State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**4911**	NAICS Code:	**562213**	SPDES Number:	**NY 0155519**
Discharge Class (CL):	**01**			DEC Number:	**7-3558-00013/00002**
Toxic Class (TX):	**T**			Effective Date (EDP):	**EDP**
Major-Sub Drainage Basin:	**07 - 01**			Expiration Date (ExDP):	**ExDP**
Water Index Number:	**ONT-66**	Item No.:		Modification Dates (EDPM):	
Compact Area:	**IJC**				

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

PERMITTEE NAME AND ADDRESS					
Name:	**Oswego County**	Attention:	Chief Facilities Operator		
Street:	**42 East Bridge St.**				
City:	**Oswego**	State:	**NY**	Zip Code:	**13126**
Email:	**Joe.Wilhelm@oswegocounty.com**	Phone:	**(315) 591-9283**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL														
Name:	**Oswego Energy Recovery Facility**													
Address / Location:	**2801 State Rt. 481**										County:	**Oswego**		
City:	**Oswego**						State:	**NY**			Zip Code:	**13069**		
Facility Location:		Latitude:	**43**	°	**20**	’	**56**	” N	& Longitude:	**-76**	°	**25**	’	**30** ” W
Primary Outfall No.:	**001**	Latitude:	**43**	°	**20**	’	**56**	” N	& Longitude:	**-76**	°	**25**	’	**39** ” W
Wastewater Description:	**Non-contact cooling water**	Receiving Water:	**Oswego River**				NAICS:	**562213**	Class:	**B**		Standard:		

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)
DOW R7 Permit Writer
RWE
RPA
BEH, Energy Unit Leader
EPA Region II (Region2_NPDES@epa.gov)

Permit Administrator:	Kevin M. Balduzzi
Address:	5786 Widewaters Parkway Syracuse, NY 13214
Signature	Date

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SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
002	Stormwater	**N/A**	**43** ° **20** ' **56** " N	**-76** ° **25** ' **33** " W
Receiving Water:	**Oswego River**			Class: **B**
Outfall	Wastewater Description	NAICS Code	Outfall Latitude	Outfall Longitude
003	Treated Sanitary	**221320**	**43** ° **20** ' **59** " N	**-76** ° **25** ' **29** " W
Receiving Water:	**Groundwater**			Class: **GA**

DEFINITIONS

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

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Non-contact cooling water	Oswego River	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Daily Minimum	Monitor	MGD			Continuous	Recorder		X	1
pH	Daily Minimum	6.5	SU			2x/month	Grab		X	
	Daily Maximum	8.5	SU							
Oil and Grease	Daily Maximum	15	mg/L			1/month	Grab		X	
Temperature	Daily Maximum	90	ºF			Daily	Grab		X	2
Temperature Difference	Daily Maximum	14	ºF			Daily	Grab		X	3
Total Mercury	12 MRA	12	ng/L			Calculated	Grab		X	4
Total Mercury	Daily Minimum	50	ng/L			2x/year	Grab		X	5
ACTION LEVEL PARAMETERS	Type	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Total Copper	Daily Maximum	100	µg/L			2x/year	Grab		X	6
Total Lead	Daily Maximum	35	µg/L			2x/year	Grab		X	6
Total Nickel	Daily Maximum	40	µg/L			2x/year	Grab		X	6
Total Zinc	Daily Maximum	200	µg/L			2x/year	Grab		X	6

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING	FN
002	Stormwater	Oswego River	3/8/2023	3/7/2028	7

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FOOTNOTES:

1. No biocides, slimicides, or corrosion control chemical are authorized for use at this facility other than those expressly approved by this Department. If use of cooling water additives is intended, application for such use must be made to this Department prior to use. The location, design, construction, and capacity of this facility's colling water intake structure shall reflect the best technology available for minimizing adverse environmental impact. Thermal discharges from this facility shall assure the protection and propagation of a balanced indigenous population of fish and wildlife in the Oswego River.

2. Temperature limit of 90 °F may be exceeded for no more than 120 minutes per 24-hour period with no single peak to exceed 125 °F at the sampling pit. Also, 90 °F shall not be exceeded 95 feet downstream from the outfall into the Oswego River at any time. A summary of temperature spikes (greater than 90 °F) shall be included as an amendment to each monthly DMR. This summary shall include the number of times the effluent temperature exceeds 90 °F as well as the minimum, average, and maximum duration of these temperature spikes.

3. The daily maximum Temperature Difference (Discharge – Intake) limit of 14°F may be exceeded by up to 3°F (resulting in an ultimate temperature difference of 17°F) for up to six minutes once during any clock hour. This variance provides for a brief thermal discharge peak which may occur during periods of adjustment to steam

demand variation. The variance is not to be included in determining compliance with the 14°F daily maximum Temperature Difference limit.

4. The 12-month rolling average for mercury is defined as the sum of the current month's monthly average concentration or load added to the semi-annual averages from the eleven previous months, divided by the number of months for which samples were collected in the 12-month period.

5. The semi-annual samples for mercury shall be collected in calendar halves (January 1st to June 30th and July 1st to December 31st).

6. If the action level is exceeded, the additional monitoring requirement is triggered, and the permittee shall undertake a short-term, high-intensity, monitoring program for this metal. Samples identical to those required for routine monitoring purposes shall be taken on each of at least three consecutive days and analyzed. Results shall be expressed in both mass and concentration. If levels higher than the action levels are confirmed, the permittee shall evaluate the treatment system operation and identify and employ actions to reduce concentrations present in the discharge. The permit may also be reopened by the DEC for consideration of revised action levels or effluent limits. Action level monitoring results and the effectiveness of the actions taken shall be summarized and submitted with the monthly operating report and DMR data.

7. 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, SPDES number NYR00B007, 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.

   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.

SPECIAL CONDITIONS

Zebra Mussel Control – Thermal Treatment

1. The Regional Water Engineer (Syracuse office) and the Energy Unit Leader, Bureau of Ecosystem Health (Albany Central Office) shall be notified five (5) days in advance of any planned thermal treatments. At the time of notification, the permittee shall provide the Department with the average Oswego River flow, in cfs, for the five (5) days preceding the notification.

2. The maximum discharge temperature of the thermal treatment shall be 104°F. The maximum discharge temperature shall be maintained for no longer than one (1) hour.

3. The permittee shall make every effort to avoid sudden increases or decreases in temperature during thermal treatments. The rate of increase and decrease in the discharge temperature of the water during treatments shall be approximately 5°F per 10 minutes.

4. Every effort shall be made to avoid thermal treatments during very low flow periods in the Oswego River. The flow in the Oswego River should average 3,000 cfs or more for the five (5) days preceding the commitment to a treatment date.

5. The permittee shall document the following information as part of its zebra mussel control program:

a. Thermal discharges during thermal treatments;
b. All observation made to evaluate the effectiveness of each thermal treatment; and,
c. Average Oswego River flow on the day(s) of the treatment.

6. The permittee shall submit an annual report to the individuals named in item 1 above, describing completed thermal treatments conducted during the year. The reports shall contain the following information:

   a. Oswego River water flows preceding the backwash, in cfs;
   b. Average Oswego River flows during the backwash, in cfs;
   c. Step log of the backwash program, including time of each step, generator status in kw, river water temperature at condenser outlet, river water temperature in the wet well, steam temperature at the condenser outlet (as appropriate), steam load in lbs/hr (as appropriate), and wet well stabilization temperature. All temperatures are to be reported in degrees Fahrenheit (°F);
   d. Evaluation of the effectiveness of the thermal treatment(s);
   e. Any reports of non-compliance with the conditions listed above; and,
   f. The report shall be submitted to the individuals named in item 1, above **no later than December 31st** of each year.

7. The Department reserves the right to modify or append the special conditions above based on future monitoring and/or operational data submitted by the permittee. Additional monitoring and/or limits on future thermal treatments for zebra mussel control may be required by this Department should conditions in the Oswego River indicate water quality and/or aquatic life degradation due to thermal treatments. The Department also reserves the right to deny future thermal treatments for zebra mussel control should the permittee demonstrate significant non-compliance with the conditions listed above.

Best Technology Available- Operation of Cylindrical Wedge Wire Screens (CWWS) and Limited Generation Capacity

- At EDP, the permittee must operate the 2.0 mm slot-width cylindrical wedgewire screens (CWWS) at a through-slot velocity not to exceed ≤ 0.5 fps at maximum pumping capacity and in accordance with the CWWS Standard Operation Plan.

- By the effective date of the permit (EDP), the facility shall be operated at less than 15 percent of its full load electric generating capacity factor. This condition shall be measured as a five-year rolling average following the EDP.

STORMWATER POLLUTION PREVENTION REQUIREMENTS

Stormwater discharges at this facility are required to obtain coverage under the current Multi-Sector General Permit (MSGP) Sector [O] (GP-0-23-001), SPDES NYR00B007.

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 reviewed annually** and shall be modified whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.

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

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

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

BMPs FOR INDUSTRIAL FACILITIES (continued)

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

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

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.

BMPs FOR INDUSTRIAL FACILITIES (continued)

[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.

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

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

(i) *Bulk Storage Secondary Containment Systems:*

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

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

(ii) *Transfer Area Secondary Containment Systems:*

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

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

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

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

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

MERCURY MINIMIZATION PROGRAM (MMP) - Type III

1. General - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below, to reduce mercury effluent levels with the goal of achieving the WQBEL of 0.7 ng/L.

2. MMP Elements - The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements as described in detail below:

   a. Monitoring - Monitoring at Outfall 001 shall be performed using either USEPA Method 1631 or another sufficiently sensitive method, as approved under 40 CFR Part 136[2]. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate. Monitoring must be coordinated so that the results can be effectively compared between locations.

      Minimum required monitoring is as follows:

      i. Plant Effluent – The permittee must collect samples at the location(s) and frequency as specified in the SPDES permit limitations table.

      ii. *Key Locations* and *Potential Mercury Sources* –The permit includes reduced monitoring requirements and does not require key location sampling. See section 2.a.iii below.

      iii. Decreased Monitoring Requirements - The permittee has an EEQ at or below 12 ng/L and the permit includes the following:

         1) Reduced requirements
            a) Conduct effluent compliance sampling semi-annually.
         2) If a facility with reduced requirements reports discharges above 12 ng/L for two of four consecutive effluent samples, the DEC may undertake a Department-initiated modification to remove the allowance of reduced requirements.
         3) Under the decreased permit requirements, the facility must continue to conduct an annual status report, as applicable in accordance with 2.c of this MMP, to determine if any waste streams have changed.

      iv. Additional monitoring must be completed as required elsewhere in this permit (e.g., locations tributary to compliance points).

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

      i. Monitoring and Inventory/Inspections for Outfall 001

         1) Monitoring shall be performed as described in 2.a above. As mercury sources are found, the permittee must track down and minimize these sources.
         2) The permittee must inventory and/or inspect users of its system as necessary to support the MMP.
            a) *Potential mercury sources*
               1. The permittee must maintain an inventory of *potential mercury sources.*
               2. The permittee must inspect *potential mercury sources* once every five years. Alternatively, the permittee may develop and implement an outreach program[3] which informs users of their responsibilities as *potential mercury sources.* The permittee must conduct the outreach program at least once every five years. The outreach program should be supported by a subset of site inspections.
               3. A file shall be maintained containing documentation demonstrating compliance with 2.b.i.(2)(a) above. This file shall be available for review by DEC representatives and copies shall be provided upon request.

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

      iii. Bulk Chemical Evaluation – For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury

[2] Outfall monitoring must be conducted using the methods specified in Table 8 of *DOW 1.3.10.*

[3] For example, the outreach program could include education about sources of mercury and what to do if a mercury source is found.

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. All MMP monitoring results for Outfall 001 for the previous reporting period;
   ii. A list of known and *potential mercury sources* for Outfall 001
      1) If the permittee meets the criteria for MMP Type IV, the permittee must notify the DEC for a permittee-initiated modification;
   iii. All actions undertaken, pursuant to the control strategy, during the previous reporting period;
   iv. Actions planned, pursuant to the control strategy, for the upcoming reporting period; and
   v. Progress towards achieving a dissolved mercury concentration of 0.70 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation and/or installation/modification of a treatment system).

   The permittee must maintain a file with all MMP documentation. The file must be available for review by 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 increase the potential for mercury discharges;
   b. Effluent discharges exceed the current permit limitation(s); or
   c. A letter from the DEC identifies inadequacies in the MMP.

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

DEFINITIONS:

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

DISCHARGE NOTIFICATION REQUIREMENTS

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

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

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

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

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

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

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

OR:

NYSDEC Division of Water Regional Office Address:

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

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

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

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date[4]
001	CYLINDRICAL WEDGE WIRE SCREENS (CWWS) Within 6 months of the effective date of the permit (EDP + 6 months), the permittee must submit for Department approval a Standard Operation Plan (SOP) to operate and maintain the 2.0 mm slot-width CWWS. This SOP must include, but is not limited to: a) operational measures, procedures, and record keeping requirements to be implemented to ensure the velocity through the CWWS does not exceed 0.5 fps; and b) a proposed schedule for maintenance of the CWWS. Upon receipt of the Department's written approval of the SOP, the permittee must implement the Plan in accordance with the approved schedule. The SOP and approved schedule will be an enforceable condition of this SPDES permit.	EDP + 6 Months
Unless noted otherwise, the above actions are one-time requirements.		

b) The permittee shall submit a Report of Non-compliance Event form 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.

[4] 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:

GENERAL REQUIREMENTS

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

B. General Conditions

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

C. Operation and Maintenance

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

D. Monitoring and Records

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

E. Reporting Requirements

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

F. Sludge Management

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

G. SPDES Permit Program Fee

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

H. Water Treatment Chemicals (WTCs)

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

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

I. Cooling Water Intake

Modification of the facility cooling water intake must not occur without prior Department approval. The permittee must submit written notification, including detailed descriptions and plans, to the NYSDEC Energy Unit; the Director of the Bureau of Water Compliance Program; and both the Regional Permit Administrator and the Regional Water Engineer, Region 7 at least 60 days prior to any proposed change which would result in the alteration of the permitted operation, location, design, construction, or capacity of the cooling water intake structure. The permittee must submit with the written notification a demonstration that the change reflects the best technology available for minimizing adverse environmental impacts pursuant to 6 NYCRR Part 704.5, Section 316(b) CWA, and 40 CFR Subpart 125.94. As determined by NYSDEC, a permit modification application in accordance with 6 NYCRR Part 621 may be required.

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 monthly 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 7
5786 Widewaters Pkwy., Syracuse, New York 13214-1867 Phone: (315) 426-7500

Department of Environmental Conservation
Energy Unit Leader, Bureau of Ecosystem Health
625 Broadway, Albany, New York 12233-4756 Phone: (518) 402-8873

D. Annual SPDES Monitoring Reports: An annual report shall be submitted to DEC by February 1st each year. The report shall summarize information for January to December of the previous year and shall be submitted electronically, or in hardcopy format, utilizing the SPDES Annual Report Form available on the DEC's website.

Hard copy submission of the Annual Report shall be submitted to the Regional Water Engineer at the address below:

Department of Environmental Conservation
Regional Water Engineer, Region 7
5786 Widewaters Parkway, Syracuse, NY 13214-1867 Phone: (315) 426-7500

E. 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	BIOLOGICAL MONITORING REQUIREMENTS[1] a) Operate the CWWS according to the approved SOP b) Limit generating capacity to 15% over a 5-year rolling average c) Submit an approvable CWWS *Standard Operation Plan*	EDP + 6 months EDP and thereafter EDP + 6 months
001	MONTHLY FLOW REDUCTION AND OUTAGE COMPLIANCE REPORT[1] The permittee must submit monthly flow reduction and outage compliance reports to the NYSDEC Energy Unit leader containing the following data: a) generating operation including daily minimum, maximum and total energy production in MWh b) cooling water usage including daily minimum, maximum and total flow in MGD c) percent reduction in daily cooling water use from calculation baseline All submitted data must be provided electronically in Microsoft Excel spreadsheet format.	EDP +1 Month, and monthly thereafter
001	RECORDS RETENTION[1] The permittee must maintain records of all data, reports and analysis pertaining to compliance with 6 NYCRR Part 704.5 and Section 316(b) of the Clean Water Act for a period of no less than ten (10) years from the EDP.	EDP +10 yrs
001	BMP PLAN The permittee shall provide a copy of the completed BMP plan to the DEC Region 7 office and shall review the BMP on an annual basis. The BMP plan shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions must be submitted to the Regional Water Engineer within 30 days.	EDP + 6 Months, Annually thereafter on January 28th
001	ANNUAL ZEBRA MUSSEL CONTROL REPORT The permittee shall provide a report as outlined in item #6 of the Special Conditions Section for zebra mussel control.	Annually, December 31st
001	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM The permittee shall submit a completed WTC Annual Report Form each year if Water Treatment Chemicals are used. The form shall be attached to the December DMR.	Annually, December 31st (if WTC used)

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
001	TEMPERATURE SUMMARY REPORT The permittee shall include an effluent temperature summary report as an attachment to the DMR when temperature spikes greater than 90 °F occur. This summary shall include the number of times the effluent temperature exceeds 90 °F as well as the minimum, average, and maximum duration of these temperature spikes.	28th day of each month (if T > 90°F)
001	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite a semiannual mercury minimization status report in accordance with the requirements of this permit.	***Maintained Onsite*** EDP + 6 months, semiannually thereafter
002	STORMWATER NO EXPOSURE CERTIFICATION Permittee must recertify every five years a condition of no exposure to stormwater in order to continue to qualify for the no exposure exclusion. The No Exposure Certification Form can be found on the DEC website.	01/31/2029 and every 5 years thereafter

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

Footnote:

1. Provide submission as follows:
    - One (1) electronic copy to the Energy Unit Leader;
    - One (1) copy of the cover letter to the Division of Water, Bureau of Water Compliance; and,
    - One (1) copy of the cover letter to the Regional Water Engineer

F. 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.

G. 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.

H. Calculations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in this permit.

I. 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.

J. Any laboratory test or sample analysis required by this permit for which the State Commissioner of Health issues certificates of approval pursuant to section 502 of the Public Health Law shall be conducted by a laboratory which has been issued a certificate of approval. Inquiries regarding laboratory certification should be directed to the New York State Department of Health, Environmental Laboratory Accreditation Program.

SPDES Permit Fact Sheet

Oswego County Energy Recovery Facility NY0155519

Contents

Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) permittee-initiated permit modification has been drafted for the Oswego County Energy Recovery Facility. The changes to the permit are summarized below:

- Updated permit format, definitions, and general conditions
- Updated revised waterbody classification from Class C to Class B
- Added MMP to Type III
- Reduced limit for maximum temperature from 97°F to 90°F
- Increased daily pH minimum from 6.0 to 6.5
- Decreased daily pH maximum from 9.0 to 8.5
- Discontinued Action Level monitoring for chromium
- Discontinued Action Level monitoring for silver
- Added Action Level monitoring for nickel
- Added requirements for biological monitoring
- Limited operation to <15% generating capacity
- Reduced notification time for conducting thermal treatment from 10 days to 5 days

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

7/19/1995 The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 4/1/1999. The 1996 permit, along with all subsequent modifications,has formed the basis of this permit.

8/12/1998 The permit was administratively renewed in, 2004, 2009, and again in 2014. The current permit administrative renewal is effective until 3/31/2024.

4/1/2019 The current permit was allowed to stay in effect pursuant to SAPA[1].

5/18/2023 The Oswego County submitted a request to modify the permit to reduce the notification timeline to the Department in advance of the annually planned zebra control treatment from 10 days to 5 days

6/1/2023 Department issued a Request for Information (RFI) to modify and renew the SPDES permit due to the request for modification letter referenced above.

12/21/2023 Oswego County submitted a new NY-2C permit application to renew the expired permit.

8/20/2024 Oswego County submitted additional testing results for emerging contaminates.

[1] State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(*l*)

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

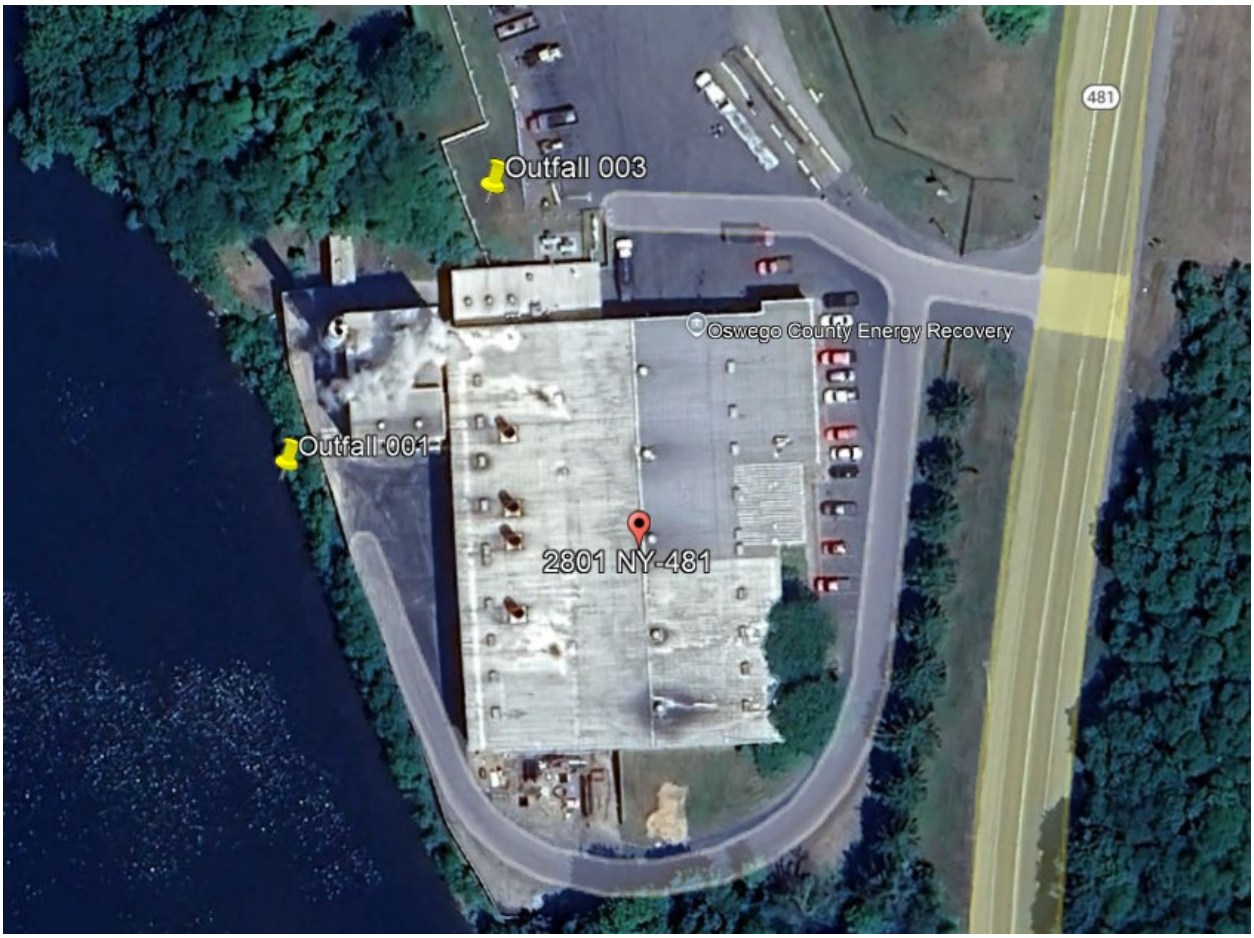
Facility Information

The Oswego Resource Recovery facility (ORR) is a steam electric generation facility that uses municipal waste as a fuel source. ORR is located on the East shore of the Oswego River and uses river water to condense steam used in the electricity generating process. Two pumps can be used to withdraw up to 17.28 million gallons per day (MGD) of river water through two, 2.0 mm slot-width cylindrical wedgewire screens (CWWS) with a through-slot velocity of 0.5 feet per second. River water is then pumped through a 28" diameter pipe and sent to the facility wet well. From here it is delivered to the station to be used in the cooling process or for emergency fire suppression. Once the water has been used for cooling purposes, it is discharged into the Oswego River at a maximum permitted discharge temperature of 97°F and a ΔT of 14°F.
.

Cooling Water Intake Structure (CWIS) Biological Monitoring

The facility currently uses a once-through cooling system to withdraw water from the Oswego River using a cooling water intake structure and is subject to the criteria governing thermal charges under 6 NYCRR Part 704.5. Appendix B contains the Biological Fact Sheet with details on the permit requirements related to the CWIS.

Site Overview



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

Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports and the application submitted by the permittee for the period 1/1/2021 to 10/31/2023. Appendix Link

Interstate Water Pollution Control Agencies

Outfall 001 is located within the Great Lakes watershed and International Joint Commission (IJC) compact area. Appendix Link

Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	4911	Non-Contact cooling water	Oswego River, Class C
002		Stormwater	Oswego River, Class C Authorized under MSGP NYR00B007
003	8999	Sanitary system	Groundwater

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

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.

Anti-backsliding

The limitations contained in the permit are at least as stringent as the previous permit limits and there are no instances of backsliding.

Appendix Link

Antidegradation

The permit contains effluent limitations which ensure that the best usages of the receiving waters will be maintained. The Notice of Complete Application published in the Environmental Notice Bulletin contains information on the State Environmental Quality Review (SEQR)[2] determination. Appendix Link

[2] As prescribed by 6 NYCRR Part 617

Discharge Notification Act Requirements

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

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

Best Management Practices (BMPs) for Industrial Facilities

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

Stormwater Pollution Prevention Requirements

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

Stormwater discharges at this facility are required to obtain coverage under the current Multi-Sector General Permit (MSGP) Sector [O] (GP-0-23-001), SPDES NYR00B007. This requirement is updated from the previous permit.

Mercury[3]

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

The facility is located within the Great Lakes Basin. Therefore, the permit also includes a 12-month rolling average total mercury effluent limitation equal to the EEQ. The calculated average existing effluent quality (EEQ) is 1.4 ng/L. The calculated 95th percentile value from the daily maximum sampling results reported to the Department is 1.4 ng/L. This is below 12 ng/L, which is below the expected contribution of mercury due to natural atmospheric deposition. Therefore, MMP Type III is protective of water quality.

On January 12, 2024, the permittee submitted a Conditional Exclusion Certification, indicating that the facility accepts hauled wastes. This is a potential source of mercury in accordance with those listed in Part III.A.3. of DOW 1.3.10. The sampling result from the effluent measured <12 ng/L. Therefore, consistent with DOW 1.3.10, the permit includes requirements for the implementation of MMP Type III and will include mercury effluent limitations. The Schedule of Additional Submittals includes a mercury minimization plan annual status report (maintained onsite). This requirement is updated from the previous permit.

Emerging Contaminant Monitoring

Emerging Contaminants, such as Perfluorooctanoic acid (PFOA), Perfluorooctanesulfonic acid (PFOS), and 1,4-Dioxane (1,4-D), have been used in a wide variety of consumer and industrial product as well as in manufacturing processes for decades. These contaminants do not break down easily, therefore their presence in wastewater can remain a concern for years following their

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

discontinued use. As the science surrounding these contaminants is still evolving, additional monitoring is needed to better understand potential sources and background levels. For more information on emerging contaminants, please see the NYSDEC Division of Water web page: https://www.dec.ny.gov/chemical/127939.html.

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

The Department received the monitoring results from the permittee on August 20, 2024. The PFOS and 1,4 Dioxane results were non-detect. PFOA results averaged 1.1 ng/L, which is well below guidance levels. Therefore, the Department has determined that there is no need for further monitoring.

Schedule of Additional Submittals

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

- Updated BMP Plan
- Mercury Minimization Program (MMP) Annual Status Report (maintained on-site)
- Annual Production Capacity Report

Special Conditions

Best Technology Available- Operation of Cylindrical Wedge Wire Screens (CWWS) and Limited Generation Capacity

- At EDP, the permittee must operate the 2.0 mm slot-width cylindrical wedgewire screens (CWWS) at a through-slot velocity not to exceed ≤ 0.5 fps at maximum pumping capacity and in accordance with the CWWS Standard Operation Plan.

- By the effective date of the permit (EDP), the facility shall be operated at less than 15 percent of its full load electric generating capacity factor. This condition shall be measured as a five-year rolling average following the EDP.

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	43° 20' 56" N	-76° 25' 33" W	Oswego River	C	Ont 66 PWL: 0701-0006	07/01	206[4]	267	562	658	4.8	50	100	100
002	43° 20' 56" N	-76° 25' 30" W	Oswego River	C	Ont 66 PWL: 0701-0006	07/01								
003	43° 20' 59" N	-76° 25' 29" W	Groundwater	GA	-	07/01	-	-	-	-	0.00075	-	-	-

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	**Description of Wastewater:** Non-Contact Cooling Water														
		Type of Treatment: N/A														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[5]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 1/01/2021 to 10/31/2023 was obtained from the application and Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.																
Flow Rate	MGD	Monthly Avg	Monitor	3.6 Actual Average	34	Monitor	TOGS 1.2.1	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	Monitor	
	Flow will continue to be monitored for informational purposes and to calculate pollutant loadings.															
pH	SU	Minimum	6.0	8.0 Actual Min	34	6.5	40 CFR 133.102	7.6[6]	-	6.5 – 8.5	Range	6.5 - 8.5	703.3	-	WQBEL	
		Maximum	9.0	8.1 Actual Max	34	8.5										
	Consistent with TOGS 1.2.1, TBELs reflect the available treatment technology listed in Attachment C. Given the available dilution, an effluent limitation equal to the WQS is appropriate.															

[4] Ambient hardness was calculated from RIBs station Ambient pH was obtained from RIBS Station 07-OSWE-5.2 in Minetto, NY as the average of 105 samples taken from 1995-2016..
[5] Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 non-detects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 non-detects)
[6] Ambient pH was obtained from RIBS Station 07-OSWE-5.2 in Minetto, NY as the average of 65 samples taken from 1995-2016.

Outfall #	001	**Description of Wastewater:** Non-Contact Cooling Water													
		Type of Treatment: N/A													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[5]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Temperature	°F	Daily Max	97	91.5 Actual Max	52	90	TOGS 1.2.1	72	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
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions. This requirement is continued from the previous permit. . The discharge is a thermal discharge consisting of (mainly) non-contact cooling water (NCCW). To achieve standards specified in 6 NYCRR Part 704, an effluent temperature limit of 90 ºF is specified. This requirement new. The basis for this limit is a Thermal Criteria (Standard) Study dated October 25, 1989 which provided a mixing zone of 71:1 at an area of 0.2 acres at an effluent temperature equal to 74.1 ºF.														
Nitrogen, Ammonia (as N)	mg/L	Monthly Avg	N/A	0.2	1/1	-	-	0.082 as N	0.23 as NH3	1.5 as NH3	A(C)	No Reasonable Potential	703.5	-	No Limitation
	Reporting for Ammonia has been changed from (as NH_3) to (as N) for simpler data reporting, as this is consistent with the laboratory reporting units. Values can be converted using the equation: Ammonia (as N) = Ammonia (as NH_3) x 0.8224.														
Total Mercury	ng/L	Daily Max	N/A	1.4	1	-	-	-	-	0.7	H(FC)	50	GLCA	-	DOW 1.3.10
	ng/L	12 MRA	N/A	N/A	N/A	-	-	-	-	-	-	12	-	-	DOW 1.3.10
	See Mercury section of this fact sheet.														
Additional Pollutants Detected															
Total Chromium	µg/L	2*/Year	30 Action Level	ND	7	-	TOGS 1.2.1	-	Not Detected	-	A(C)	No Reasonable Potential	703.5		Discontinued
Over five years, a max concentration of “non-detect” was reported in the DMRs for 6 out of 7 samples. And is consistent with the non-detect concentration data reported in the NY-2C application. Based on the non-detect data, the action level has been discontinued.															
Total Copper (as Cu)	µg/L	2*/Year	100 Action Level	72 total, Max	7	100 Action Level	TOGS 1.2.1	-	0.21 µg/L dissolved	-	A(C)		703.5		Action Level
	Consistent with 6 NYCRR Part 703.5, monitoring is required and may be used to inform future permitting decisions. This requirement is continued from the previous permit.														

Outfall #	001	**Description of Wastewater:** Non-Contact Cooling Water													
		Type of Treatment: N/A													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[5]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Lead (as Pb)	µg/L	2*/Year	35, Action Level	10 total, Max	7	35, Action Level	TOGS 1.2.1	-	-	8.2 Dissolved	A(C)	No Reasonable Potential	703.5		Action Level
	A max concentration of 10 µg/L was reported in the DMRs for 6 out of 7 samples. Consistent with 6 NYCRR Part 703.5, monitoring is required and may be used to inform future permitting decisions. This requirement is continued from the previous permit.														
Total Nickel (as Ni)	µg/L	2*/Year	-	40 total, max	1	40, Action Level	TOGS 1.2.1	-	-	90 Dissolved	A(C)	90	703.5		Action Level
	A max concentration of 40 µg/L was reported in the DMRs for 6 out of 7 samples. Consistent with 6 NYCRR Part 703.5, monitoring is required and may be used to inform future permitting decisions. Due to the high dilution, the calculated WQBEL is greater than the Action Level. Therefore, a value of 40 µg/L is appropriate. This requirement is new and is added due to the potential for inclusion within the hauled wastes received at the facility.														
Total Silver (as Ag)	µg/L	2*/Year	0.4, Action Level	ND	7	-	TOGS 1.2.1	-	-	0.1, ionic	A(C)	No Reasonable Potential	703.5		Discontinued
	A max concentration of "non-detect" was reported in the DMRs for 6 out of 7 samples. This is consistent with the non-detect concentration data reported in the NY-2C application. Based on the non-detect data, the action level has been discontinued.														
Total Zinc (as Zn)	µg/L	2*/Year	200, Action Level	45 total, max	8	200, Action Level	TOGS 1.2.1	-	-	153 dissolved	A(C)		703.5		Action Level
	A max concentration of 45 µg/L was reported in the DMRs for 6 out of 7 samples. Consistent with 6 NYCRR Part 703.5, monitoring is required and may be used to inform future permitting decisions. This requirement is continued from the previous permit.														

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Outfall 003

Outfall #	003	**Description of Wastewater:** Treated Sanitary Sewage													
		Type of Treatment: Septic Tank and Leach Field to Groundwater													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[7]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Groundwater discharge only, under jurisdiction of the Oswego County Department of Health.															
Flow Rate	GPD	Monthly Avg	N/A	No monitoring Actual Average	N/A	N/A	Design Flow	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	No Limitation or Monitoring
	Flow is less than 1,000 gpd. Outfall under jurisdiction of Oswego Co. DOH														

[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 nondetects)

Appendix A: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

SPDES Permit Requirements	Regulatory Reference
Anti-backsliding	6 NYCRR 750-1.10(c)
Best Management Practices (BMPS) for CSOs	6 NYCRR 750-2.8(a)(2)
Environmental Benefits Permit Strategy (EBPS)	6 NYCRR 750-1.18, NYS ECL 17-0817(4), TOGS 1.2.2 (revised January 25,2012)
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
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
General Provisions of a SPDES Permit Department Request for Additional Information	NYCRR 750-2.1(i)
Requirements Applicable to Cooling Water Intake Structures for Existing Facilities Under Section 316(b) of the Clean Water Act	40 CFR 125 Subpart J
Surface Waters and Groundwaters	6 NYCRR Part 701 Classifications
Intake Structures – Oswego Co. Waste Recovery Facility, Water Withdrawal Permit (WWA 11-785) Renewal Application	6 NYCRR Part 704.5
Water Withdrawal Renewal Application	NYSDEC WWA 11-785, February 3, 2021

Outfall and Receiving Water Information

Interstate Water Pollution Control Agencies

Some facilities may be subject to regulations of interstate basin/compact agencies including: Interstate Sanitation Commission (ISC), International Joint Commission (IJC), Delaware River Basin Commission (DRBC), Ohio River Valley Water Sanitation Commission (ORSANCO), and the Susquehanna River Basin Commission (SRBC). Generally, basin commission requirements focus principally on water quality and not treatment technology. However, interstate/compact agency regulations for the ISC, IJC, DRBC and NYC

Watershed contain explicit effluent limits which must be addressed during permit drafting. 6 NYCRR 750-2.1(d) requires SPDES permits for discharges that originate within the jurisdiction of an interstate water pollution control agency, to include any applicable effluent standards or water quality standards (WQS) promulgated by that interstate agency.

Existing Effluent Quality

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

Permit Requirements

Basis for Effluent Limitations

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

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

Anti-backsliding

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

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

quality criteria in the receiving water might result. If there is a reasonable potential for exceedances of water quality criteria to occur, water quality-based effluent limitations (WQBELs) are developed. A WQBEL is designed to ensure that the water quality standards of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL.

Technology-based Effluent Limitations (TBELs) for Industrial Facilities

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

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

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

Best Professional Judgement (BPJ)

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

Minimum Level of Detection

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

Monitoring Requirements

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

frequency is based on guidance provided in TOGS 1.2.1. For municipal facilities, sampling frequency is based on guidance provided in TOGS 1.3.3.

Other Conditions

Mercury

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

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

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

Schedule(s) of Additional Submittals

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

Best Management Practices (BMP) for Industrial Facilities

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

Appendix B: Biological Fact Sheet — Cooling Water Intake Structure
Bureau of Ecosystem Health, Energy Unit

Description of Facility
The Oswego Resource Recovery facility (ORR) is a steam electric generation facility that uses municipal waste as a fuel source. ORR is located on the East shore of the Oswego River and uses river water to condense steam used in the electricity generating process. Two pumps can be used to withdraw up to 17.28 million gallons per day (MGD) of river water through two, 2.0 mm slot-width cylindrical wedgewire screens (CWWS) with a through-slot velocity of 0.5 feet per second. River water is then pumped through a 28” diameter pipe and sent to the facility wet well. From here it is delivered to the station to be used in the cooling process or for emergency fire suppression. Once the water has been used for cooling purposes, it is discharged into the Oswego River at a maximum permitted discharge temperature of 97°F and a ΔT of 14°F.

Ecological Resource
The Oswego River in the vicinity of the ORR intake is a Class B water. The best usages of Class B waters include “primary and secondary contact recreation and fishing. These waters shall be suitable for fish, shellfish and wildlife propagation and survival.”

Although no site specific biological studies have been conducted at ORR’s CWIS, fish species that can be expected in the river near the facility intake include walleye, yellow perch, northern pike, smallmouth and largemouth bass, Chinook salmon, coho salmon, rainbow trout, brown trout, pumpkinseed, bluegill, white perch, black crappie, brown bullhead, channel catfish, freshwater drum, bowfin, common carp, alewife, round goby, and gizzard shad.

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

In keeping with the Department’s established, environmentally protective BTA requirements, impingement mortality and entrainment will be minimized as a result of implementation of these permit conditions.

Determination of Best Technology Available
The New York State Department of Environmental Conservation (NYSDEC) has determined that, in combination, the following technologies and operational measures represent the best technology available for minimizing adverse environmental impacts from the cooling water intake structure:

a) Continued use of the 2.0 mm CWWS at less than 0.5 fps intake velocity
b) Limited operation to <15% generating capacity

Monitoring Requirements
Biological Monitoring Requirement #4 requires ORR to submit monthly water usage and generation reports to the NYSDEC.

Legal Requirements

The requirements for the cooling water intake structure in this State Pollutant Discharge Elimination System permit are consistent with the policies and requirements embodied in the New York State Environmental Conservation Law, in particular - Sec.1-0101.1.; 1-0101.2.; 1-0101.3.b., c.; 1-0303.19.; 3-0301.1.b., c., i., s. and t.; 11-0107.1; 11-0303.; 11-0535.2; 11-1301.; 11-1321.1.; 17-0105.17.; 17-0303.2., 4.g.; 17-0701.2., 6 NYCRR Part 704.5 Section 316(b) CWA, and the rules thereunder, specifically 40 CFR Parts 122 and 125.

Summary of Proposed Permit Changes

Additions

Biological Monitoring Requirement 1	Requires permittee to operate 2mm CWWS
Biological Monitoring Requirement 2	Requires permittee to limit generation to 15% capacity
Biological Monitoring Requirement 3	Requires permittee to submit a CWWS Standard Operating Plan
Biological Monitoring Requirement 4	Requires permittee to submit monthly reports of water usage and generation
Biological Monitoring Requirement 5	Requires permittee to maintain records and data
Biological Monitoring Requirement 6	Prohibits modification of the CWIS without prior Department approval