best Conventional Pollutant Control Technology (BCT), Best Available Technology Economically Achievable (BAT), and New Source Performance Standards (NSPS) limitations are based on [Effluent Limitation Guidelines](#) developed by USEPA for specific industries³. The applicable effluent guidelines and limits are listed in the Pollutant Summary Table for each outfall as applicable. [Appendix Link](#)

Whole Effluent Toxicity (WET) Testing

An evaluation of the discharge indicates the potential for toxicity based on the following criteria: [Appendix Link](#)

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

The requirement for WET testing is new. No previous WET data was available to perform a reasonable potential analysis. Consistent with TOGS 1.3.2, given the dilution available and location outside of the Great Lakes basin, the permit requires chronic WET testing. WET testing action levels of 3 TUa and 10 TUC have been included in the permit at Outfall 025 for each species. The acute action level for each species represent the acute dilution ratio times a factor of 0.3. The chronic action levels represent the chronic dilution ratio. Samples will be collected quarterly during calendar years ending in 4 and 9.

Anti-backsliding

The following effluent limitations are subject to an antibacksliding determination:

Chromium, Total; Copper, Total; and Cyanide, Total at Outfall 008. This outfall is no longer used for evaporator blowdown. Instead, water not suitable for use in the generator is allowed to be vented, instead of condensed, and sent out Outfall 008. Per 6 NYCRR 750-1.10(c)(1), "a permit may be modified to contain a less stringent effluent limit...if...material and substantial alterations or additions to the permitted facility occurred after permit issuance, which justify the application of a less stringent effluent limitation."

[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)⁴ determination. [Appendix Link](#)

³ As promulgated under 40 CFR Parts 405 - 471

⁴ As prescribed by 6 NYCRR Part 617

Discharge Notification Act Requirements

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

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

Best Management Practices (BMPs) for Industrial Facilities

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

Stormwater Pollution Prevention Requirements

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

Due to additional pollutants present in the stormwater, stormwater discharges at this facility require coverage under an individual SPDES permit and 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.

Mercury⁵

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

The facility is located outside of the Great Lakes Basin, does not have a mercury source, is a Class 03 industrial facility, and the permit includes requirements for the implementation of MMP Type IV.

On 2/1/2024, the permittee submitted a Conditional Exclusion Certification, certifying that **Outfalls 002, 005, 007, 008, 009, & 025** do not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10 and the effluent measured <12 ng/L. Therefore, consistent with DOW 1.3.10, the permit includes requirements for the implementation of MMP Type IV and does not include mercury effluent limitations. The [Schedule of Additional Submittals](#) includes a mercury minimization plan annual status report (maintained onsite), and re-certification of the exclusion every five years. As part of the re-certification, the effluent must be sampled and continue to measure <12 ng/L. This requirement is new.

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: [Emerging Contaminants In NY's Waters - NYSDEC](#).

Required Sampling: 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 1,4-Dioxane. This monitoring program is consistent with 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

⁵ In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.

Investigation Checklist for Industrial Facilities to determine whether cause exists to modify the permit to incorporate a pollutant minimization program per 6 NYCRR 750-1.14(f).

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

Schedule(s) of Additional Submittals

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

- Emerging Contaminant Short-Term Monitoring
- Updated BMP Plan
- Whole Effluent Toxicity (WET) Testing
- Water Treatment Chemical (WTC) Annual Report Form
- Mercury Conditional Exclusion Certification
- Thermal Discharge Study

Special Conditions

Special Condition 1, listed in the current permit, is being updated to remove Outfall 032 and 033 as these outfalls now are internal to Outfall 025.

Special Condition 5, listed in the current permit, is being removed as the requirement for Water Treatment Chemicals (WTCs) is encompassed in the General Requirements section of the permit.

Special Conditions 13 and 14, listed in the current permit, are being removed as they are no longer applicable.

1. There shall be no discharge to groundwater of wastewater resulting from station operation, except for the permitted discharge of uncontaminated stormwater at Outfalls 026 and 027 ~~032, 033~~, and the discharge of excess steam.
2. There shall be no discharge to groundwaters or surface waters of oil tank bottom water, sanitary waste, or PCBs from this facility.
3. The permittee shall submit annually reports to the Department's offices in Albany and Stony Brook (Region 1) by the 28th of the month following the end of the reporting period. This report must include:
 - a. A log of the daily minimum, average, and maximum station electrical output;
 - b. A log of the daily minimum, average, and maximum cooling water usage (either directly or indirectly, measured or calculated);
 - c. A log of the daily minimum, average, and maximum intake and discharge temperatures;
 - d. Values reported in a, b, and c shall be based upon measurements taken on an hourly basis.
4. Notwithstanding any other requirement in this permit, the permittee shall also comply with all of the Water Quality Regulations promulgated by the Interstate Environmental Commission (IEC), including Section 1.01 and 2.05(f) as they relate to Oil and Grease.
 - a. All waters of the Interstate Environmental District shall be of such quality and condition that they will be free from Oil and Grease, to the extent that Oil and Grease shall be noticeable on the water or deposited along the shore or on aquatic substrata, in quantities detrimental to the natural biota; nor shall Oil and Grease be present in quantities that would render the waters in question unsuitable for use in accordance with their respective classifications. All wastes shall be of a character that will not violate, or cause violation of, the requirements contained in this paragraph.
 - b. In addition to the requirements for Total Suspended Solids (TSS) contained elsewhere in this permit, the requirements for TSS for the IEC shall be met.

~~5. All water treatment chemicals (e.g., corrosion inhibitors, antifouling additives, slimicides, and biocides) identified in the August 31, 2005 Request for Information Response are approved for use. Approval is granted only for uses which do not contravene New York State Water Quality Standards. The permittee must comply with Generic Water Treatment Chemical (WTC) Usage Requirements including annual reporting and other requirements identified on page 3 of the WTC Usage Notification form available at the NYSDEC website: www.dec.ny.gov/permits/6222.html. If the use of any new water treatment chemicals is intended, prior notification and approval must occur before use.~~

6. In all instances, chlorine use shall be:
 - a. Kept to the minimum amount which will maintain plant operating efficiency; and
 - b. Eliminated when intake water temperature is below 40°F unless failure to apply chlorine below 40°F is shown to adversely affect plant operating efficiency.
7. The waste treatment facility sludge impoundment area shall be inspected and properly maintained following each cleaning to uphold the integrity of the concrete basin and waterstop lining.
8. Information regarding residuals management, as identified in 6 NYCRR Part 750-2.8(e)(3) & (4), shall be reported semi-annually to the NYSDEC offices in Albany and Stony Brook.
9. The thermal discharge from the facility shall assure the protection and propagation of a balanced indigenous population of shellfish, fish, and wildlife in and on Port Jefferson Harbor and Long Island Sound in accordance with 6 NYCRR Part 704.1(a). The permittee's thermal discharge may not exceed Part 704.2(b)(4)(1) which states that the discharge shall not cause the receiving water temperature to be raised more than 4°F from October to June nor more than 1.5°F from July through September over that which existed before the addition of heat of artificial origin except within a mixing zone of 26.6×10^6 sq. ft. (611 acres).
10. The bottom surface of the Holding Pond liner shall be inspected at least once every three years. Annual inspections shall be conducted of the following components of the Holding Pond and Surge Pond system: earthen dikes; visible sections of the liners; outlet structure; degritter structure; sludge impoundment area; clarifier tank; and other miscellaneous items that can be inspected. The results of this annual inspection must be included in an Engineering Report to be submitted to the NYSDEC Regional Water Manager and the Suffolk County Department of Health Services for review. If at any time it is suspected that the liner system has been compromised, the NYSDEC Regional Water Manager and the Suffolk County Department of Health Services must be notified and a complete inspection of the bottom surface of the Holding Pond must be conducted and repairs made as required.
11. Any fish, shellfish, or other organism collected or trapped at the intake structure shall be returned to Port Jefferson Harbor, except during periods when organisms are collected for scientific research.
12. The traveling screens for any operating cooling water circulating pump must be rotated and washed continuously whenever the screens are operable.
- ~~13. The permittee shall conduct a short term monitoring program for the parameter(s) and outfall(s) identified on the Schedule of Compliance table on page 18 of 22 of this permit.~~
- ~~14. In order to maintain technology based discharge limitations for the wastewater treatment plant discharge Outfall 025, the permittee has proposed relocating the discharge outfall to a location between the condenser cooling water intakes in accordance with the Schedule of Compliance table on page 18 of 22 of this permit.~~

OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	40° 57' 2" N	73° 4' 43" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	2.16	10:1	10:1	10:1
002	40° 57' 5" N	73° 4' 40" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	0.43	10:1	10:1	10:1
003	40° 57' 4" N	73° 4' 40" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	0.10	10:1	10:1	10:1
005	40° 57' 4" N	73° 4' 39" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	0.04	10:1	10:1	10:1
006	40° 57' 3" N	73° 4' 38" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	0.00	10:1	10:1	10:1
007	40° 57' 3" N	73° 4' 38" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	0.24	10:1	10:1	10:1
07A	Internal to Outfall 025		-	-	-	-	-	-	-	-	0.01	-	-	-
07B	Internal to Outfall 025		-	-	-	-	-	-	-	-	0.00	-	-	-
07C	Internal to Outfall 025		-	-	-	-	-	-	-	-	0.00	-	-	-
008	40° 57' 2" N	73° 4' 36" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	0.62	10:1	10:1	10:1
009	40° 57' 1" N	73° 4' 34" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	288	10:1	10:1	10:1
020	40° 57' 3" N	73° 4' 36" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	0.00	10:1	10:1	10:1
021	40° 57' 3" N	73° 4' 36" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	0.00	10:1	10:1	10:1
022	40° 57' 3" N	73° 4' 36" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	0.00	10:1	10:1	10:1
023	40° 57' 3" N	73° 4' 36" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	0.00	10:1	10:1	10:1
024	40° 57' 3" N	73° 4' 37" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	0.03	10:1	10:1	10:1
025	40° 57' 4" N	73° 4' 42" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	0.35	10:1	10:1	10:1
025A	Internal to Outfall 025		-	-	-	-	-	-	-	-	0.00	-	-	-
025B	Internal to Outfall 025		-	-	-	-	-	-	-	-	0.00	-	-	-
026	40° 56' 53" N	73° 4' 49" W	Groundwater	GA	-	17 / 02	-	-	-	-	0.05	-	-	-

Permittee: National Grid Generation, LLC
 Facility: Port Jefferson Power Station
 SPDES Number: NY0005932
 USEPA Non-Major/Class 01 Industrial

Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

027	40° 56' 53" N	73° 4' 49" W	Groundwater	GA	-	17 / 02	-	-	-	-	0.01	-	-	-
028	Internal to Outfall 025		-	-	-	-	-	-	-	-	0.00	-	-	-
029	Internal to Outfall 025		-	-	-	-	-	-	-	-	0.01	-	-	-
030	Internal to Outfall 025		-	-	-	-	-	-	-	-	0.00	-	-	-
031	Internal to Outfall 025		-	-	-	-	-	-	-	-	0.01	-	-	-
032	Internal to Outfall 025		-	-	-	-	-	-	-	-	0.01	-	-	-
033	Internal to Outfall 025		-	-	-	-	-	-	-	-	0.01	-	-	-
034	40° 57' 2" N	73° 4' 36" W	Port Jefferson Harbor	SA	LIS-PJH PWL: 1702-0015	17 / 02	-	-	-	-	0.02	10:1	10:1	10:1

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	Description of Wastewater: Screenwash													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁶	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: No monitoring required.															

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

Outfall #	002	Description of Wastewater: Yard Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁷	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	11410 Actual Max	43/0	Monitor	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	Monitor	
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	6.0	6.2 Actual Min.	43/0	6.0	USEPA ELG BPT	The normal range shall not be extended by more than one-tenth (0.1) of a pH unit.				703.3	-	TBEL	
		Maximum	9.0	8.15 Actual Max	43/0	9.0									
	pH at this outfall is regulated by the USEPA effluent limitations guidelines under 40 CFR Part 423.														
Oil & Grease	mg/L	Daily Max	15	Non-Detect	0/43	15	Antibacksliding	Narrative: No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.				703.2	-	Antibacksliding	
	This permit is maintaining the original daily maximum limit of 15 mg/L which prevents backsliding.														
Total Suspended Solids	mg/L	Daily Max	50	42.07	32/11	50	Antibacksliding	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	Antibacksliding	
	The existing permit limit was set in place under 40 CFR 423 when the facility used coal for electricity production and point sources of coal pile runoff occurred from this outfall. While this is no longer applicable as the facility does not use coal for electricity production, the existing limit is being maintained to be protective of water quality and to prevent backsliding.														
Total Mercury	ng/L	-	-	2.9	1/0	-	-	-	-	0.7	H(FC)	-	-	-	DOW 1.3.10
	See Mercury section of this factsheet .														

⁷ 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)

Permittee: National Grid Generation, LLC
 Facility: Port Jefferson Power Station
 SPDES Number: NY0005932
 USEPA Non-Major/Class 01 Industrial

Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Outfall #	002	Description of Wastewater: Yard Stormwater														
		Type of Treatment: None														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality ⁷	# 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			
Additional Pollutants Detected																
Ammonia (as N)	mg/L	-	-	0.414	1/0	-	-	-	0.3305	0.572	A(C)	No Reasonable Potential	40 CFR 122.44 (RSAT)	-	No Limitation	
	Ammonia (as N) was detected as reported in the NY-2C application. The WQS was determined based on 10 th percentile salinity of 24.98 k/kg, a 90 th percentile temperature of 24.41 deg. C, and 90 th percentile pH of 8.04 using the closest gage to Port Jefferson Harbor. The projected instream concentration was calculated using the maximum reported effluent concentration of 0.414 mg/L and an ambient upstream concentration of 0 mg/L. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.20 was applied to the projected effluent to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.															
Nitrate-Nitrite (as N)	mg/L	-	-	0.465	1/0	-	-	-	-	-	-	-	-	-	No Limitation	
	Nitrate-Nitrite (as N) was detected as reported in the NY-2C application. No water quality standard exists for Nitrate-Nitrite (as N) to Class SA waterbodies. Therefore, no limitation is being imposed.															
Total Organic Carbon	mg/L	-	-	7.91	1/0	-	-	-	-	-	-	-	-	-	No Limitation	
	Total Organic Carbon was detected as reported in the NY-2C application. No water quality standard exists for Total Organic Carbon to Class SA waterbodies. Therefore, no limitation is being imposed.															
Aluminum, Total	mg/L	-	-	0.205	1/0	-	-	-	-	-	-	-	-	-	No Limitation	
	Aluminum, Total was detected as reported in the NY-2C application. No water quality standard exists for Aluminum, Total to Class SA waterbodies. Therefore, no limitation is being imposed.															
Iron, Total	mg/L	-	-	0.38	1/0	-	-	-	-	-	-	-	-	-	No Limitation	
	Iron, Total was detected as reported in the NY-2C application. No water quality standard exists for Iron, Total to Class SA waterbodies. Therefore, no limitation is being imposed.															
Acetone	µg/L	-	-	32	4/0	-	-	-	-	-	-	-	-	-	No Limitation	
	32 µg/L is the maximum effluent concentration reported. Acetone was detected as reported in the NY-2C application. No water quality standard exists for Acetone to Class SA waterbodies. Therefore, no limitation is being imposed.															

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 USEPA Non-Major/Class 01 Industrial
Outfall 003

Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Outfall #	003	Description of Wastewater: Intake Bay Dewatering														
		Type of Treatment: None														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality ⁸	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
General Notes: No monitoring required.																

Outfall 005

Outfall #	005	Description of Wastewater: Yard Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁹	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	11400 Actual Max	43/0	Monitor	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	Monitor	
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	6.0	6.4 Actual Min.	43/0	6.0	USEPA ELG BPT	The normal range shall not be extended by more than one-tenth (0.1) of a pH unit.				703.3	-	TBEL	
		Maximum	9.0	7.9 Actual Max	43/0	9.0									
pH at this outfall is regulated by the USEPA effluent limitations guidelines under 40 CFR Part 423.															

⁸ 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)

⁹ 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)

Permittee: National Grid Generation, LLC
 Facility: Port Jefferson Power Station
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Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Outfall #	005	Description of Wastewater: Yard Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁹	# 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		
Oil & Grease	mg/L	Daily Max	15	6	1/42	15	Antibacksliding	Narrative: No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.					703.2	-	Antibacksliding
	This permit is maintaining the original daily maximum limit of 15 mg/L which prevents backsliding.														
Total Suspended Solids	mg/L	Daily Max	50	43.52	38/5	50	Antibacksliding	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.					703.2	-	Antibacksliding
	The existing permit limit was set in place under 40 CFR 423 when the facility used coal for electricity production and point sources of coal pile runoff occurred from this outfall. While this is no longer applicable as the facility does not use coal for electricity production, the existing limit is being maintained to be protective of water quality and to prevent backsliding.														
Total Mercury	ng/L	-	-	4.9	1/0	-	-	-	-	0.7	H(FC)	-	-	-	DOW 1.3.10
	See Mercury section of this factsheet .														
Additional Pollutants Detected															
Ammonia (as N)	mg/L	-	-	0.413	1/0	-	-	-	0.3299	0.572	A(C)	No Reasonable Potential	40 CFR 122.44 (RSAT)	-	No Limitation
	Ammonia (as N) was detected as reported in the NY-2C application. The WQS was determined based on 10 th percentile salinity of 24.98 k/kg, a 90 th percentile temperature of 24.41 deg. C, and 90 th percentile pH of 8.04 using the closest gage to Port Jefferson Harbor. The projected instream concentration was calculated using the maximum reported effluent concentration of 0.413 mg/L and an ambient upstream concentration of 0 mg/L. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.20 was applied to the projected effluent to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														
Nitrate-Nitrite (as N)	mg/L	-	-	0.539	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Nitrate-Nitrite (as N) was detected as reported in the NY-2C application. No water quality standard exists for Nitrate-Nitrite (as N) to Class SA waterbodies. Therefore, no limitation is being imposed.														
Total Organic Carbon	mg/L	-	-	6.39	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Total Organic Carbon was detected as reported in the NY-2C application. No water quality standard exists for Total Organic Carbon to Class SA waterbodies. Therefore, no limitation is being imposed.														
Aluminum, Total	mg/L	-	-	6.5	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Aluminum, Total was detected as reported in the NY-2C application. No water quality standard exists for Aluminum, Total to Class SA waterbodies. Therefore, no limitation is being imposed.														
Iron, Total	mg/L	-	-	10.8	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Iron, Total was detected as reported in the NY-2C application. No water quality standard exists for Iron, Total to Class SA waterbodies. Therefore, no limitation is being imposed.														

Permittee: National Grid Generation, LLC
 Facility: Port Jefferson Power Station
 SPDES Number: NY0005932
 USEPA Non-Major/Class 01 Industrial

Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Description of Wastewater: Yard Stormwater															
Outfall #	005	Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ⁹	# 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		
Acetone	µg/L	-	-	47	4/0	-	-	-	-	-	-	-	-	-	No Limitation
	47 µg/L is the maximum effluent concentration reported. Acetone was detected as reported in the NY-2C application. No water quality standard exists for Acetone to Class SA waterbodies. Therefore, no limitation is being imposed.														

Outfall 006

Outfall #	006	Description of Wastewater: Heating Steam Condensate														
		Type of Treatment: None														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & QBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality ¹⁰	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. QBEL	Basis for QBEL			
General Notes: No monitoring required.																

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

Outfall #	007	Description of Wastewater: Stormwater and Outfalls 07A, 07B, and 07C													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ¹¹	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	45650 Actual Max	43/0	Monitor	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	Monitor	
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	6.0	6.3 Actual Min.	43/0	6.0	USEPA ELG BPT	The normal range shall not be extended by more than one-tenth (0.1) of a pH unit.				703.3	-	TBEL	
		Maximum	9.0	7.9 Actual Max	43/0	9.0									
	pH at this outfall is regulated by the USEPA effluent limitations guidelines under 40 CFR Part 423.														
Oil & Grease	mg/L	Daily Max	15	Non-Detect	0/43	15	Antibacksliding	Narrative: No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.				703.2	-	Antibacksliding	
	This permit is maintaining the original daily maximum limit of 15 mg/L which prevents backsliding.														
Total Suspended Solids	mg/L	Daily Max	50	67.6	37/6	50	Antibacksliding	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	Antibacksliding	
	The existing permit limit was set in place under 40 CFR 423 when the facility used coal for electricity production and point sources of coal pile runoff occurred from this outfall. While this is no longer applicable as the facility does not use coal for electricity production, the existing limit is being maintained to be protective of water quality and to prevent backsliding.														
Total Mercury	ng/L	-	-	8	1/0	-	-	-	-	0.7	H(FC)	-	-	-	DOW 1.3.10
	See Mercury section of this factsheet .														

¹¹ 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)

Permittee: National Grid Generation, LLC
 Facility: Port Jefferson Power Station
 SPDES Number: NY0005932
 USEPA Non-Major/Class 01 Industrial

Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Description of Wastewater: Stormwater and Outfalls 07A, 07B, and 07C															
Outfall #	007	Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ¹¹	# 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		
Additional Pollutants Detected															
Ammonia (as N)	mg/L	-	-	0.376	1/0	-	-	-	0.3069	0.572	A(C)	No Reasonable Potential	40 CFR 122.44 (RSAT)	-	No Limitation
	Ammonia (as N) was detected as reported in the NY-2C application. The WQS was determined based on 10 th percentile salinity of 24.98 k/kg, a 90 th percentile temperature of 24.41 deg. C, and 90 th percentile pH of 8.04 using the closest gage to Port Jefferson Harbor. The projected instream concentration was calculated using the maximum reported effluent concentration of 0.376 mg/L and an ambient upstream concentration of 0 mg/L. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.20 was applied to the projected effluent to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														
Nitrate-Nitrite (as N)	mg/L	-	-	0.974	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Nitrate-Nitrite (as N) was detected as reported in the NY-2C application. No water quality standard exists for Nitrate-Nitrite (as N) to Class SA waterbodies. Therefore, no limitation is being imposed.														
Total Organic Carbon	mg/L	-	-	8.72	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Total Organic Carbon was detected as reported in the NY-2C application. No water quality standard exists for Total Organic Carbon to Class SA waterbodies. Therefore, no limitation is being imposed.														
Aluminum, Total	mg/L	-	-	0.138	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Aluminum, Total was detected as reported in the NY-2C application. No water quality standard exists for Aluminum, Total to Class SA waterbodies. Therefore, no limitation is being imposed.														
Iron, Total	mg/L	-	-	0.143	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Iron, Total was detected as reported in the NY-2C application. No water quality standard exists for Iron, Total to Class SA waterbodies. Therefore, no limitation is being imposed.														
Acetone	µg/L	-	-	9.6	1/3	-	-	-	-	-	-	-	-	-	No Limitation
	Acetone was detected as reported in the NY-2C application. No water quality standard exists for Acetone to Class SA waterbodies. Therefore, no limitation is being imposed.														

Outfall #	07A	Description of Wastewater: Wastewater Holding Tank													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ¹²	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	No Discharge	-	-	-	-			-	-	-	Discontinued	
	Outfall 07A is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
pH	SU	Minimum	6.0	No Discharge	-	-	-	-			-	-	-	Discontinued	
		Maximum	9.0	No Discharge	-	-	-	-			-	-	-	Discontinued	
	Outfall 07A is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Oil & Grease	mg/L	Daily Max	15	No Discharge	-	-	-	-			-	-	-	Discontinued	
	Outfall 07A is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Iron, Total Recoverable	mg/L	Daily Max	3.0	No Discharge	-	-	-	-	-	-	-	-	-	-	Discontinued
	Outfall 07A is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														

¹² 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)

Permittee: National Grid Generation, LLC
 Facility: Port Jefferson Power Station
 SPDES Number: NY0005932
 USEPA Non-Major/Class 01 Industrial
 Outfall 07B

Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Outfall #	07B	Description of Wastewater: Waste Oil/Sludge Tank Secondary Containment Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ¹³	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	No Discharge	-	-	-	-				-	-	Discontinued	
	Outfall 07B is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Oil & Grease	mg/L	Daily Max	15	No Discharge	-	-	-	-				-	-	Discontinued	
	Outfall 07B is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														

Outfall 07C

Outfall #	07C	Description of Wastewater: Oil Water Separator Secondary Containment Stormwater														
		Type of Treatment: None														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality ¹⁴	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.																
Flow Rate	GPD	Daily Max	Monitor	No Discharge	-	-	-	-				-	-	Discontinued		
	Outfall 07C is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.															

¹³ 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)

¹⁴ 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)

Permittee: National Grid Generation, LLC
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Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Outfall #	07C	Description of Wastewater: Oil Water Separator Secondary Containment Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ¹⁴	# 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		
Oil & Grease	mg/L	Daily Max	15	No Discharge	-	-	-	-				-	-	Discontinued	
	Outfall 07C is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														

Outfall 008

Outfall #	008	Description of Wastewater: Roof and Yard Drainage													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ¹⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	11400 Actual Max	43/0	Monitor	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	Monitor	
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	6.0	6.6 Actual Min.	43/0	6.0	USEPA ELG BPT	The normal range shall not be extended by more than one-tenth (0.1) of a pH unit.				703.3	-	TBEL	
		Maximum	9.0	8.8 Actual Max	43/0	9.0									
pH at this outfall is regulated by the USEPA effluent limitations guidelines under 40 CFR Part 423.															

¹⁵ 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)

Permittee: National Grid Generation, LLC
Facility: Port Jefferson Power Station
SPDES Number: NY0005932
USEPA Non-Major/Class 01 Industrial

Date: August 23, 2024 v.1.26
Permit Writer: Gwendolyn Temple
Water Quality Reviewer: Gwendolyn Temple
Full Technical Review

Description of Wastewater: Roof and Yard Drainage															
Outfall #	008	Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ¹⁵	# 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		
Oil & Grease	mg/L	Daily Max	15	Non-Detect	0/43	15	Antibacksliding	Narrative: No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.					703.2	-	Antibacksliding
	This permit is maintaining the original daily maximum limit of 15 mg/L which prevents backsliding.														
Total Suspended Solids	mg/L	Daily Max	50	45.18	30/13	50	Antibacksliding	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.					703.2	-	Antibacksliding
	The existing permit limit was set in place under 40 CFR 423 when the facility used coal for electricity production and point sources of coal pile runoff occurred from this outfall. While this is no longer applicable as the facility does not use coal for electricity production, the existing limit is being maintained to be protective of water quality and to prevent backsliding.														
Chromium, Total	mg/L	AL - Type I	0.2	-	-	-	-	-	-	-	-	-	-	-	Discontinued
	Chromium, Total monitoring is only required for evaporator blowdown and must be collected prior to mixing with stormwater. No sampling for Chromium, Total occurred during the 5-year period reviewed.														
	According to permittee, this outfall is no longer used for evaporator blowdown. Instead, water not suitable for use in the generator is allowed to be vented, instead of condensed, and sent out Outfall 008. Only stormwater remains. As such, this action level is being removed per 6 NYCRR 750-1.10(c)(1) which states that "a permit may be modified to contain a less stringent effluent limit...if...material and substantial alterations or additions to the permitted facility occurred after permit issuance, which justify the application of a less stringent effluent limitation."														
Copper, Total	mg/L	Daily Max	0.05	-	-	-	-	-	-	0.0034	A(C)	-	-	-	Discontinued
	Copper, Total monitoring is only required for evaporator blowdown and must be collected prior to mixing with stormwater. No sampling for Copper, Total occurred during the 5-year period reviewed.														
	According to permittee, this outfall is no longer used for evaporator blowdown. Instead, water not suitable for use in the generator is allowed to be vented, instead of condensed, and sent out Outfall 008. Only stormwater remains. As such, this effluent limit is being removed per 6 NYCRR 750-1.10(c)(1) which states that "a permit may be modified to contain a less stringent effluent limit...if...material and substantial alterations or additions to the permitted facility occurred after permit issuance, which justify the application of a less stringent effluent limitation."														
Cyanide, Total	mg/L	Daily Max	0.01	-	-	-	-	-	-	9	H(FC)	-	-	-	Discontinued
	Cyanide, Total monitoring is only required for evaporator blowdown and must be collected prior to mixing with stormwater. No sampling for Cyanide, Total occurred during the 5-year period reviewed.														
	According to permittee, this outfall is no longer used for evaporator blowdown. Instead, water not suitable for use in the generator is allowed to be vented, instead of condensed, and sent out Outfall 008. Only stormwater remains. As such, this effluent limit is being removed per 6 NYCRR 750-1.10(c)(1) which states that "a permit may be modified to contain a less stringent effluent limit...if...material and substantial alterations or additions to the permitted facility occurred after permit issuance, which justify the application of a less stringent effluent limitation."														

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Water Quality Reviewer: Gwendolyn Temple
Full Technical Review

Outfall #	008	Description of Wastewater: Roof and Yard Drainage													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ¹⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Mercury	ng/L	-	-	5.8	1/0	-	-	-	-	0.7	H(FC)	-	-	-	DOW 1.3.10
See Mercury section of this factsheet.															
Additional Pollutants Detected															
Ammonia (as N)	mg/L	-	-	0.439	1/0	-	-	-	0.346	0.572	A(C)	No Reasonable Potential	40 CFR 122.44 (RSAT)	-	No Limitation
	Ammonia (as N) was detected as reported in the NY-2C application. The WQS was determined based on 10 th percentile salinity of 24.98 k/kg, a 90 th percentile temperature of 24.41 deg. C, and 90 th percentile pH of 8.04 using the closest gage to Port Jefferson Harbor. The projected instream concentration was calculated using the maximum reported effluent concentration of 0.376 mg/L and an ambient upstream concentration of 0 mg/L. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.20 was applied to the projected effluent to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														
Nitrate-Nitrite (as N)	mg/L	-	-	0.624	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Nitrate-Nitrite (as N) was detected as reported in the NY-2C application. No water quality standard exists for Nitrate-Nitrite (as N) to Class SA waterbodies. Therefore, no limitation is being imposed.														
Total Organic Carbon	mg/L	-	-	8.44	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Total Organic Carbon was detected as reported in the NY-2C application. No water quality standard exists for Total Organic Carbon to Class SA waterbodies. Therefore, no limitation is being imposed.														
Aluminum, Total	mg/L	-	-	0.411	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Aluminum, Total was detected as reported in the NY-2C application. No water quality standard exists for Aluminum, Total to Class SA waterbodies. Therefore, no limitation is being imposed.														
Iron, Total	mg/L	-	-	0.558	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Iron, Total was detected as reported in the NY-2C application. No water quality standard exists for Iron, Total to Class SA waterbodies. Therefore, no limitation is being imposed.														
Acetone	µg/L	-	-	24	4/0	-	-	-	-	-	-	-	-	-	No Limitation
	24 µg/L is the maximum effluent concentration reported. Acetone was detected as reported in the NY-2C application. No water quality standard exists for Acetone to Class SA waterbodies. Therefore, no limitation is being imposed.														

Outfall #	009	Description of Wastewater: Main Circulating Cooling Water													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ¹⁶	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	MGD	Monthly Avg	Monitor	100.4 Actual Avg.	57/0	Monitor	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	Monitor	
		Daily Max	Monitor	316 Actual Max	57/0	Monitor	750-1.13 Monitor								
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	6.0	6.3 Actual Min.	53/0	6.0	USEPA ELG BPT	The normal range shall not be extended by more than one-tenth (0.1) of a pH unit.				703.3	-	TBEL	
		Maximum	9.0	8.8 Actual Max	53/0	9.0									
	pH at this outfall is regulated by the USEPA effluent limitations guidelines under 40 CFR Part 423.														
Discharge Temperature	°F	Daily Max	110	128.05	57/0	110	Antibacksliding	Narrative: The water temperature at the surface of an estuary shall not be raised to more than 90 degrees Fahrenheit at any point.				704.2	-	Antibacksliding	
	The existing effluent quality noted above is the 99% lognormal. Actual maximum temperature was 103°F. The discharge is a thermal discharge consisting of (mainly) non-contact cooling water (NCCW). To achieve standards specified in 6 NYCRR Part 704, an effluent temperature of 110°F is specified. This requirement is being continued from the previous permit. The basis for this limit is a 316(a) and (b) demonstration, approved by the Department, which provides a mixing zone of 26.6x10 ⁶ ft. ² (611 acres).														

¹⁶ 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)

Permittee: National Grid Generation, LLC
Facility: Port Jefferson Power Station
SPDES Number: NY0005932
USEPA Non-Major/Class 01 Industrial

Date: August 23, 2024 v.1.26
Permit Writer: Gwendolyn Temple
Water Quality Reviewer: Gwendolyn Temple
Full Technical Review

Outfall #	009	Description of Wastewater: Main Circulating Cooling Water													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ¹⁶	# 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		
Intake-Discharge Temperature Difference	°F	Daily Max	30	77.47	57/0	30	Antibacksliding	Narrative: The water temperature at the surface of an estuary shall not be raised to more than 90 degrees Fahrenheit at any point.					704.2	-	Antibacksliding
	The existing effluent quality noted above is the 99% lognormal. Actual maximum intake-discharge temperature difference was 38.3°F.														
	Intake-discharge temperature difference was previously determined from a review of station data from 1975 showing that maximum discharge ΔT at Port Jefferson Power Station was about 30°F. Temperatures as high as 30°F occurred infrequently and were of brief duration, but this ΔT was determined to be required for normal operation of the units. This requirement is being continued from the previous permit.														
	The permittee may exceed this limit by not more than 10 degrees Fahrenheit and for not more than 1% of the operating time per year.														
Total Residual Chlorine	mg/L	Daily Max	0.13	-	-	0.2	USEPA ELG BAT	-	-	0.0075	A(C)	0.075	703.5	-	WQBEL
	No discharge of Total Residual Chlorine during the entire 5-year term. A Total Residual Chlorine limit is being continued from the previous permit in the event that the facility intends to utilize chlorine in the future.														
	The period of chlorination is limited to two hours per day per unit. Individual units are treated separately. Monitoring is only required during the period of chlorine treatment and discharge.														
Net Addition of Heat	BTU/Hr	Daily Max	2.8 x 10E9	2.6 x 10E9	51/5	2.8 x 10E9	Antibacksliding	-	-	-	-	-	-	-	Antibacksliding
	The existing effluent quality noted above is the 99% lognormal. Actual maximum net addition of heat was 1.9 x 10E9 BTU/Hr.														
	This requirement is being continued from the previous permit.														
Total Mercury	ng/L	Daily Max	-	4.2	1/0	-	-	-	-	0.7	H(FC)	-	-	-	DOW 1.3.10
	See Mercury section of this factsheet .														
Additional Pollutants Detected															
Total Organic Carbon	mg/L	-	-	4.5	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Total Organic Carbon was detected as reported in the NY-2C application. No water quality standard exists for Total Organic Carbon to Class SA waterbodies. Therefore, no limitation is being imposed.														
Total Suspended Solids	mg/L	-	-	5	1/0	-	-	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	No Limitation	
	Total Suspended Solids was detected as reported in the NY-2C application. There is no ELG specified in 40 CFR 423 for Total Suspended Solids in once through cooling water. Additionally, no treatment occurs at this outfall. Therefore, no TBEL is specified. No limitation is being imposed.														

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 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Outfall #	009	Description of Wastewater: Main Circulating Cooling Water													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ¹⁶	# 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		
Acetone	µg/L	-	-	10	2/2	-	-	-	-	-	-	-	-	-	No Limitation
Acetone was detected as reported in the NY-2C application. No water quality standard exists for Acetone to Class SA waterbodies. Therefore, no limitation is being imposed.															

Outfall 020

Outfall #	020	Description of Wastewater: Condensed Steam														
		Type of Treatment: None														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality ¹⁷	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
General Notes: No monitoring required.																

Outfall 021

Outfall #	021	Description of Wastewater: Condensed Steam														
		Type of Treatment: None														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality ¹⁸	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
General Notes: No monitoring required.																

¹⁷ 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)

¹⁸ 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)

Permittee: National Grid Generation, LLC
 Facility: Port Jefferson Power Station
 SPDES Number: NY0005932
 USEPA Non-Major/Class 01 Industrial
 Outfall 022

Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Outfall #	022	Description of Wastewater: Condensed Steam														
		Type of Treatment: None														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality ¹⁹	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
General Notes: No monitoring required.																

Outfall 023

Outfall #	023	Description of Wastewater: Condensed Steam														
		Type of Treatment: None														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality ²⁰	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
General Notes: No monitoring required.																

¹⁹ 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)

²⁰ 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)

Permittee: National Grid Generation, LLC
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 USEPA Non-Major/Class 01 Industrial
Outfall 024

Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Outfall #	024	Description of Wastewater: Roof Stormwater Drains from Administration Building														
		Type of Treatment: None														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality ²¹	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
General Notes: No monitoring required.																

Outfall 025

Outfall #	025	Description of Wastewater: Wastewater Treatment Facility (metal cleaning wastes, leachate, stormwater, demineralization system waste, ultrafiltration backwash)													
		Type of Treatment: Acid, lime, polymer and mixing, chemical precipitation, neutralization													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ²²	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Monthly Avg	Monitor	145441 Actual Avg.	59/0	Monitor	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	Monitor	
		Daily Max	Monitor	551605 Actual Max	59/0	Monitor	750-1.13 Monitor								
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	6.0	6.4 Actual Min.	59/0	6.0	USEPA ELG BPT	The normal range shall not be extended by more than one-tenth (0.1) of a pH unit.				703.3	-	TBEL	
		Maximum	9.0	8.9 Actual Max	59/0	9.0									
	pH at this outfall is regulated by the USEPA effluent limitations guidelines under 40 CFR Part 423.														

²¹ 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)

²² 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)

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Date: August 23, 2024 v.1.26
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Water Quality Reviewer: Gwendolyn Temple
Full Technical Review

Outfall #	025	Description of Wastewater: Wastewater Treatment Facility (metal cleaning wastes, leachate, stormwater, demineralization system waste, ultrafiltration backwash)													
		Type of Treatment: Acid, lime, polymer and mixing, chemical precipitation, neutralization													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ²²	# 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		
Oil & Grease	mg/L	Monthly Avg	-	-	-	15	USEPA ELG BPT	Narrative: No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.					703.2	-	No Limitation
		Daily Max	15	Non-Detect	0/59	20	USEPA ELG BPT								Antibacksliding
	The EPA effluent limitation guidelines in 40 CFR 423 require a daily maximum limit of 20 mg/L and a monthly average limit of 15 mg/L for Oil & Grease from low volume waste sources. This permit is maintaining the original daily maximum limit of 15 mg/L which prevents backsliding. The daily maximum is as protective as the monthly average and therefore, the 15 mg/L monthly average is not being added to the permit.														
Total Suspended Solids	mg/L	Monthly Avg	30	6.6	27/32	30	USEPA ELG BPT	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.					703.2	-	TBEL
		Daily Max	50	21.48	35/24	100	USEPA ELG BPT								Antibacksliding
	The EPA effluent limitation guidelines in 40 CFR 423 require a daily maximum limit of 100 mg/L and a monthly average limit of 30 mg/L for Total Suspended Solids from low volume waste sources. This permit is maintaining the original daily maximum limit of 50 mg/L which prevents backsliding and maintaining the monthly average limit of 30 mg/L.														
Ammonia (as N)	mg/L	Daily Max	Monitor	1.15	38/21	Monitor	750-1.13 Monitor	-	0.2003	0.572	A(C)	No Reasonable Potential	40 CFR 122.44 (RSAT)	-	Monitor
	The WQS was determined based on 10 th percentile salinity of 24.98 k/kg, a 90 th percentile temperature of 24.41 deg. C, and 90 th percentile pH of 8.04 using the closest gage to Port Jefferson Harbor. The projected instream concentration was calculated using the maximum reported effluent concentration of 1.15 mg/L and an ambient upstream concentration of 0 mg/L. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 1.10 was applied to the projected effluent to account for the number of samples. A metals translator of 1.000 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified. Due to the industry type, Ammonia (as N) will continue to be monitored for informational purposes and to calculate pollutant loading.														
Total Iron	mg/L	Monthly Avg	-	-	-	1.0	USEPA ELG BPT	-	-	-	-	-	-	-	No Limitation
		Daily Max	1.0	0.44	54/5	1.0	USEPA ELG BPT	-	-	-	-	-	-	-	TBEL
	The EPA effluent limitation guidelines in 40 CFR 423 require a daily maximum limit of 1.0 mg/L and a monthly average limit of 1.0 mg/L for Total Iron from metal cleaning wastes. This permit is maintaining the original daily maximum limit of 1.0 mg/L. The daily maximum is as protective as the monthly average and therefore, the 1.0 mg/L monthly average is not being added to the permit.														
Total Copper	mg/L	Monthly Avg	-	-	-	1.0	USEPA ELG BPT	-	-	-	-	-	-	-	No Limitation
		Daily Max	0.5	0.08	5/54	1.0	USEPA ELG BPT	-	-	-	-	-	-	-	Antibacksliding
	The EPA effluent limitation guidelines in 40 CFR 423 require a daily maximum limit of 1.0 mg/L and a monthly average limit of 1.0 mg/L for Total Copper from metal cleaning wastes. This permit is maintaining the original daily maximum limit of 0.5 mg/L which prevents backsliding. The daily maximum is as protective as the monthly average and therefore, the 1.0 mg/L monthly average is not being added to the permit.														

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Water Quality Reviewer: Gwendolyn Temple
Full Technical Review

USEPA Permit Major Discharge: Industrial: Air Pollution Review															
Outfall #	025	Description of Wastewater: Wastewater Treatment Facility (metal cleaning wastes, leachate, stormwater, demineralization system waste, ultrafiltration backwash)													
		Type of Treatment: Acid, lime, polymer and mixing, chemical precipitation, neutralization													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ²²	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Vanadium	mg/L	Monthly Avg	10.0	0.15	42/17	10.0	Antibacksliding	-	-	-	-	-	-	-	Antibacksliding
		Daily Max	15.0	0.32	44/15	15.0	Antibacksliding	-	-	-	-	-	-	-	
	There is no ELG specified in 40 CFR 423 for Total Vanadium in metal cleaning wastestreams. The existing permit limits will be maintained due to the type of wastestream.														
Total Zinc	mg/L	Monthly Avg	-	-	-	1.0	USEPA ELG BAT	-	-	-	-	-	-	-	No Limitation
		Daily Max	1.0	0.09	11/48	1.0	USEPA ELG BAT	-	-	-	-	-	-	-	TBEL
	The EPA effluent limitation guidelines in 40 CFR 423 require a daily maximum limit of 1.0 mg/L and a monthly average limit of 1.0 mg/L for Total Zinc from cooling tower blowdown. This permit is maintaining the original daily maximum limit of 1.0 mg/L which prevents backsliding. The daily maximum is as protective as the monthly average and therefore, the 1.0 mg/L monthly average is not being added to the permit.														
Total Chromium	mg/L	Monthly Avg	-	-	-	0.2	USEPA ELG BAT	-	-	-	-	-	-	-	No Limitation
		Daily Max	0.5	Non-Detect	0/59	0.2	USEPA ELG BAT	-	-	-	-	-	-	-	TBEL
	The EPA effluent limitation guidelines in 40 CFR 423 require a daily maximum limit of 0.2 mg/L and a monthly average limit of 0.2 mg/L for Total Chromium from cooling tower blowdown. This permit is reducing the daily maximum limit from 0.5 mg/L to 0.2 mg/L. The daily maximum is as protective as the monthly average and therefore, the 0.2 mg/L monthly average is not being added to the permit.														
Total Nickel	mg/L	Monthly Avg	-	-	-	No Detectable Amount	USEPA ELG BAT	-	-	-	-	-	-	-	No Limitation
		Daily Max	2.0	0.07	3/56	No Detectable Amount	USEPA ELG BAT	-	-	-	-	-	-	-	TBEL
	The EPA effluent limitation guidelines in 40 CFR 423 require a daily maximum limit of no detectable amount and a monthly average limit of no detectable amount for Total Nickel from cooling tower blowdown. This permit is reducing the daily maximum limit from 2.0 mg/L to no detectable amount. The daily maximum is as protective as the monthly average and therefore, the No Detectable Amount monthly average is not being added to the permit.														
Total Manganese	mg/L	Daily Max	2.0	0.14	18/41	2.0	TOGS 1.2.1	-	-	-	-	-	-	-	TBEL
	Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C.														
Benzene	µg/L	Daily Max	50	Non-Detect	0/59	50	Antibacksliding	-	-	10	H(FC)	100	703.5	-	Antibacksliding
	No discharge of Benzene during the 5-year term reviewed. Due to the wastewater type and to protect water quality, Benzene will remain a permit requirement. The WQBEL is less stringent than the current permit limit. Therefore, the current permit limit will remain.														

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Water Quality Reviewer: Gwendolyn Temple
Full Technical Review

0025: Water Pollution Control of Industrial Wastewater															
Outfall #	025	Description of Wastewater: Wastewater Treatment Facility (metal cleaning wastes, leachate, stormwater, demineralization system waste, ultrafiltration backwash)													
		Type of Treatment: Acid, lime, polymer and mixing, chemical precipitation, neutralization													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ²²	# 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		
Toluene	µg/L	Daily Max	50	Non-Detect	0/59	50	Antibacksliding	-	-	92	A(C)	920	TOGS 1.1.1	-	Antibacksliding
	No discharge of Toluene during the 5-year term reviewed. Due to the wastewater type and to protect water quality, Toluene will remain a permit requirement. The WQBEL is less stringent than the current permit limit. Therefore, the current permit limit will remain.														
Total Xylenes	µg/L	Daily Max	50	4.25	2/57	50	Antibacksliding	-	0.43	19	A(C)	190	TOGS 1.1.1	-	Antibacksliding
	Due to the wastewater type and to protect water quality, Total Xylenes will remain a permit requirement. The WQBEL is less stringent than the current permit limit. Therefore, the current permit limit will remain.														
Ethylbenzene	µg/L	Daily Max	50	1	1/58	-	-	-	0.1	4.5	A(C)	45	TOGS 1.1.1	-	WQBEL
	Due to the wastewater type and to protect water quality, Ethylbenzene will remain a permit requirement. The WQBEL is more stringent than the current permit limit. Therefore, the limit is being reduced to the WQBEL of 45 µg/L.														
Total Mercury	ng/L	Daily Max	-	0.9	1/0	-	-	-	-	0.7	H(FC)	-	-	-	DOW 1.3.10
	See Mercury section of this factsheet .														
Additional Pollutants Detected															
Nitrate-Nitrite (as N)	mg/L	-	-	0.501	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Nitrate-Nitrite (as N) was detected as reported in the NY-2C application. No water quality standard exists for Nitrate-Nitrite (as N) to Class SA waterbodies. Therefore, no limitation is being imposed.														
Total Organic Carbon	mg/L	-	-	5.05	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Total Organic Carbon was detected as reported in the NY-2C application. No water quality standard exists for Total Organic Carbon to Class SA waterbodies. Therefore, no limitation is being imposed.														
Aluminum, Total	mg/L	-	-	0.0545	1/0	4.0	TOGS 1.2.1	-	-	-	-	-	-	-	No Limitation
	Aluminum, Total was detected as reported in the NY-2C application. No water quality standard exists for Aluminum, Total to Class SA waterbodies. Therefore, no limitation is being imposed.														
Arsenic, Total	mg/L	-	-	0.0297	1/0	0.15	TOGS 1.2.1	-	0.01841	0.063	A(C)	No Reasonable Potential	40 CFR 122.44 (RSAT)	-	No Limitation
	Arsenic, Total was detected as reported in the NY-2C application. The projected instream concentration was calculated using the maximum reported effluent concentration of 0.297 mg/L and an ambient upstream concentration of 0 mg/L. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.20 was applied to the projected effluent to account for the number of samples. A metals translator of 1.000 was applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified.														

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Full Technical Review

Outfall #	025	Description of Wastewater: Wastewater Treatment Facility (metal cleaning wastes, leachate, stormwater, demineralization system waste, ultrafiltration backwash)													
		Type of Treatment: Acid, lime, polymer and mixing, chemical precipitation, neutralization													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ²²	# 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		
Magnesium, Total	mg/L	-	-	8.74	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Magnesium, Total was detected as reported in the NY-2C application. No water quality standard exists for Magnesium, Total to Class SA waterbodies. Therefore, no limitation is being imposed.														
Selenium, Total	mg/L	-	-	0.0123	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Selenium, Total was detected as reported in the NY-2C application. No water quality standard exists for Selenium, Total to Class SA waterbodies. Therefore, no limitation is being imposed.														
Thallium, Total	mg/L	-	-	0.007	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Thallium, Total was detected as reported in the NY-2C application. No water quality standard exists for Thallium, Total to Class SA waterbodies. Therefore, no limitation is being imposed.														
Acetone	µg/L	-	-	10	1/3	-	-	-	-	-	-	-	-	-	No Limitation
	Acetone was detected as reported in the NY-2C application. No water quality standard exists for Acetone to Class SA waterbodies. Therefore, no limitation is being imposed.														
Phenols, Total Recoverable	mg/L	-	-	0.0128	1/0	-	-	-	-	-	-	-	-	-	No Limitation
	Phenols, Total Recoverable was detected as reported in the NY-2C application. No water quality standard exists for Phenols, Total Recoverable to Class SA waterbodies. Therefore, no limitation is being imposed.														

Outfall #	025A	Description of Wastewater: Ammonia Tank Secondary Containment Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ²³	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	-	-	-	-	-				-	-	Discontinued	
	Outfall 025A is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Oil & Grease	mg/L	Daily Max	15	-	-	-	-	-				-	-	Discontinued	
	Outfall 025A is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Benzene	µg/L	Daily Max	0.8	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 025A is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Toluene	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 025A is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Xylene, ortho-	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 025A is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Xylene, meta- and para-	µg/L	Daily Max	10	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 025A is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Ethylbenzene	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 025A is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														

²³ Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	025B	Description of Wastewater: Ammonia Truck Unloading Facility Stormwater														
		Type of Treatment: None														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality ²⁴	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.																
Flow Rate	GPD	Daily Max	Monitor	-	-	-	-	-				-	-	Discontinued		
	Outfall 025B is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.															
Oil & Grease	mg/L	Daily Max	15	-	-	-	-	-				-	-	Discontinued		
	Outfall 025B is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.															
Benzene	µg/L	Daily Max	0.8	-	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 025B is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.															
Toluene	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 025B is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.															
Xylene, ortho-	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 025B is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.															
Xylene, meta- and para-	µg/L	Daily Max	10	-	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 025B is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.															
Ethylbenzene	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 025B is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.															

²⁴ Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	026	Description of Wastewater: IC Fuel Oil Tank Secondary Containment Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ²⁵	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	8400 Actual Maximum	52/0	Monitor	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	Monitor	
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	-	-	-	6.0	USEPA ELG BPT	-	-	6.5-8.5	Range	6.5 - 8.5	703.6	-	GW Effluent Limitation
		Maximum	-	-	-	9.0		-	-	-	-	-	-		
Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given that adequate dilution is not available, an effluent limitation equal to the WQS is appropriate.															
Oil & Grease	mg/L	Daily Max	15	Non-Detect	0/52	15	TOGS 1.2.1	Narrative: No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.				703.2	-	TBEL	
	Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C.														
Benzene	µg/L	Daily Max	0.8	Non-Detect	0/20	0.8	Antibacksliding	-	-	1	-	-	703.6	-	Antibacksliding
	Due to the discharge type, Benzene will remain in the permit at the current permit limit per antibacksliding.														
Toluene	µg/L	Daily Max	5	Non-Detect	0/20	-	-	-	-	5	-	5	TOGS 1.1.1	-	GW Effluent Limitation
	With the absence of dilution due to discharge to groundwater, the calculated WQBEL is equal to the groundwater effluent limitation. Due to the discharge type, Toluene will remain in the permit.														
Xylene, ortho-	µg/L	Daily Max	5	Non-Detect	0/20	-	-	-	-	5	-	5	TOGS 1.1.1	-	GW Effluent Limitation
	With the absence of dilution due to discharge to groundwater, the calculated WQBEL is equal to the groundwater effluent limitation. Due to the discharge type, Xylene, ortho- will remain in the permit.														
Xylene, meta- and para-	µg/L	Daily Max	10	Non-Detect	0/20	-	-	-	-	10	-	10	TOGS 1.1.1	-	GW Effluent Limitation
	With the absence of dilution due to discharge to groundwater, the calculated WQBEL is equal to the groundwater effluent limitation. Due to the discharge type, Xylene, meta- and para- will remain in the permit.														

²⁵ 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)

Permittee: National Grid Generation, LLC
 Facility: Port Jefferson Power Station
 SPDES Number: NY0005932
 USEPA Non-Major/Class 01 Industrial

Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Outfall #	026	Description of Wastewater: IC Fuel Oil Tank Secondary Containment Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ²⁵	# 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		
Ethylbenzene	µg/L	Daily Max	5	Non-Detect	0/20	-	-	-	-	5	-	5	TOGS 1.1.1	-	GW Effluent Limitation
With the absence of dilution due to discharge to groundwater, the calculated WQBEL is equal to the groundwater effluent limitation. Due to the discharge type, Ethylbenzene will remain in the permit.															

Outfall 027

Outfall #	027	Description of Wastewater: IC Fuel Truck Unloading Facility Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ²⁶	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	No Discharge	-	Monitor	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	Monitor	
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.														
pH	SU	Minimum	-	-	-	6.0	USEPA ELG BPT	-	-	6.5-8.5	Range	6.5 - 8.5	703.6	-	GW Effluent Limitation
		Maximum	-	-	-	9.0		-	-	6.5-8.5	Range	6.5 - 8.5	703.6	-	
	Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given that adequate dilution is not available, an effluent limitation equal to the WQS is appropriate.														
Oil & Grease	mg/L	Daily Max	15	No Discharge	-	15	TOGS 1.2.1	Narrative: No residue attributable to sewage, industrial wastes or other wastes, nor visible oil film nor globules of grease.				703.2	-	TBEL	
	Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C.														

²⁶ 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)

Permittee: National Grid Generation, LLC
 Facility: Port Jefferson Power Station
 SPDES Number: NY0005932
 USEPA Non-Major/Class 01 Industrial

Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Outfall #	027	Description of Wastewater: IC Fuel Truck Unloading Facility Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ²⁶	# 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		
Benzene	µg/L	Daily Max	0.8	Non-Detect	0/1	0.8	Antibacksliding	-	-	1	-	-	703.6	-	Antibacksliding
	Due to the discharge type, Benzene will remain in the permit at the current permit limit per antibacksliding.														
Toluene	µg/L	Daily Max	5	Non-Detect	0/1	-	-	-	-	5	-	5	TOGS 1.1.1	-	GW Effluent Limitation
	With the absence of dilution due to discharge to groundwater, the calculated WQBEL is equal to the groundwater effluent limitation. Due to the discharge type, Toluene will remain in the permit.														
Xylene, ortho-	µg/L	Daily Max	5	Non-Detect	0/1	-	-	-	-	5	-	5	TOGS 1.1.1	-	GW Effluent Limitation
	With the absence of dilution due to discharge to groundwater, the calculated WQBEL is equal to the groundwater effluent limitation. Due to the discharge type, Xylene, ortho- will remain in the permit.														
Xylene, meta- and para-	µg/L	Daily Max	10	Non-Detect	0/1	-	-	-	-	10	-	10	TOGS 1.1.1	-	GW Effluent Limitation
	With the absence of dilution due to discharge to groundwater, the calculated WQBEL is equal to the groundwater effluent limitation. Due to the discharge type, Xylene, meta- and para- will remain in the permit.														
Ethylbenzene	µg/L	Daily Max	5	Non-Detect	0/1	-	-	-	-	5	-	5	TOGS 1.1.1	-	GW Effluent Limitation
	With the absence of dilution due to discharge to groundwater, the calculated WQBEL is equal to the groundwater effluent limitation. Due to the discharge type, Ethylbenzene will remain in the permit.														

Outfall #	028	Description of Wastewater: LiquiMag Tank Secondary Containment Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ²⁷	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	-	-	-	-	-				-	-	Discontinued	
	Outfall 028 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Oil & Grease	mg/L	Daily Max	15	-	-	-	-	-				-	-	Discontinued	
	Outfall 028 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Benzene	µg/L	Daily Max	0.8	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 028 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Toluene	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 028 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Xylene, ortho-	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 028 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Xylene, meta- and para-	µg/L	Daily Max	10	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 028 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Ethylbenzene	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 028 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														

²⁷ Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	029	Description of Wastewater: LiquiMag Truck Unloading Facility Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ²⁸	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	-	-	-	-	-				-	-	Discontinued	
	Outfall 029 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Oil & Grease	mg/L	Daily Max	15	-	-	-	-	-				-	-	Discontinued	
	Outfall 029 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Benzene	µg/L	Daily Max	0.8	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 029 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Toluene	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 029 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Xylene, ortho-	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 029 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Xylene, meta- and para-	µg/L	Daily Max	10	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 029 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Ethylbenzene	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 029 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														

²⁸ Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	030	Description of Wastewater: Acid & Caustic Tank Secondary Containment Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ²⁹	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	-	-	-	-	-				-	-	Discontinued	
	Outfall 030 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Oil & Grease	mg/L	Daily Max	15	-	-	-	-	-				-	-	Discontinued	
	Outfall 030 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Benzene	µg/L	Daily Max	0.8	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 030 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Toluene	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 030 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Xylene, ortho-	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 030 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Xylene, meta- and para-	µg/L	Daily Max	10	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 030 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Ethylbenzene	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 030 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														

²⁹ Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	031	Description of Wastewater: Acid & Caustic Truck Unloading Facility Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ³⁰	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	-	-	-	-	-				-	-	Discontinued	
	Outfall 031 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Oil & Grease	mg/L	Daily Max	15	-	-	-	-	-				-	-	Discontinued	
	Outfall 031 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Benzene	µg/L	Daily Max	0.8	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 031 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Toluene	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 031 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Xylene, ortho-	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 031 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Xylene, meta- and para-	µg/L	Daily Max	10	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 031 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
Ethylbenzene	µg/L	Daily Max	5	-	-	-	-	-	-	-	-	-	-	Discontinued	
	Outfall 031 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														

³⁰ Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	032	Description of Wastewater: Transformer Secondary Containment Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ³¹	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	1200 Actual Maximum	16/0	-	-	-				-	-	Discontinued	
	Outfall 032 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
pH	SU	Minimum	6.5	7 Actual Minimum	16/0	-	-	-	-	-	-	-	-	-	Discontinued
		Maximum	8.5	8.3 Actual Maximum	16/0	-									
Outfall 032 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.															
Oil & Grease	mg/L	Daily Max	15	Non-Detect	0/16	-	-	-				-	-	Discontinued	
	Outfall 032 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														

³¹ 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)

Permittee: National Grid Generation, LLC
 Facility: Port Jefferson Power Station
 SPDES Number: NY0005932
 USEPA Non-Major/Class 01 Industrial
Outfall 033

Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Outfall #	033	Description of Wastewater: Transformer Secondary Containment Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ³²	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/31/2018 to 12/31/2022 was obtained from Discharge Monitoring Reports and the NY-2C application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	Daily Max	Monitor	1300 Actual Maximum	16/0	-	-	-				-	-	Discontinued	
	Outfall 033 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														
pH	SU	Minimum	6.5	7.1 Actual Minimum	16/0	-	-	-	-	-	-	-	-	Discontinued	
		Maximum	8.5	8.5 Actual Maximum	16/0	-	-	-	-	-	-	-	-		
Outfall 033 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.															
Oil & Grease	mg/L	Daily Max	15	13.4	1/15	-	-	-				-	-	Discontinued	
	Outfall 033 is an internal outfall routed through Outfall 025 for ultimate discharge to Port Jefferson Harbor. As all pollutants expected from this internal outfall are encompassed in the external outfall 025, no monitoring of this parameter is required and will be discontinued in the SPDES permit.														

³² 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)

Permittee: National Grid Generation, LLC
 Facility: Port Jefferson Power Station
 SPDES Number: NY0005932
 USEPA Non-Major/Class 01 Industrial
 Outfall 034

Date: August 23, 2024 v.1.26
 Permit Writer: Gwendolyn Temple
 Water Quality Reviewer: Gwendolyn Temple
 Full Technical Review

Outfall #	034	Description of Wastewater: Yard Stormwater													
		Type of Treatment: None													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality ³³	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: No monitoring required.															

³³ Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Appendix A: Biological Fact Sheet – Cooling Water Intake Structure

Bureau of Ecosystem Health, Energy Unit

Name of Facility: Port Jefferson Power Station
Owner/Operator: National Grid
SPDES #: NY-0005932
Location: Suffolk County, New York
Town of Brookhaven
Port Jefferson Harbor, Long Island Sound

1. Description of Facility

The Port Jefferson Power Generating Station (PJS), owned by National Grid, is located in Port Jefferson, Suffolk County, NY. The station is situated on the southwestern shore of Port Jefferson Harbor, on the North shore of Long Island. This facility has two active natural gas/oil fired steam-electric generating units, Units 3 and 4. These units were built in 1948 and 1950 respectively. Units 1 and 2 have been in permanent cold standby since 1992. Net generation for this facility is 362 MW of electricity.

PJS employs a once-through cooling system that withdraws water from Port Jefferson Harbor using a shoreline intake structure. The intake structure consists of four separate screenbays, each with a skimmer wall, trash rack and 3/8" Ristroph-type traveling screen. Fish and debris washed from the traveling screens are returned to Port Jefferson Harbor via a 24" diameter return pipe. Each unit has two variable speed capability circulating water pumps rated for a total water withdrawal capacity of 294 million gallons per day (MGD). After passing through the cooling system, the cooling water is discharged at an elevated temperature back into the harbor via a submerged discharge opening approximately 127 feet east of the intake. The thermal discharge limits of the cooling water include a maximum discharge temperature of 110 °F and a change in temperature of not more than 30 °F compared to the intake temperature.

2. Ecological Resource

Port Jefferson Harbor is classified as SA waters, with the best usages of Class SA waters being shellfishing for market purposes, primary and secondary contact recreation, and fishing. These waters shall be suitable for fish, shellfish, and wildlife propagation and survival.

Port Jefferson Harbor provides important habitat for several species of marine fish, including but not limited to scup, bluefish, Atlantic silversides, Atlantic menhaden, northern puffer, striped bass, blackfish and winter flounder. The harbor is also an important shellfish producing area, with much of the area open seasonally or conditionally for recreational or commercial harvest of shellfish, including American oyster and hard clam.

Impingement and entrainment studies were conducted at PJS during 2003-2004 and 2008-2009. The estimated number of fish impinged during these two study years ranged from 10,689 to 150,000 fish. The range in number of eggs, larvae and juveniles estimated to be entrained during the study years was between 290 million to 1.1 billion organisms. The range in numbers of fish impinged and entrained is likely due to interannual variability (ASA July 2009). The species of fish most commonly impinged during the study years were Atlantic menhaden, Atlantic silverside, striped killifish, cunner, butterfish, winter flounder, sea robins and three spine stickleback. The majority of species entrained

were Atlantic menhaden, bay anchovy, cunner, tautog, fourbeard rockling, Atlantic silverside and gobies.

In 2015-2016, National Grid performed a site-specific entrainment survival at the facility. The results of this study indicated there was demonstrated entrainment survival for several fish species that dominated sampling collections, including wrasses, bay anchovy, clupeids, cod, and sea robins.

3. Determination of Best Technology Available

The New York State Department of Environmental Conservation (NYSDEC) evaluated biological monitoring and technology reports submitted by National Grid to assess what measures would be the Best Technology Available (BTA) at the facility. After evaluating all of the available alternatives, NYSDEC determined that, in combination, the following technologies represent the best technology available for minimizing adverse environmental impacts from the cooling water intake structure.

1. Continuous operation of new, Ristroph-type traveling screens
2. Employ pump shutdown procedures when not generating
3. Installation of Variable Speed Pumps on Units 3 and 4
4. Limit capacity to less than 15% generation on a 5-year average

In keeping with the Department's established, environmentally protective BTA requirements for existing facilities with cooling water intake structures, a 95 percent reduction in impingement mortality and an 80 percent reduction in entrainment, including through-plant entrainment survival, from calculation baseline level, were the impact reductions feasible from implementation of these technologies and operational measures.

In 2011, the NYSDEC included Biological Conditions in the SPDES permit to require implementation of these BTA measures, as well as requirements to meet the reductions in impingement and entrainment mortality. These technologies and operational measures continue to represent BTA at the PJS.

4. Monitoring Requirements

In accordance with Biological Monitoring Requirement 5 of the attached permit, the permittee must submit to the NYSDEC Energy Unit, a *Cumulative Reductions Report* to calculate reductions in impingement and entrainment mortality over the prior five years.

5. Legal Requirements

The requirements for the cooling water intake structure in this State Pollutant Discharge Elimination System permit are consistent with the policies and requirements embodied in the New York State Environmental Conservation Law, in particular - Sec.1-0101.1.; 1-0101.2.; 1-0101.3.b., c.; 1-0303.19.; 3-0301.1.b., c., i., s. and t.; 11-0107.1; 11-0303.; 11-0535.2; 11-1301.; 11-1321.1.; 17-0105.17.; 17-0303.2., 4.g.; 17-0701.2. and the rules thereunder, specifically 6NYCRR Part 704.5 and Commissioner Policy -52. Additionally, the requirements are consistent with the Clean Water Act, in particular Section 316(b).

6. Summary of Proposed Permit Changes

Table 1. Deletions

Permit condition	Reason for Deletion
Biological Requirements B2, B4, B5	Permit conditions have been satisfied.
Biological Requirements B1, B3, B6-B12	Conditions require rewriting based on the Department's BTA determination.

Table 2. Additions/Changes

Permit Condition	Requirements
Biological Requirement B1	Requires continuous operation of Ristroph traveling screens, variable speed capability pumps, shut down of pumps when generation ceases, and limit generation to less than 15% capacity.
Biological Requirement B2	Identifies impingement and entrainment mortality reductions
Biological Requirement B3	Requires submission of a monthly report documenting MWh generation and cooling water use.
Biological Requirement B4	Requires submission of a Cumulative Reductions report.
Biological Requirement B5	Requires a contingency plan if BTA measures do not meet impingement mortality and entrainment mortality reduction requirements.
Biological Requirement B6	Requires maintenance of records for a minimum of 10 years from EDP.
Biological Requirement B7	Requires no modifications made to the intake structure without prior Department approval.

7. References

6 NYCRR Part 701 [Classification of waters](#)

6 NYCRR Part 704.5 [Intake structures](#)

Section 316(b) [Clean Water Act](#)

ASA Analysis & Communication, Inc. 2005. Impingement and Entrainment Monitoring for Port Jefferson Power Station March 2003- February 2004. Prepared for KeySpan Corporation by ASA Analysis & Communication.

Permittee: National Grid Generation, LLC
Facility: Port Jefferson Power Station
SPDES Number: NY0005932
USEPA Non-Major/Class 01 Industrial

Date: August 23, 2024 v.1.26
Permit Writer: Gwendolyn Temple
Water Quality Reviewer: Gwendolyn Temple
Full Technical Review

ASA Analysis & Communication, Inc. 2007. Design and Construction Technology Review for Port Jefferson Power Station. Prepared for KeySpan Corporation by ASA Analysis & Communication.

ASA Analysis & Communication, Inc. 2009. Impingement and Entrainment Monitoring for Port Jefferson Power Station March 2008- March 2009. Prepared for National Grid by ASA Analysis & Communication.

ASA Analysis & Communication, Inc. 2017. Verification Monitoring Program Port Jefferson Power Station 2015-2016. Prepared for National Grid by ASA Analysis & Communication.

National Grid. 2008. Proposed Suite of Technologies and Operational Measures for Port Jefferson Power Station.

Appendix B: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

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

Outfall and Receiving Water Information

Impaired Waters

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

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

Interstate Water Pollution Control Agencies

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

Existing Effluent Quality

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

Permit Requirements

Basis for Effluent Limitations

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

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

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(l) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this factsheet. Consistent with current case law³⁴ and USEPA interpretation³⁵ 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.

³⁴ American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)

³⁵ U.S. EPA, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; 65 Fed. Reg. 31682, 31704 (May 18, 2000); Proposed Water Quality Guidance for the Great Lakes System, 58 Fed. Reg. 20802, 20837 & 20981 (April 16, 1993)

Antidegradation Policy

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

Effluent Limitations

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

Technology-based Effluent Limitations (TBELs) for Industrial Facilities

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

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

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

Best Professional Judgement (BPJ)

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

Water Quality-Based Effluent Limitations (WQBELs)

In addition to the TBELs, permits must include additional or more stringent effluent limitations and conditions, including those necessary to protect water quality. CWA sections 101 and 301(b)(1)(C), 40 CFR 122.44(d)(1), and 6 NYCRR Parts 750-1.11 require that permits include limitations for all pollutants or parameters which are or may be discharged at a level which may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. Water quality standards can be found under 6 NYCRR Parts 700-704. The limitations must be stringent enough to ensure that water quality standards are met and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1,

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

Mixing Zone Analyses

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

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

Critical Flows

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

Reasonable Potential Analysis (RPA)

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

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

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

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

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

Whole Effluent Toxicity (WET) Testing:

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

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

Minimum Level of Detection

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

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

Monitoring Requirements

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

Other Conditions

Mercury

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

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

Schedules of Compliance

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

Schedule(s) of Additional Submittals

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

Best Management Practices (BMP) for Industrial Facilities

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