



State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	4911	NAICS Code:	221112	SPDES Number:	NY0242586
Discharge Class (CL):	01	DEC Number:	4-3814-00029/00002		
Toxic Class (TX):	T	Effective Date (EDP):	EDP		
Major-Sub Drainage Basin:	13 - 01	Expiration Date (ExDP):	ExDP		
Water Index Number:	H (portion 5)	Item No.:	858 - 4	Modification Dates (EDPM):	
Compact Area:	-				

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:	Rensselaer Generating, LLC			Attention:	Richard Hallstead, Vice President
Street:	811 Main St Ste 3500				
City:	Houston		State:	TX	Zip Code: 77002
Email:	Richard.hallstead@riverviewpwr.com			Phone:	518-465-1657

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL											
Name:	Rensselaer Cogen										
Address / Location:	39 Riverside Avenue						County:	Rensselaer			
City:	Rensselaer			State:	NY		Zip Code:	12144			
Facility Location:	Latitude:	42 °	37 '	33 " N	& Longitude:	73 °	45 '	2.0 " W			
Primary Outfall No.:	001	Latitude:	42 °	37 '	33 " N	& Longitude:	73 °	45 '	2.0 " W		
Wastewater Description:	Treated wastewater	Receiving Water:	Hudson River			NAICS:	221112	Class:	C	Standard:	C

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)
- County Health Dept.

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

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SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewater Description	NAICS Code	Outfall Latitude			Outfall Longitude		
002	Stormwater	221112	42 °	37 '	33 " N	73 °	45 '	1.6 " W
Receiving Water: Hudson River						Class: C		

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DEFINITIONS

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

PERMIT LIMITS, LEVELS AND MONITORING - 001

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Treated Wastewater	Hudson River	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Daily Maximum	Monitor	GPD			Continuous	Recorder		X	
	Month Total	Monitor	Gallons			Monthly	Recorder		X	
pH	Daily Minimum	6.0	SU			2/Month	Grab		X	
	Daily Maximum	9.0	SU							
Temperature	Daily Maximum	90	°F			Continuous	Recorder		X	
Total Suspended Solids (TSS)	Daily Maximum	40	mg/L			2/Month	Grab		X	
	Monthly Average	20	mg/L			Monthly	Grab		X	
Oil and Grease	Daily Maximum	15	mg/L			2/Month	Grab		X	
Total Phosphorus	Daily Maximum	5.0	mg/L	Monitor	lb/d	2/Month	Grab		X	
Free Available Chlorine	Daily Maximum	0.5	mg/L			2/Month	Grab		X	
	Monthly Average	0.2	mg/L			Monthly	Grab		X	
Total Residual Chlorine (TRC)	Daily Maximum	0.25	mg/L			2/Month	Grab		X	1
Total Iron	Daily Maximum	1.0	mg/L			2/Month	Grab		X	
Total Chromium	Daily Maximum	1.0	mg/L			2/Month	Grab		X	
Total Zinc	Daily Maximum	1.0	mg/L			2/Month	Grab		X	
Total Copper	Daily Maximum	95	ug/L			2/Month	Grab		X	1

FOOTNOTES FOR OUTFALL 001:

1. This is a final effluent limitation for copper and TRC at Outfall 001. See [Schedule of Compliance](#) for any applicable interim effluent limitations.

See [Schedule of Additional Submittals](#) for short-term monitoring requirement of emerging contaminants.

PERMIT LIMITS, LEVELS AND MONITORING - 002

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
002	Stormwater	Hudson River	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
pH	Daily Minimum	6.0	SU			Quarterly	Grab		X	1, 2
	Daily Maximum	9.0	SU							
Total Suspended Solids (TSS)	Daily Maximum	Monitor	mg/L			Quarterly	Grab		X	1, 2
ACTION LEVELS	Type	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Location	FN	
Oil and Grease	Daily Maximum			15	mg/L	Quarterly	Grab		X	1,2,3
Total Recoverable Iron	Daily Maximum			1.0	mg/L	Quarterly	Grab		X	1,2,3

OUTFALL 002 EMERGING CONTAMINANTS	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Perfluoro-butanoic Acid (PFBA) CAS No. 375-22-4	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-pentanoic Acid (PFPeA) CAS No. 2706-90-3	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-hexanoic Acid (PFHxA) CAS No - 307-24-4	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-heptanoic Acid (PFHpA) CAS No. 375-85-9	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-octanoic Acid (PFOA) CAS No. 335-67-1	Daily Maximum			6.7	ng/L	Quarterly	Grab		X	1,2,4
Perfluoro-nonanoic Acid (PFNA) CAS No. 375-95-1	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-decanoic Acid (PFDA) CAS No. 335-76-2	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-undecanoic Acid (PFUnA) CAS No. 2058-94-8	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-dodecanoic Acid (PFDoA) CAS No. 307-55-1	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-tridecanoic Acid (PFTriDA) CAS No. 72629-94-8	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-tetradecanoic Acid (PFTeA) CAS No. 376-06-7	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-butanesulfonic Acid (PFBS) CAS No. 375-73-5	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-pentanesulfonic Acid (PFPeS) CAS No. 2706-91-4	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-hexanesulfonic Acid (PFHxS) CAS No. 355-46-4	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2

OUTFALL 002 EMERGING CONTAMINANTS	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Perfluoro-heptanesulfonic Acid (PFHpS) CAS No. 375-92-8	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-octanesulfonic Acid (PFOS) CAS No. 1763-23-1	Daily Maximum			2.7	ng/L	Quarterly	Grab		X	1,2,4
Perfluoro-nonanesulfonic Acid (PFNS) CAS No. 68259-12-1	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-decanesulfonic Acid (PFDS) CAS No. 335-77-3	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-dodecane-sulfonic Acid (PFDoS) CAS No. 79780-39-5	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-octane-sulfonamide (FOSA) CAS No. 754-91-6	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
N-methyl Perfluoro-octanesulfon-amidoacetic Acid (NMeFOSAA) CAS NO. 2355-31-9	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
N-ethyl Perfluoro-octanesulfon-amidoacetic Acid (NEtFOSAA) CAS No. 2991-50-6	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (4:2 FTS) CAS No. 757124-72-4	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
1H,1H,2H,2H- Fluorotelomer Sulfonic Acid (6:2 FTS) CAS No. 27619-97-2	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
1H,1H,2H,2H- Fluorotelomer Sulfonic Acid (8:2 FTS) CAS No. 39108-34-4	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
N-ethyl Perfluoro-octanesulfonamide (NEtFOSA) CAS No. 4151-50-2	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
N-methyl Perfluoro-octanesulfon-amide (NMeFOSA) CAS No. 31506-32-8	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
N-methyl Perfluoro-octanesulfon-amidoethanol (NMeFOSE) CAS No. 24448-09-7	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
N-ethyl Perfluoro-octanesulfon-amidoethanol (NEtFOSE) CAS No. 1691-99-2	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
9-Chlorohexadeca-fluoro-3-oxanonane-1-sulfonic Acid (9Cl-PF3ONS) CAS No. 756426-58-1	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2

OUTFALL 002 EMERGING CONTAMINANTS	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Hexafluoro-propylene Oxide Dimer Acid (HFPO-DA or GenX) CAS No. 13252-13-6	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic Acid (11Cl-PF3OUdS) CAS No. 763051-92-9	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
4,8-Dioxa-3H-perfluorononanoic Acid (ADONA) CAS No. 919005-14-4	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
3-Perfluoropropyl Propanoic Acid (3:3 FTCA) CAS No - 356-02-5	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
2H,2H,3H,3H-Perfluoro-octanoic Acid (5:3 FTCA) CAS No. 914637-49-3	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
3-Perfluoroheptyl Propanoic Acid (7:3 FTCA) CAS No. 812-70-4	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Nonafluoro-3,6-dioxaheptanoic Acid (NFDHA) CAS No. 151772-58-6	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-4-methoxy-butanoic Acid (PFMBA) CAS No. 863090-89-5	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro-3-methoxy-propanoic Acid (PFMPA) CAS No. 377-73-1	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2
Perfluoro(2-ethoxyethane)sulfonic Acid (PFEESA) CAS No. 13507-82-7	Daily Maximum	Monitor	ng/L			Quarterly	Grab		X	1,2

FOOTNOTES FOR OUTFALL 002:

1. 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).

2. Stormwater Sampling

All stormwater sampling shall be in accordance with the New York State Department of Environmental Conservation SPDES Multi-Sector General Permit for Stormwater Discharges Associated with Industrial Activity Permit Number GP-0-23-001, which states:

A minimum of one grab sample must be taken from the *stormwater discharge associated with industrial activity* resulting from a storm event with at least 0.1 inch of precipitation (defined as a "measurable" event), providing the interval from the preceding measurable storm is at least 72 hours. The 72-hour storm interval is waived if the preceding measurable storm did not result in a *stormwater discharge* (e.g., a storm event in excess of 0.1 inches may not result in a *stormwater discharge* at some facilities), or if the *owner or operator* is able to document that less than a 72 hour interval is representative for local storm events during the sampling period.

FOOTNOTES CONTINUED ON NEXT PAGE

FOOTNOTES FOR OUTFALL 002 (continued):

2. (continued) The grab sample must be taken during the first 30 minutes (or as soon thereafter as practical, but not to exceed one [1] hour) of the *discharge*. If the sampled *discharge* commingles with non-stormwater water, the *owner or operator* must attempt to sample the stormwater *discharge* before it mixes.
3. If the action level for oil and grease or iron is exceeded, the permittee must perform the following actions:
 - a. Inspect the facility for potential sources of stormwater contamination.
 - b. Implement additional non-structural and/or structural BMPs to address any sources of contamination that are identified to prevent recurrence within the following timeframes:
 - i. The implementation must be completed before the next anticipated storm event, if practicable, but not more than 12 weeks after discovery.
 - ii. If implementation will take longer than 12 weeks, the owner or operator must submit a proposed schedule for completion of the project and obtain a written approval from the Regional Water Manager.
 - c. Revise the facility's SWPPP
 - d. Continue efforts to implement additional BMPs at the facility if corrective actions do not result in achieving satisfactory results of the action levels.
4. **Emerging Contaminants Action Level:** Upon each exceedance of the Action Level for PFOA and/or PFOS, perform one (1) confirmatory sample during the next qualifying storm event. If confirmed exceedance notify DEC at emergingcontaminantsdow@dec.ny.gov, and initiate minimization program and continuous reporting as outlined in the [Schedule of Additional Submittals](#). All PFAS compound sampling shall use EPA Method 1633.

ADDITIONAL REQUIREMENTS

1. There shall be no discharge of Polychlorinated Biphenyls from this facility.
2. Currently the facility is using municipal supply water for cooling. If at any time the facility wishes to switch to use Hudson River water, the facility must obtain the Department's approval prior to starting to use Hudson River water for cooling purposes.

DISCHARGE NOTIFICATION REQUIREMENTS

The permittee has obtained a waiver for the installation of signs at all outfalls. The waiver was submitted and accepted on December 17, 2024.

BEST MANAGEMENT PRACTICES (BMPs) FOR INDUSTRIAL FACILITIES

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

1. **General** - The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage. The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the DEC as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized DEC representatives upon request.
2. **Compliance Deadlines** – The BMP plan shall be implemented within 6 months of submission, unless a different time frame is approved by the Department. The BMP plan **shall be reviewed annually** and shall be modified whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.
3. **Facility Review** - The permittee shall review all facility components or systems (including but not limited to material storage areas; in-plant transfer, process, and material handling areas; loading and unloading operations; storm water, erosion, and sediment control measures; process emergency control systems; and sludge and waste disposal areas) where materials or pollutants are used, manufactured, stored or handled to evaluate the potential for the release of pollutants to the waters of the State. In performing such an evaluation, the permittee shall consider such factors as the probability of equipment failure or improper operation, cross-contamination of storm water by process materials, settlement of facility air emissions, the effects of natural phenomena such as freezing temperatures and precipitation, fires, and the facility's history of spills and leaks. The relative toxicity of the pollutant shall be considered in determining the significance of potential releases. The review shall address all substances present at the facility that are identified in the SPDES application Form NY-2C (available at https://www.dec.ny.gov/docs/permits_ej_operations_pdf/form2c.pdf) or that are required to be monitored for by the SPDES permit.
4. **13 Minimum BMPs:** Whenever the potential for a release of pollutants to State waters is determined to be present, the permittee shall identify BMPs that have been established to prevent or minimize such potential releases. Where BMPs are inadequate or absent, appropriate BMPs shall be established. In selecting appropriate BMPs, the permittee shall consider good industry practices and, where appropriate, structural measures such as secondary containment and erosion/sediment control devices and practices. USEPA guidance for development of stormwater elements of the BMP is available in *Developing Your Stormwater Pollution Prevention Plan A Guide for Industrial Operators*, February 2009, EPA 833-B-09-002. As a minimum, the plan shall include the following BMPs:

- | | | |
|-------------------------------------|---|---------------------------------|
| 1. BMP Pollution Prevention Team | 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 area¹. (Note: the disturbance threshold is 5000 SF in the New York City East of Hudson Watershed). The SWPPP shall conform to the current version of the SPDES General Permit for Stormwater Discharges from Construction Activity (CGP), including the *New York Standards and Specifications for Erosion and Sediment Control* and *New York State Stormwater Management Design Manual*. The permittee shall submit a copy of the SWPPP and any amendments thereto to the local governing body and any other authorized agency having jurisdiction or regulatory control over the construction activity **at least 30 days prior to soil disturbance**. The SWPPP shall be maintained on-site and submitted to the Department only upon request. When a SWPPP is required, a properly completed *Notice of Intent* (NOI) form shall be submitted (available at www.dec.ny.gov/chemical/43133.html) prior to soil disturbance. Note that submission of the NOI is required for informational purposes; the permittee is not eligible for and will not obtain coverage under any SPDES general permit for stormwater discharges. SWPPPs must be developed for subsequent site disturbances in accordance with the above requirements. The permittee is responsible for ensuring that the provisions of each SWPPP are properly implemented.
6. **Required Sampling For "Hot Spot" Identification** - Development of the BMP plan shall include sampling of waste stream segments for the purpose of pollutant "hot spot" identification. The economic achievability of effluent limits will not be considered until plant site "hot spot" sources have been identified, contained, removed or minimized through the imposition of site specific BMPs or application of internal facility treatment technology. For the purposes of this permit condition a "hot spot" is a segment of an industrial facility (including but not limited to soil, equipment, material storage areas, sewer lines etc.) which contributes elevated levels of problem pollutants to the wastewater or stormwater collection system of that facility. For the purposes of this definition, problem pollutants are substances for which treatment to meet a water quality or technology requirement may, considering the results of waste stream segment sampling, be deemed unreasonable. For the purposes of this definition, an elevated level is a concentration or mass loading of the pollutant in question which is sufficiently higher than the concentration of that same pollutant at the compliance monitoring location so as to allow for an economically justifiable removal, isolation, or B.A.T. treatment of wastewaters emanating from the segment.
7. **Facilities with Petroleum or Chemical Bulk Storage (PBS and CBS) Areas** - Compliance must be maintained with all applicable regulations including those involving releases, registration, handling and storage (6 NYCRR 595-599 and 612-614). Stormwater discharges from handling and storage areas should be eliminated where practical.
- A. **Spill Cleanup** - All spilled or leaked substances must be removed from secondary containment systems as soon as practical and for CBS storage areas within 24 hours, unless written authorization is received from the DEC. The containment system must be thoroughly cleaned to remove any residual contamination which could cause contamination of stormwater and the resulting discharge of pollutants to waters of the State. Following spill cleanup the affected area must be completely flushed with clean water three times and the water removed after each flushing for proper disposal in an on-site or off-site wastewater treatment plant designed to treat such water and permitted to discharge such wastewater. Alternately, the permittee may test the first batch of stormwater following the spill cleanup to determine discharge acceptability. If the water contains no pollutants at concentrations above the applicable effluent limits or Action Levels it may be discharged. Otherwise, it must be disposed of as noted above. See *Discharge Monitoring* below for the list of parameters to be sampled for.
- B. **Discharge Operation** - Stormwater must be removed before it compromises the required containment system capacity. Each discharge may only proceed with the prior approval of the permittee staff person responsible for ensuring SPDES permit compliance. Bulk storage secondary containment drainage systems must be locked in a closed position except when the operator is in the process of draining accumulated stormwater. Transfer area secondary containment drainage systems must be locked in a closed position during all transfers to or from these systems and must not be reopened unless the transfer area is clean of contaminants. Stormwater discharges from secondary containment systems should be avoided during periods of precipitation. A logbook shall be maintained on site noting the date, time and personnel supervising each discharge.

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

BMPs FOR INDUSTRIAL FACILITIES (continued)

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

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

(i) *Bulk Storage Secondary Containment Systems:*

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

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

(ii) *Transfer Area Secondary Containment Systems:*

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

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

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

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

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

MERCURY MINIMIZATION PROGRAM (MMP):

On 12/18/2023, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10.

1. **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 elements² 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 are neither a mercury source nor receives flows from a mercury source.
 - 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.
 - c. **Status Report** - An **annual** status report must be developed and maintained on site, in accordance with the [Schedule of Additional Submittals](#), summarizing:
 - i. Review of criteria to determine if the facility has a potential mercury source;
 - a. If the permittee no longer meets the criteria for MMP Type IV, the permittee must notify the DEC for a permittee-initiated permit modification;
 - ii. All actions undertaken, pursuant to the control strategy, during the previous year; and
 - iii. Actions planned, pursuant to the control strategy, for the upcoming year.

The permittee must maintain a file with all MMP documentation. The file must be available for review by DEC representatives and copies must be provided upon request in accordance with 6 NYCRR 750-2.1(i) and 750-2.5(c)(4).
3. **MMP Modification** - The MMP must be modified whenever:
 - a. Changes at the facility, or within the collection system, increase the potential for mercury discharges;
 - b. A letter from the DEC identifies inadequacies in the MMP.

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

DEFINITIONS:

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

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

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date ³
001	<p>Copper and Total Residual Chlorine Effluent Limitations</p> <p>Submit workplan summarizing the methodology and schedule for determining effluent quality, identifying potential sources, and the possible control strategies or treatment alternatives for meeting the final limits.</p> <p>Submit interim status report summarizing steps taken towards meeting workplan milestones and schedule.</p> <p>Comply with the final effluent limitations for copper and total residual chlorine.</p>	<p>EDP + 12 Months</p> <p>EDP + 18 Months</p> <p>EDP + 24 months</p>
Unless noted otherwise, the above actions are one-time requirements.		

OUTFALL	PARAMETER	INTERIM EFFLUENT LIMIT					MONITORING REQUIREMENTS				Notes
		Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.		
001	Total Copper	Daily Max	Monitor	ug/L	-	-	2/Month	Grab	-	X	1
001	Total Residual Chlorine	Daily Max	Monitor	mg/L	-	-	2/Month	Grab	-	X	1

Note: 1. Interim limits expire EDP + 24 months.

b) The permittee shall submit a [Report of Non-compliance Event](https://extapps.dec.ny.gov/docs/water_pdf/noncomprep.pdf) form (https://extapps.dec.ny.gov/docs/water_pdf/noncomprep.pdf) with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All notifications shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

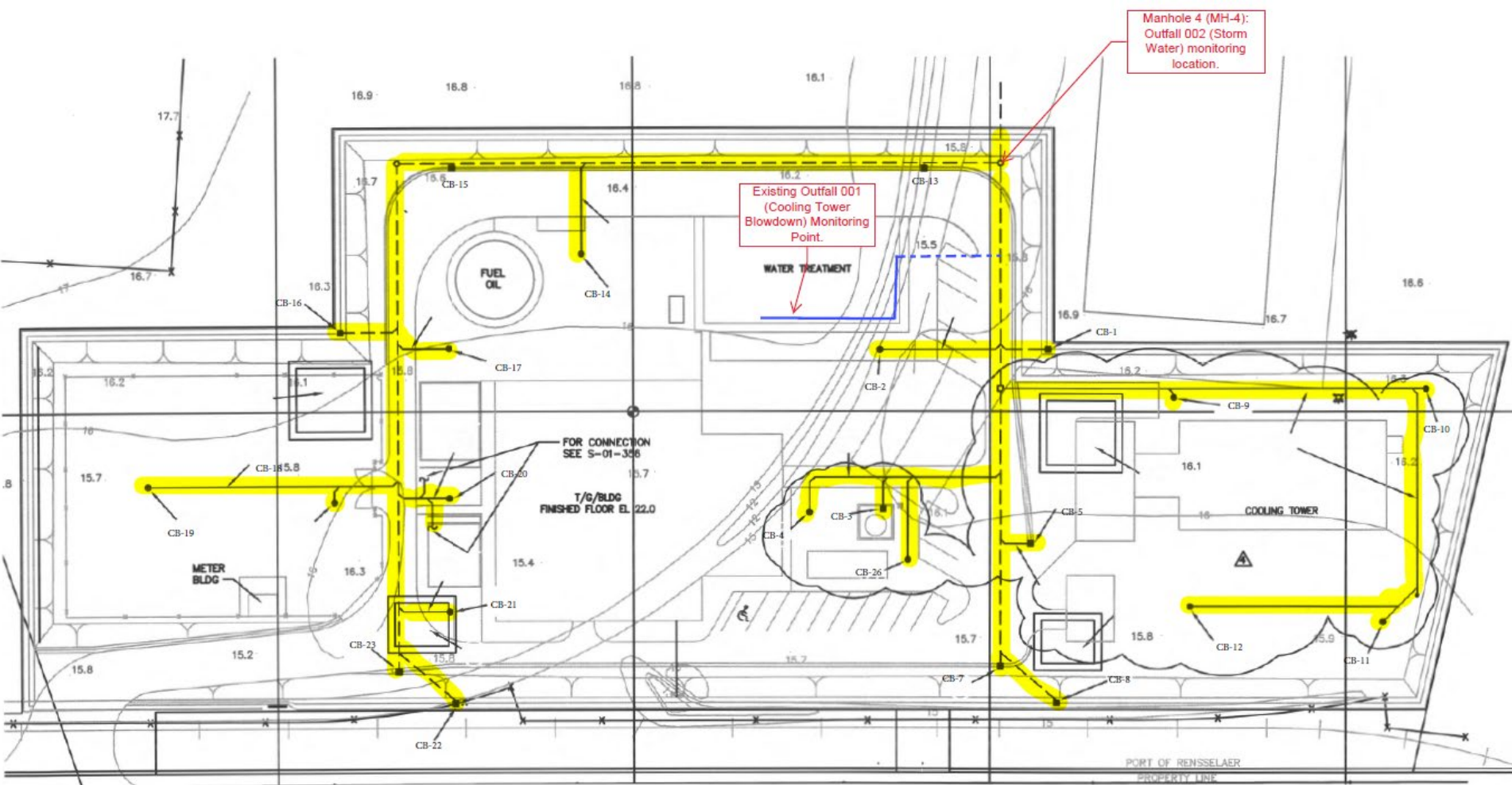
1. A short description of the non-compliance;
2. A description of any actions taken or proposed by the permittee to comply with the elapsed schedule requirements without further delay and to limit environmental impact associated with the non-compliance;
3. Any details which tend to explain or mitigate an instance of non-compliance; and
4. An estimate of the date the permittee will comply with the elapsed schedule requirement and an assessment of the probability that the permittee will meet the next scheduled requirement on time.

c) The permittee shall submit copies of any document required by the above schedule of compliance to the DEC Regional Water Engineer and to the Bureau of Water Permits.

³ 6 NYCRR 750-1.14 (a)

MONITORING LOCATIONS

The permittee shall take samples and measurements, to comply with the monitoring requirements specified in this permit, at the locations(s) specified below:
Outfall 001 effluent sampling shall be conducted after all treatment processes and before joining the stormwater drain
Outfall 002 effluent sampling shall be conducted when there is no discharge from Outfall 001 and sampling is representative of stormwater only



Rensselaer Cogen facility plot plan for SPDES request for information. 3/11/2024.

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

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

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

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

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

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

Department of Environmental Conservation
Regional Water Engineer, Region 04
1130 North Westcott Road, Schenectady, New York, 12306-2014 Phone: (518) 357-2045
dow.r4@dec.ny.gov

- D. Schedule of Additional Submittals:

The permittee shall submit the following information to the Regional Water Engineer and to the Bureau of Water Permits, unless otherwise instructed:

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
001	<p><u>EMERGING CONTAMINANT SHORT-TERM MONITORING – OUTFALL 001</u> The permittee shall collect grab samples of the effluent from the facility's treatment system(s) associated with the identified outfall for Per-and Polyfluoroalkyl Substances (PFAS) utilizing EPA analytical method 1633. 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.</p> <p>The permittee shall initiate track down of potential sources by completing the "Emerging Contaminants Investigation Checklist for Industrial Facilities" available at the above link.</p> <p>The DEC may periodically request updates or additional monitoring to check progress on track down investigations. Elements of the checklist may be used as permit conditions in future permit modifications.</p>	<p>EDP + 6 months</p> <p>Within 90 days of DEC written notification</p>

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
002	<p><u>EMERGING CONTAMINANT (EC) MINIMIZATION PROGRAM</u> The permittee shall initiate and continue track down of potential sources by utilizing the “Emerging Contaminants Investigation Checklist for Industrial Facilities” available at Emerging Contaminants In NY’s Waters - NYSDEC and submit reports summarizing:</p> <ol style="list-style-type: none"> a. All EC monitoring results taken to date; b. A list of known and potential EC sources; c. All actions taken to reduce EC contaminants; and d. Proposed next steps, including implementation of the following BMPs where applicable: <ol style="list-style-type: none"> i. Product elimination or substitution; ii. Equipment decontamination or replacement where PFAS products have historically been used; iii. Where PFAS cannot be eliminated, isolate contaminated waste stream and investigate potential treatment options. <p>*The requirements to track down and submit summary reports will continue at the specified frequencies until effluent concentrations fall below the Action Levels for at least 12 months or until notified by the Department.</p>	<p>Confirmation of initial Action Level exceedance</p> <p>12 months after initiating track down and every 6 months thereafter*</p>
001 and 002	<p><u>BMP PLAN</u> The permittee shall develop and submit a BMP plan. The BMP plan shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions must be submitted to the Regional Water Engineer within 30 days.</p>	<p>Initial Submittal Due EDP + 6 Months</p> <p>Updated annually thereafter on January 28th</p>
001	<p><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.</p>	<p>Annually on January 28th</p>
	<p><u>MERCURY MINIMIZATION PLAN</u> The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.</p>	<p><i>Maintained Onsite</i> EDP + 6 months, annually thereafter</p>
	<p><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.</p>	<p>December 18, 2028, and every 5 years thereafter</p>

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.

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS (continued)

- 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.

DRAFT

SPDES Permit Fact Sheet Rensselaer Generating, LLC

Rensselaer Cogen NY0242586



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Summary of Permit Changes

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

- Updated permit format, definitions, and general conditions
- Updated permittee and facility name and address to reflect change of ownership (2016)
- Updated SIC code from 4931 “Electric and Other Services” to 4911 “Electric Services”
- Discharge type has changed from non-toxic to toxic
- Added Stormwater Pollution Prevention Requirements
- Added a Mercury Minimization Plan requirement
- Updated the Additional Requirements section to reflect current practices
- Added Schedule of Compliance for meeting final effluent limitations for Total Copper and Total Residual Chlorine (TRC) at Outfall 001
- Added Schedule of Additional Submittals for submittal of an Industrial Best Management Practices (BMP) Plan, Mercury Minimization Program Annual Report, Emerging Contaminant Short-term Monitoring at Outfall 001, and Emerging Contaminant Minimization Program at Outfall 002

Outfall 001

- Adjusted sampling frequency from monthly to 2/month
- Added monthly monitoring requirement for total flow
- Reduced daily max Total Suspended Solids (TSS) limit from 50 mg/L to 40 mg/L
- Added monthly average TSS limit of 20 mg/L
- Added daily max phosphorous load monitoring (concentration limit remains the same)
- Added a new daily max Total Copper limit of 95 ug/L
 - Added associated schedule of compliance item including submittal of work plan
- Added daily maximum limitations for Chromium, Zinc, and Iron of 1.0 mg/L
- Added a new limit for TRC of 0.25 mg/L
 - Added associated schedule of compliance item including submittal of work plan
- Added emerging contaminant short-term monitoring

Outfall 002

- Added effluent limitation for pH range of 6.0 – 9.0 SU
- Added daily max monitoring requirement for TSS
- Added daily max action levels of 15 mg/L and 1.0 mg/L for Oil and Grease and Iron, respectively
- Added emerging contaminant ongoing monitoring and action levels for PFOA of 6.7 ng/L and PFOS of 2.7 ng/L

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

Administrative History

- 2/1/1997 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 2/1/2002.
- The permit was administratively renewed in 2002, 2007, 2011, 2017 and again in 2022. The current permit administrative renewal is effective until 1/31/2027.
- 11/14/2016 Permit was transferred from CCI Rensselaer, LLC, to Rensselaer Generating, LLC.
- 8/28/2023 DEC issued a Request for Information (RFI) to modify and renew the SPDES permit due to the facility's EBPS score¹. At the time of the RFI, the facility had an EBPS score of 217.
- 12/18/2023 The Rensselaer Generating, LLC, submitted a NY-2C permit application in response to the 8/18/2023 RFI.
- 4/29/2024 The permittee submitted additional necessary permit application information to supplement the 12/18/2023 application submittal.

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

Facility Information

This is an industrial facility (SIC code - 4911) that produces electricity and is subject to categorical effluent limitation guidelines (ELGs) under 40 CFR Part 423 for steam electric power generation. The facility consists of a combined-cycle combustion turbine, heat recovery steam generator, steam turbine, and a closed loop cooling water system with cooling tower. The primary fuel for the combustion turbine is natural gas. Municipal water is used as the source for the cooling system. The facility is no longer using Hudson River water (intake water) for cooling purposes.

Effluent from Outfall 001 consists of cooling tower blowdown, boiler blowdown, floor drains, and reverse osmosis (RO) reject water from the water treatment system. Treatment for Outfall 001 consists of an oil-water separator.

Outfall 002 consists of untreated stormwater. The process flow from 001 combines with the stormwater and connects to the municipal storm sewer at Outfall 002. However, Outfall 001 is not treated as an internal outfall because the operations allow distinct sampling of the process and stormwater flows separately. The municipal storm sewer ultimately discharges to the Hudson River, Class C.

The facility currently uses following water treatment chemicals: Trisodium Phosphate (TSP), Disodium Phosphate (DSP), Monosodium Phosphate (MSP), Sodium Hypochlorite, and Sulfuric Acid (93% and 50%). The SPDES permit contains discharge limits for pH, free chlorine, and total phosphorous and as such WTC authorization is not required for the sulfuric acid, sodium hypochlorite and boiler phosphates as these pollutants are already protected by a permit limit.

Sludge from the oil-water separator is sent off-site by a licensed contractor for energy recovery (fuel blending) and disposed as solid waste.

¹ Pursuant to 6 NYCRR 750-1.18 and NYS Environmental Benefit Permit Strategy (EBPS)

Enforcement History

Based on the last 5 (five) years' record, the facility does not have any non-compliance issues with the SPDES permit's effluent limitations or requirements. 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 (DMRs) submitted by the permittee for the period of 7/31/2018 to 6/30/2023 (Outfall 001). In addition to DMR data, the Department used information from the permit renewal NY-2C application.

Site Overview



Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	4911	Cooling Tower Blowdown; Boiler Blowdown; Floor Drains; and RO Reject Water	Hudson River, Class C
002	4911	Stormwater	Hudson River, Class C

Reach Description: Outfalls 001 and 002 discharge to a municipal storm sewer which then discharges to the Hudson River (Class C) ~0.25 miles away. The downstream USGS gage station

01361450 located on the Hudson River in Catskill, NY was used to establish the ambient hardness of 70 mg/L and the downstream RIBS station 13-LHUD located in Athens, NY ~30 miles downstream was used to establish the ambient pH of 7.8.

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

Impaired Waterbody Information

The Hudson River segment (PWL No. 1301-0002) was first listed on the 2020 [New York State Section 303\(d\) List](#) of Impaired/TMDL Waters as impaired due to PCBs from contaminated sediments. A TMDL has not been developed to address the impairment and, therefore, there are no applicable wasteload allocations (WLAs) for this facility.

Critical Receiving Water Data

The facility discharges to the Hudson River, which is a tidal waterbody and therefore an acute, chronic, and HEW dilution ratio of 10:1 is applicable and consistent with TOGS 1.3.1.

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001		10:1		TOGS 1.3.1
002		10:1		TOGS 1.3.1

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 industries². The applicable effluent guidelines and limits are listed at the end of the Pollutant Summary Table in the [USEPA ELG Calculation Table](#). [Appendix Link](#)

Whole Effluent Toxicity (WET) Testing

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

Anti-backsliding

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

² As promulgated under 40 CFR Parts 405 - 471

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)³ determination.

[Appendix Link](#)

Discharge Notification Act Requirements

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

The permittee requested a waiver in 2001 and was granted a waiver on 01/29/2001.

Best Management Practices (BMPs) for Industrial Facilities

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

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 the complexity with the combined process and stormwater flows, and detections of emerging contaminants, Outfall 002 is covered under this individual SPDES permit instead of the Multi-Sector General Permit (MSGP) (GP-0-23-001). Permit requirements consistent with Sector O for Steam Electric Generating Stations have been applied at Outfall 002. This requirement is new.

Mercury⁴

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

The facility is located outside the Great Lake watershed and the facility does not have any known mercury sources. On 12/18/2023, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10 and the effluent measured <12 ng/L. Therefore, consistent with DOW 1.3.10, the permit includes requirements for the implementation of MMP Type IV and does not include mercury effluent limitations. The [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. [Appendix Link](#)

Additional Requirements

The additional requirements of the previous permit have been updated as follows:

1. Requirement to prevent the discharge of any PCBs will remain.
2. Requirement to specify any additives has been removed from permit and replaced with the standard Water Treatment Chemical (WTC) authorization process specified under the General Requirements. Any water treatment chemicals used at the facility must be authorized separately from this permit renewal.

³ As prescribed by 6 NYCRR Part 617

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

3. Requirement to limit chlorine use to two hours per day is unnecessary with the new TRC effluent limitation and has been removed.
4. Requirement for engineering submittals to include a stamp from a professional engineer has been removed. The requirements of any submittals are explicitly listed in the Schedule of Compliance or Schedule of Additional Submittals.
5. Requirements for a new intake structure have been removed. The intake structure is no longer used and municipal source water is used. A new requirement has been added to obtain Department approval before switching back to use Hudson River water.

Emerging Contaminant Monitoring

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

Given the emerging nature of these contaminants; the USEPA's addition of PFOA and PFOS to the hazardous substance list under CERCLA; the USEPA's addition of PFOA and PFOS to the recommended contaminant monitoring list for state fish advisory programs; and pursuant to 6 NYCRR 750-1.14(f), the Department is imposing action levels, and minimization programs when any of the action levels are exceeded. This requirement is being imposed for the protection of the downstream receiving waterbody and to gather data needed to support establishment of TBELs.

Requirements at Outfall 002: Based on the available data (presented below in the [Pollutant Summary Table](#)) showing detections of PFOS and PFOA at Outfall 002, action levels set at the human health guidance values of 2.7 ng/L and 6.7 ng/L, respectively, have been included in the permit at Outfall 002. Monitoring is required for the remaining 38 PFAS compounds at Outfall 002 pursuant to 6 NYCRR Part 750-1.13(b). Monitoring requirements are also consistent with guidance released in EPA memorandums dated April 28, 2022, and December 5, 2022.

Requirements at Outfall 001: Due to the presence of higher concentrations in the stormwater sample results from Outfall 002, additional sampling for the PFAS suite is being required at Outfall 001 under a short-term monitoring program in the Schedule of Additional Submittals.

Schedule of Compliance

A Schedule of Compliance is being included⁵ for attainment of final effluent limits at Outfall 001 for Total Copper and Total Residual Chlorine (TRC). These are new effluent limitations and the permittee needs additional time to perform a track-down to find potential sources of copper and implement minimization practices before evaluating if any modifications to the treatment facility or operations are needed. [Appendix Link](#)

Schedule of Additional Submittals

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

- Industrial BMP Plan
- Mercury Minimization Program Annual Report
- Emerging Contaminant Short-term Monitoring at Outfall 001
- Emerging Contaminant Minimization Program at Outfall 002

⁵ Pursuant to 6 NYCRR 750-1.14

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	42° 37' 33" N	73° 45' 2.0" W	Hudson River	C	H (portion 5) PWL: 1301 -0002	13/01	70 ⁶	-	-	-	0.16	10:1		
002	42° 37' 32" N	73° 45' 1.0" W									-			
Discharge Point at Hudson River	42° 37' 42" N	73° 45' 6.0" W									-			

Notes: Outfall 001 and 002 latitude and longitude are the locations of the Outfall 001-sampling point and the point when the combined discharge leaves the site, respectively. The latitude and longitude of the discharge point of the municipal storm sewer at the Hudson River is also given. See the [Receiving Water Information](#) section for more information.

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	Description of Wastewater: Cooling tower blowdown, boiler blowdown, floor drains, and reverse osmosis reject water														
		Type of Treatment: Oil water separator														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & QBELs						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. QBEL	Basis for QBEL			
<p>General Notes: Existing discharge data from 07/31/2018 to 06/06/2023 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the QBELs. The standard and QBEL shown below represent the most stringent. Rensselaer Cogen is a power generating industrial facility and is not expected to have a meaningful impact on the dissolved oxygen of the Hudson River (effluent BOD₅ measured ~2.5 mg/L). As such, no dissolved oxygen modeling was conducted as part of the permit review.</p>																

⁶ Ambient hardness was calculated from USGS gage station 01361450, located in Catskill, NY as the average of 62 samples collected from 1969 – 1974.

⁷ Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 non-detects)

Outfall #	Description of Wastewater: Cooling tower blowdown, boiler blowdown, floor drains, and reverse osmosis reject water														
	Type of Treatment: Oil water separator														
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		
Flow	GPD	Daily Max	Monitor	160,000 Actual Max	NY-2C	-	-	Narrative: No alterations that will impair the waters for their best usages.						-	Monitor 750-1.13
	Gallon	Month Total	-	20,000 Long-Term Average		-	-								-
Flow will continue to be monitored as a daily max and a new monitoring requirement for the monthly total gallons discharged has been added for informational purposes and to calculate pollutant loadings.															
pH	SU	Minimum	6.0	7.1 Actual Min	0/27	6.0	40 CFR 423	7.8 ⁸	-	6.5 – 8.5	Range	No Reasonable Potential	703.3	-	TBEL
		Maximum	9.0	8.6 Actual Max	0/27	9.0									
Consistent with the existing permit limitations, TBELs reflect the Effluent Limitation Guidelines (ELGs) listed under 40 CFR Part 423 and will remain. Given the available dilution, an effluent limitation equal to the TBEL is expected to be protective of water quality.															
Temperature	°F	Daily Max	90	83 Actual Max	0/28	-	-	84* Summer	Narrative (Non-Trout): The water temperature at the surface of a stream shall not be raised to more than 90F at any point and... shall not be raised or lowered to more than 5F over the temperature that existed before the addition			704.2	-	WQBEL	
	The effluent is a thermal discharge including cooling tower blowdown water . To protect water quality, an effluent temperature limit of 90 °F will continue. *The ambient summer temperature was established as the max value from the RIBS 13-LHUD-104.6 station, located downstream from the facility (22 samples from 1991-2017).														
Total Suspended Solids (TSS)	mg/L	Daily Max	50	37 Max 7.3 Avg	1/26	40	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.			703.2	-	TBEL	
						100	40 CFR 423								
	mg/L	Monthly Average	-	-	-	20	TOGS 1.2.1								
						30	40 CRF 423								
Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C, and are more stringent than the Effluent Limitation Guidelines (ELG) requirements under 40 CFR Part 423. Given the available dilution, effluent limitations equal to the TBEL are expected to be protective of water quality.															

⁸ Ambient pH calculated from RIBs station 13-LHUD, located near Athens ~30 miles downstream of the facility as the 80th percentile of 18 samples collected from 1997 –2017.

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 USEPA Non-Major/Class 01 Industrial

Date: January 3, 2025 v.1.25
 Permit Writer: Rashid Ahmed
 Water Quality: Rashid Ahmed / Evan Walters
 Full Technical Review

Outfall #	Description of Wastewater: Cooling tower blowdown, boiler blowdown, floor drains, and reverse osmosis reject water														
	Type of Treatment: Oil water separator														
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		
Oil and Grease	mg/L	Daily Max	15	5.2	1/27	15	TOGS 1.2.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	TBEL
		Monthly Average	-	-		20	40 CFR 423								No Limitation
		Consistent with TOGS 1.2.1, effluent limitations will continue to reflect the available treatment technology listed in Attachment C and are more stringent than the Effluent Limitation Guidelines (ELG) requirements under 40 CFR Part 423. Given the available dilution, effluent limitations equal to the TBEL are expected to be protective of water quality.													
Total Phosphorus	mg/L	Daily Max	5.0	4.0	27/0	-	-	-	Narrative: None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.				703.2	-	Anti-backsliding
	lb/d		-	-	-	-	-								Monitor 750-1.13
Consistent with anti-backsliding regulations, the current permit daily max limit will remain in the permit. Load monitoring has been added for informational purposes.															
Total Mercury	ng/L	Daily Max	-	7.2	1	-	-	-	-	0.7	H(FC)	-	703.5	-	DOW 1.3.10
	See Mercury section of this fact sheet . No effluent limitations are required at this time.														
Free Available Chlorine	mg/L	Daily Max	0.5	0.15 Max	7/21	0.5	40 CFR 423	-	-	-	-	-	-	-	TBEL
	mg/L	Monthly Average	0.2	0.1 Max	7/21	0.2	40 CFR 423		-	-	-	-	-		TBEL
Chlorine is a component of approved water treatment chemicals and the existing limits for free available chlorine will remain due to the Effluent Limitation Guidelines (ELG) requirements.															
Total Residual Chlorine	mg/L	Daily Max	-	0.24	1	-	-	-	-	0.005	A(C)	0.25	703.5	-	WQBEL
	Chlorine is a component of approved water treatment chemicals. The WQBEL was calculated by multiplying the WQS by the chronic dilution ratio and a decay factor of five. The decay factor was applied due to the effluent joining the storm sewer and the ~0.25 mile distance to travel before the Hudson River. It is expected that an effluent limitation equal to the WQBEL is protective of water quality. This is a new effluent limitation and a Schedule of Compliance item has been included in the permit.														

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Outfall #	Description of Wastewater: Cooling tower blowdown, boiler blowdown, floor drains, and reverse osmosis reject water														
	Type of Treatment: Oil water separator														
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															
Total Copper	ug/L	Daily Max	-	228 Total	1	1,000 Total	40 CFR 423	1.5* Dissolved	80 Dissolved	6.6 Dissolved	A(C)	95 Total	703.5	-	WQBEL
	ug/L	Monthly Avg	-	-	-	1,000 Total	40 CFR 423	-	-	-	-	-	-	-	No Limitation
	<p>The projected in-stream concentration was calculated from a maximum value of 228 ug/L, a multiplier of 6.2, a translator of 1.8 in accordance with the Tri-basin RIBS calculation (to convert between the total and dissolved form), and the chronic dilution ratio. A comparison of the projected instream concentration to the water quality standard indicates reasonable potential to violate a water quality standard and a new effluent limitation equal to the WQBEL is being added to the permit. A schedule of compliance has been included to perform a track down and meet the final effluent limitation. The daily max effluent limitation is also protective of the monthly average ELG requirement.</p> <p>*Ambient copper was taken as the average of 21 samples from RIBS station 13-LHUD.</p>														
Total Lead	ug/L	Daily Max	-	7.0	1	-	-	0.14*	1.9	2.6	A(C)	No Reasonable Potential	703.5	-	No limitation or monitoring
	<p>The projected in-stream concentration was calculated from a maximum value of 7.0 ug/L, a multiplier of 6.2, a translator of 2.5 in accordance with the Tri-basin RIBS calculation (to convert between the total and dissolved form), and the chronic dilution ratio. The projected instream concentration is lower than the water quality standard. No limitation or monitoring is necessary.</p> <p>* Ambient lead was taken as the average of 13 samples from RIBS station 13-LHUD.</p>														
Total Chromium	mg/L	Daily Max	-	<0.005 Total	1	1.0	40 CFR 423	-	-	0.011 Hexavalent	A(C)	No Reasonable Potential	703.5	-	TBEL
	mg/L	Monthly Avg	-	-	-	1.0 Total	40 CFR 423	-	-	-	-	-	-	-	No Limitation
	<p>A new daily max effluent limitation equal to the TBEL and the Effluent Limitation Guidelines (ELG) has been added to the permit. The daily max effluent limitation is also protective of the monthly average ELG requirement.</p>														
Zinc	mg/L	Daily Max	-	0.079 Total	1	1.0	40 CFR 423	0.0033* Dissolved	0.027	0.061 Dissolved	A(C)	No Reasonable Potential	703.5	-	TBEL
	mg/L	Monthly Avg	-	-	-	1.0 Total	40 CFR 423	-	-	-	-	-	-	-	No Limitation
	<p>The projected in-stream concentration was calculated from a maximum value of 0.079 mg/L, a multiplier of 6.2 and the chronic dilution ratio. A comparison of the projected in-stream concentration to the water quality standard indicates no reasonable potential, however a new effluent limitation equal to the Effluent Limitation Guidelines (ELG) has been included. A translator of 2.0 was used to convert between total and dissolved form in accordance with the Tri-basin RIBS calculation. The daily max effluent limitation is also protective of the monthly average ELG requirement.</p> <p>* Ambient zinc was taken as the average of 15 samples from RIBS station 13-LHUD</p>														

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Outfall #	Description of Wastewater: Cooling tower blowdown, boiler blowdown, floor drains, and reverse osmosis reject water														
	Type of Treatment: Oil water separator														
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		
Iron	mg/L	Daily Max	-	4.9	1	1.0	40 CFR 423	-	-	-	-	-	-	-	TBEL
	mg/L	Monthly Avg	-	-	-	1.0 Total	40 CFR 423	-	-	-	-	-	-	-	No Limitation
A new daily max effluent limitation equal to the TBEL and the Effluent Limitation Guidelines (ELG) has been added to the permit. The daily max effluent limitation is also protective of the monthly average ELG requirement.															

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		
Emerging Contaminants Outfall 001															
Notes: Due to the presence of higher concentrations of emerging contaminants in the sample results from Outfall 002, additional sampling for the PFAS suite is being required at Outfall 001 under a short-term monitoring program in the Schedule of Additional Submittals. See the Emerging Contaminant Monitoring section for more information.															
Perfluorobutanoic Acid (PFBA)	ng/L	Daily Max	-	<0.331	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoropentanoic Acid (PFPeA)	ng/L	Daily Max	-	21.3	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluorohexanoic Acid (PFHxA)	ng/L	Daily Max	-	38.6	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoroheptanoic Acid (PFHpA)	ng/L	Daily Max	-	2.55	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														

⁹ Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

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		
Emerging Contaminants Outfall 001															
Notes: Due to the presence of higher concentrations of emerging contaminants in the sample results from Outfall 002, additional sampling for the PFAS suite is being required at Outfall 001 under a short-term monitoring program in the Schedule of Additional Submittals. See the Emerging Contaminant Monitoring section for more information.															
Perfluoro-octanoic Acid (PFOA)	ng/L	Daily Max	-	1.16	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-nonanoic Acid (PFNA)	ng/L	Daily Max	-	11	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-decanoic Acid (PFDA)	ng/L	Daily Max	-	<0.753	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-undecanoic Acid (PFUnA)	ng/L	Daily Max	-	<1.13	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-dodecanoic Acid (PFDoA)	ng/L	Daily Max	-	<0.884	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-tridecanoic Acid (PFTriA)	ng/L	Daily Max	-	<0.743	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-tetradecanoic Acid (PFTeA)	ng/L	Daily Max	-	<0.693	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-butanesulfonic Acid (PFBS)	ng/L	Daily Max	-	3.19	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-pentanesulfonic Acid (PFPeS)	ng/L	Daily Max	-	<0.763	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-hexanesulfonic Acid (PFHxS)	ng/L	Daily Max	-	<0.683	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														

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Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality 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		
Emerging Contaminants Outfall 001															
Notes: Due to the presence of higher concentrations of emerging contaminants in the sample results from Outfall 002, additional sampling for the PFAS suite is being required at Outfall 001 under a short-term monitoring program in the Schedule of Additional Submittals. See the Emerging Contaminant Monitoring section for more information.															
Perfluoro-heptanesulfonic Acid (PFHpS)	ng/L	Daily Max	-	<0.914	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-octanesulfonic Acid (PFOS)	ng/L	Daily Max	-	< 0.683	1	-	-	-	-	160,000	A(C)	No Reasonable Potential	TOGS 1.1.1 GV	-	ST Monitoring 750-1.13
	Given the non-detect result from the single sample collected in the application there is no reasonable potential to violate the guidance value. Short-term monitoring has been added for informational purposes.														
Perfluoro-nonanesulfonic Acid (PFNS)	ng/L	Daily Max	-	<0.864	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-decanesulfonic Acid (PFDS)	ng/L	Daily Max	-	<1.33	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-dodecane-sulfonic Acid (PFDoS)	ng/L	Daily Max	-	<0.934	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-octane-sulfonamide (PFOSA)	ng/L	Daily Max	-	<0.884	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
N-methyl Perfluoro-octanesulfon-amidoacetic Acid (NMeFOSAA)	ng/L	Daily Max	-	<0.793	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
N-ethyl Perfluoro-octanesulfon-amidoacetic Acid (NEtFOSAA)	ng/L	Daily Max	-	<1.03	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														

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			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		
Emerging Contaminants Outfall 001															
Notes: Due to the presence of higher concentrations of emerging contaminants in the sample results from Outfall 002, additional sampling for the PFAS suite is being required at Outfall 001 under a short-term monitoring program in the Schedule of Additional Submittals. See the Emerging Contaminant Monitoring section for more information.															
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (4:2 FTS)	ng/L	Daily Max	-	<1.80	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
Short-term monitoring has been added for informational purposes.															
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (6:2 FTS)	ng/L	Daily Max	-	<1.06	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
Short-term monitoring has been added for informational purposes.															
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (8:2 FTS)	ng/L	Daily Max	-	<2.06	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
Short-term monitoring has been added for informational purposes.															
N-ethyl Perfluoro-octanesulfonamide (NEtFOSA)	ng/L	Daily Max	-	<1.81	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
Short-term monitoring has been added for informational purposes.															
N-methyl Perfluoro-octanesulfonamide (NMeFOSA)	ng/L	Daily Max	-	<1.59	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
Short-term monitoring has been added for informational purposes.															
N-methyl Perfluoro-octanesulfonamidoethanol (NMeFOSE)	ng/L	Daily Max	-	<4.01	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
Short-term monitoring has been added for informational purposes.															
N-ethyl Perfluoro-octanesulfonamidoethanol (NEtFOSE)	ng/L	Daily Max	-	<4.01	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
Short-term monitoring has been added for informational purposes.															

Permittee: Rensselaer Generating, LLC
 Facility: Rensselaer Cogen
 SPDES Number: NY0242586
 USEPA Non-Major/Class 01 Industrial

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Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & QBELs						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. QBEL	Basis for QBEL		
Emerging Contaminants Outfall 001															
Notes: Due to the presence of higher concentrations of emerging contaminants in the sample results from Outfall 002, additional sampling for the PFAS suite is being required at Outfall 001 under a short-term monitoring program in the Schedule of Additional Submittals. See the Emerging Contaminant Monitoring section for more information.															
9-Chlorohexadeca-fluoro-3-oxanonane-1-sulfonic Acid (9CI-PF3ONS)	ng/L	Daily Max	-	<0.703	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Hexafluoro-propylene Oxide Dimer Acid (HFPO-DA or GenX)	ng/L	Daily Max	-	<3.24	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic Acid (11CI-PF3OUdS)	ng/L	Daily Max	-	<0.1.39	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)	ng/L	Daily Max	-	<0.532	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
3-Perfluoropropyl Propanoic Acid (3:3 FTCA)	ng/L	Daily Max	-	< 2.04	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
2H,2H,3H,3H-Perfluoro-octanoic Acid (5:3 FTCA)	ng/L	Daily Max	-	< 7.36	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														

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Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality 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		
Emerging Contaminants Outfall 001															
Notes: Due to the presence of higher concentrations of emerging contaminants in the sample results from Outfall 002, additional sampling for the PFAS suite is being required at Outfall 001 under a short-term monitoring program in the Schedule of Additional Submittals. See the Emerging Contaminant Monitoring section for more information.															
3-Perfluoroheptyl Propanoic Acid (7:3 FTCA)	ng/L	Daily Max	-	< 9.51	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Nonfluoro-3,6-dioxaheptanoic Acid (NFDHA)	ng/L	Daily Max	-	< 2.15	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-4-methoxybutanoic Acid (PFMBA)	ng/L	Daily Max	-	< 0.372	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro-3-methoxypropanoic Acid (PFMPA)	ng/L	Daily Max	-	< 0.251	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
Perfluoro(2-ethoxyethane)sulfonic Acid (PFEESA)	ng/L	Daily Max	-	< 0.502	1	-	-	-	-	-	-	-	-	-	ST Monitoring 750-1.13
	Short-term monitoring has been added for informational purposes.														
1,4-Dioxane (1,4-D)	µg/L	Daily Max	-	<0.35	1	-	-	-	-	18,000	A(C)	No Reasonable Potential	TOGS 1.1.1 GV	-	No Limitation or Monitoring
	Given the non-detect result from the single sample collected in the application there is no reasonable potential to violate the guidance value. No limitation or monitoring is needed at this time.														

Outfall 002

Outfall #	Description of Wastewater: 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 ¹⁰	# 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: The previous permit did not have any sampling requirements for Outfall 002 and the existing discharge data shown below was obtained from the application provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	MGD	Monthly Avg	-	-	-	-	-	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	No Limitation or Monitoring	
	Due to the variable nature of stormwater, flow monitoring is not needed at this time.														
pH	SU	Minimum	-	7.4	1	6.0	BPJ	7.8 ¹¹	-	6.5 – 8.5	Range	-	703.3	-	TBEL
		Maximum	-			9.0									
pH effluent limitations have been applied based on best professional judgment.															
Total Suspended Solids (TSS)	mg/L	Daily Max	-	9.0	1	-	-	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	Monitor 750-1.13
	Total suspended solids monitoring requirement has been included for information purposes.														
Oil and Grease	mg/L	Daily Max	-	<5.3	1	15 Action Level	BPJ MSGP Sector O	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	Action Level
	Consistent with the MSGP Sector O, an action Level for oil and grease has been applied based on best professional judgment.														
Total Recoverable Iron	mg/L	Daily Max	-	-	-	1.0 Action Level	BPJ MSGP Sector O	-	-	-	-	-	-	-	Action Level
	Consistent with the MSGP Sector O, an action level for total iron has been applied based on best professional judgment.														

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

¹¹ Ambient pH calculated from RIBs station 13-LHUD, located near Athens about 30 miles downstream of the discharge point, and samples collected from 7/08/1997 – 9/27/2017.

Outfall #	Description of Wastewater: 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 ¹⁰	# 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	Daily Max	-	8.9	1	-	-	-	-	0.7	H(FC)	-	-	-	DOW 1.3.10
	See Mercury section of this fact sheet . No effluent limitation or monitoring is required at this time.														
Emerging Contaminants Outfall 002															
Perfluorobutanoic Acid (PFBA)	ng/L	Daily Max	-	<0.336	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoropentanoic Acid (PFPeA)	ng/L	Daily Max	-	17	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluorohexanoic Acid (PFHxA)	ng/L	Daily Max	-	14.5	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoroheptanoic Acid (PFHpA)	ng/L	Daily Max	-	5.79	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluorooctanoic Acid (PFOA)	ng/L	Daily Max	-	18.7	1	6.7 Action Level	BPJ	-	-	-	-	-	-	-	Action Level
	Due to the presence of PFOA , industrial category, and the need to protect downstream waters, an action level has been established at the human health guidance value, the lowest regulatory value available. See the Emerging Contaminant Monitoring section for more information.														
Perfluorononanoic Acid (PFNA)	ng/L	Daily Max	-	3.44	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluorodecanoic Acid (PFDA)	ng/L	Daily Max	-	1.48	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoroundecanoic Acid (PFUnA)	ng/L	Daily Max	-	<1.15	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														

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Outfall #	Description of Wastewater: 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 ¹⁰	# 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		
Perfluoro-dodecanoic Acid (PFDoA)	ng/L	Daily Max	-	< 0.896	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-tridecanoic Acid (PFTTrDA)	ng/L	Daily Max	-	< 0.754	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-tetradecanoic Acid (PFTTeA)	ng/L	Daily Max	-	< 0.708	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-butanesulfonic Acid (PFBS)	ng/L	Daily Max	-	<4.08	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-pentanesulfonic Acid (PFPeS)	ng/L	Daily Max	-	< 0.744	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-hexanesulfonic Acid (PFHxS)	ng/L	Daily Max	-	2.07	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														

Outfall #	Description of Wastewater: 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 ¹⁰	# 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			
Perfluoroheptanesulfonic Acid (PFHpS)	ng/L	Daily Max	-	< 0.927	1	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
Monitoring has been added to support establishment of future standards or TBELs.																
Perfluorooctanesulfonic Acid (PFOS)	ng/L	Daily Max	-	12.1	1	2.7 Action Level	BPJ	-	7.4	160,000	A(C)	No Reasonable Potential	TOGS 1.1.1 GV	-	-	Action Level
The projected instream concentration was calculated using the maximum measured effluent concentration of 12 ng/L, a multiplier of 6.2, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the guidance value indicates no reasonable potential to cause or contribute to a water quality violation. However, due to the presence of PFOS, industrial category, and the need to protect downstream waters, an action level has been established at the human health guidance value, the lowest regulatory value available. See the Emerging Contaminant Monitoring section for more information.																
Perfluorononanesulfonic Acid (PFNS)	ng/L	Daily Max	-	< 0.876	1	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
Monitoring has been added to support establishment of future standards or TBELs.																
Perfluorodecane-sulfonic Acid (PFDS)	ng/L	Daily Max	-	< 1.34	1	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
Monitoring has been added to support establishment of future standards or TBELs.																
Perfluorododecane-sulfonic Acid (PFDoS)	ng/L	Daily Max	-	1.52	1	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
Monitoring has been added to support establishment of future standards or TBELs.																
Perfluorooctane-sulfonamide (PFOSA)	ng/L	Daily Max	-	< 0.896	1	-	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
Monitoring has been added to support establishment of future standards or TBELs.																

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Outfall #	Description of Wastewater: 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 ¹⁰	# 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		
N-methyl Perfluoro-octanesulfon-amidoacetic Acid (NMeFOSAA)	ng/L	Daily Max	-	< 0.805	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
N-ethyl Perfluoro-octanesulfon-amidoacetic Acid (NEtFOSAA)	ng/L	Daily Max	-	< 1.05	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (4:2 FTS)	ng/L	Daily Max	-	< 1.82	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (6:2 FTS)	ng/L	Daily Max	-	< 1.08	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
1H,1H,2H,2H-Fluorotelomer Sulfonic Acid (8:2 FTS)	ng/L	Daily Max	-	< 2.09	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
N-ethyl Perfluoro-octanesulfon-amide (NEtFOSA)	ng/L	Daily Max	-	< 1.83	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
N-methyl Perfluoro-octanesulfon-amide (NMeFOSA)	ng/L	Daily Max	-	< 1.61	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
N-methyl Perfluoro-	ng/L	Daily Max	-	< 4.06	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														

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	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 ¹⁰	# 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		
octanesulfon-amidoethanol (NMeFOSE)	Monitoring has been added to support establishment of future standards or TBELs.														
N-ethyl Perfluoro-octanesulfon-amidoethanol (NEtFOSE)	ng/L	Daily Max	-	< 4.06	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
9-Chlorohexadeca-fluoro-3-oxanonane-1-sulfonic Acid (9Cl-PF3ONS)	ng/L	Daily Max	-	< 0.713	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Hexafluoro-propylene Oxide Dimer Acid (HFPO-DA or GenX)	ng/L	Daily Max	-	< 3.29	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
11-Chloroeicosafuoro-3-oxaundecane-1-sulfonic Acid (11Cl-PF3OUdS)	ng/L	Daily Max	-	< 1.41	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
4,8-Dioxa-3H-perfluorononanoic Acid (ADONA)	ng/L	Daily Max	-	< 0.540	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
3-Perfluoropropyl Propanoic Acid (3:3 FTCA)	ng/L	Daily Max	-	< 2.07	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
2H,2H,3H,3H-Perfluoro-octanoic Acid (5:3 FTCA)	ng/L	Daily Max	-	< 7.47	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														

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Outfall #	Description of Wastewater: 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 ¹⁰	# 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		
3-Perfluoroheptyl Propanoic Acid (7:3 FTCA)	ng/L	Daily Max	-	< 9.65	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Nonfluoro-3,6-dioxaheptanoic Acid (NFDHA)	ng/L	Daily Max	-	< 2.18	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-4-methoxybutanoic Acid (PFMBA)	ng/L	Daily Max	-	< 0.377	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro-3-methoxypropanoic Acid (PFMPA)	ng/L	Daily Max	-	< 0.255	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
Perfluoro(2-ethoxyethane)sulfonic Acid (PFEESA)	ng/L	Daily Max	-	< 0.509	1	-	-	-	-	-	-	-	-	-	Monitor 750-1.13
	Monitoring has been added to support establishment of future standards or TBELs.														
1,4-Dioxane (1,4-D)	µg/L	Daily Max	-	< 0.35	1	-	-	-	-	18,000	A(C)	No Reasonable Potential	TOGS 1.1.1 GV	-	No Limitation or Monitoring
	Given the non-detect result from the single sample collected in the application there is no reasonable potential to violate the guidance standard. No limitation or monitoring is needed at this time.														

USEPA EFFLUENT LIMITATION GUIDELINE (ELG) CALCULATIONS

[Appendix Link](#)

For the applicable categorical limitations under 40 CFR Part 423, the following basis was used to determine the TBEL:

Outfall	001
40 CFR Part/Subpart	§423
Subpart Name	STEAM ELECTRIC POWER GENERATING POINT SOURCE CATEGORY

ELG Pollutant	Daily Max	Monthly Avg.
423.12 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best practicable control technology currently available (BPT); and		
423.13 Effluent limitations guidelines representing the degree of effluent reduction attainable by the application of the best available technology economically achievable (BAT).		
Free Available Chlorine – mg/L	0.5	0.2
Oil & Grease – mg/L	20	15
Total Suspended Solids (TSS) – mg/L	100	30
Total Chromium – mg/L	1.0	1.0
Total Zinc – mg/L	1.0	1.0
Total Copper – mg/L	1.0	1.0
Total Iron – mg/L	1.0	1.0
pH	6.0 - 9.0 su	

Appendix: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

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

Outfall and Receiving Water Information

Impaired Waters

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

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

Existing Effluent Quality

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

Permit Requirements

Basis for Effluent Limitations

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

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

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law¹² and USEPA interpretation¹³ 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.

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

¹² American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)

¹³ 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)

to ensure that the water quality standards of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL.

Technology-based Effluent Limitations (TBELs) for Industrial Facilities

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

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

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

Best Professional Judgement (BPJ)

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

Water Quality-Based Effluent Limitations (WQBELs)

In addition to the TBELs, permits must include additional or more stringent effluent limitations and conditions, including those necessary to protect water quality. CWA sections 101 and 301(b)(1)(C), 40 CFR 122.44(d)(1), and 6 NYCRR Parts 750-1.11 require that permits include limitations for all pollutants or parameters which are or may be discharged at a level which may cause or contribute to an exceedance of any State water quality standard adopted pursuant to NYS ECL 17-0301. Additionally, 6 NYCRR Part 701.1 prohibits the discharge of pollutants that will cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge. Water quality standards can be found under 6 NYCRR Parts 700-704. The limitations must be stringent enough to ensure that water quality standards are met at the point of discharge and in downstream waters and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1, 1.3.2, 1.3.5 and 1.3.6. The DEC considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

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 $1.2 \times 7Q10$ to be equivalent to the 30Q10. The 7Q10 or 30Q10 flow is used with the critical effluent flow to calculate the dilution ratio. The critical effluent flow can be the maximum daily flow reported on the permit application, the maximum of the monthly average flows from discharge monitoring reports for the past three years, or the facility design flow. When more than one applicable standard exists for aquatic or human health protection for a specific pollutant, a reasonable potential analysis is conducted for each applicable standard and corresponding critical flow to ensure effluent limitations are sufficiently stringent to ensure all applicable water quality standards are met as required by 40 CFR 122.44(d)(1)(i). For brevity, the pollutant summary table reports the results of the most conservative scenario.

Reasonable Potential Analysis (RPA)

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

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

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

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

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

the Watershed Approach. The Watershed Approach accounts for the cumulative effect of multiple discharges of conservative toxic pollutants to ensure water quality standards are met in downstream segments.

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.

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 DEC 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.

Permittee: Rensselaer Generating, LLC
Facility: Rensselaer Cogen
SPDES Number: NY0242586
USEPA Non-Major/Class 01 Industrial

Date: January 3, 2025 v.1.25
Permit Writer: Rashid Ahmed
Water Quality: Rashid Ahmed / Evan Walters
Full Technical Review

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.