

State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code: 4941	NAICS Code: 221310 S		SPDES Number:	NY0281662		
Discharge Class (CL):	01 DE		DEC Number:	3-5528-00152/00001		
Toxic Class (TX):	Т		Effective Date (EDP):	TBD		
Major-Sub Drainage Basin:	17 - 02		Expiration Date (ExDP):	TBD		
Water Index Number:	ER-3-P 1063-12	Item No.: 935.6-4				
Compact Area:	IEC		Modification Dates (EDPM):			

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

PERMITTEE NAME	AND ADDRESS	
Name:	Westchester Joint Water Works (WJWW)	Attention: Paul Kutzy, PE
Street:	1625 Mamaroneck Avenue	Allernion. Paul Kutzy, PE
City:	Mamaroneck	State: NY Zip Code: 10528
Email:	pkutzy@wjww.com	Phone: 914-698-3500

is authorized to discharge from the facility described below:

FACILITY NAME,	ADDRES	SS, AND F	PRIMARY	' OU	TFALL										
Name:	Rye L	ve Lake Water Filtration Plant													
Address / Location	: 4325 I	25 Purchase Street County: Westchester													
City:	Harris	son						State :	NY		Zip (Code:	1060)4	
Facility Location:		Latitude:		41	° 03	,	51	" N	& Longitude	э:	73	0	43	, 0	6 " W
Primary Outfall No	.: 001∢	Latitude:		41	03	,	54	" N	& Longitude	э:	73	0	43	, 0	0 " W
Wastewater eme		F	Receiving Water:	Trik Ker	named outary. onsico Ro termitte eam	ese	ervoir	NAICS	S: 221310	Cla	iss: I	Ą	Stan	dard:	A

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:

Permit Administrator:	Rebecca S Crist						
Address:	21 South Putt Corners Road New Paltz, NY 12561						
Signature	Date						

SPDES Number: **NY0281662**Page 2 of 17 v.1.24 Effective Date: TBD

Contents

SUMMARY OF ADDITIONAL OUTFALLS	3
DEFINITIONS	4
PERMIT LIMITS, LEVELS AND MONITORING	5
STORMWATER POLLUTION PREVENTION REQUIREMENTS	6
BEST MANAGEMENT PRACTICES (BMPs) FOR INDUSTRIAL FACILITIES	7
MERCURY MINIMIZATION PROGRAM (MMP) - Type IV	10
DISCHARGE NOTIFICATION REQUIREMENTS	12
MONITORING LOCATIONS	13
GENERAL REQUIREMENTS	15
RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS	16
D. Schedule of Additional Submittals:	16



SPDES Number: **NY0281662**Page 3 of 17 v.1.24 Effective Date: TBD

SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewat	er Description	NAICS Code Outfall Latitude					Outfall Longitude					
002	Plant Over water	flow/Startup testing of potable	221310	41	° 03	3 '	54	" N	73	0	43 '	02	2 " W
Receivi	Receiving Water: Unnamed Tributary. of Kensico Reservoir (Intermittent Stream) Class: A												
Outfall	Wastewat	er Description	NAICS Code Outfall Latitude					Outfall Longitude					
003	Stormwat	er	221310	41	° 03	3 '	54	" N	73	0	43 '	02	" W
Receivi	Receiving Water: Unnamed Tributary. of Kensico Reservoir (Intermittent Stream) Class: A												



Effective Date: TBD SPDES Number: **NY0281662**Page 4 of 17 v.1.24

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.

Effective Date: TBD SPDES Number: **NY0281662**Page 5 of 17 v.1.24

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Gallery Drain – emergency discharge of potable water	Unnamed Tributary of Kensico Reservoir	EDP	ExDP

	EFF	LUENT I	IMITATI	ON		MONITORING REQUIREMENTS				
PARAMETER	Typo	Limit	Units	Limit	Units	Sample	Sample Type	Loca	Location	
	Туре	LIIIIII	Ullis	LIIIIII	Ullits	Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Total	Monitor	MG	-	-	Quarterly	Calculated		Х	1
Flow	Daily Maximum	Monitor	MG	1	-	1/Event	Estimate		Х	1
-11	Daily Minimum	6.5	SU	-	-	1/Event	Grab		Х	1
pH	Daily Maximum	8.5	SU	-	-	1/Event	Glab	Glab		1
Total Suspended Solids (TSS)	Daily Maximum	10.0	mg/L	-	-	1/Event	Grab		Х	1
Settleable Solids	Daily Maximum	0.1	mL/L	-	-	1/Event	Grab		Х	1
Total Residual Chlorine (TRC)	Daily Maximum	0.03	mg/L	4	ı	1/Event	Grab		Х	1
Aluminum	Monthly Average	2.0	mg/L	-	-	1/Event	Grab		Х	1
Aluminum	Daily Maximum	4.0	mg/L	•	-	1/Event	Grab		Х	1
Total Copper	Monitor	-	mg/L	-	-	1/Event	Grab	Х	Х	1

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
002	Plant Overflow/Startup testing	Unnamed Tributary of Kensico Reservoir	EDP	ExDP

	EFF	LUENT I	IMITATI	ON		MONITORING REQUIREMENTS				
PARAMETER	Typo	Limit	Units	Limit	Units	Sample	Sample Type	Loca	ation	FN
	Туре	Lillit	Ullits	Lillin	Ullits	Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Total	Monitor	MG		-	Monthly	Calculated		Х	1
Flow	Daily Maximum	Monitor	MG	-	-	1/Event	Estimate		Х	
-11	Daily Minimum	6.5	SU	1	-	1/Event	Grab		Х	1
pH	Daily Maximum	8.5	SU	-	-	1/Event Grab			^	1
Total Suspended Solids (TSS)	Daily Maximum	10.0	mg/L	-	-	1/Event	Grab		Х	1
Settleable Solids	Daily Maximum	0.1	mL/L	-	-	1/Event	Grab		Х	1
Total Residual Chlorine (TRC)	Daily Maximum	0.03	mg/L	1	-	1/Event	Grab		Х	1
Aluminum	Monthly Average	2.0	mg/L	ı	-	1/Event	Grab		Х	1
Aluminum	Daily Maximum	4.0	mg/L	-	-	1/Event	Grab		Х	1
Total Copper	Monitor	-	mg/L	-	-	1/Event	Grab	Χ	Χ	1

OUTFALL	DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
003	Unregulated Stormwater – no monitoring required	Unnamed Tributary. of Kensico Reservoir	EDP	ExDP

FOOTNOTES:

1. If there is no discharge from the facility, the permittee shall report NODI-C on the DMR

Effective Date: TBD SPDES Number: **NY0281662**Page 6 of 17 v.1.24

STORMWATER POLLUTION PREVENTION REQUIREMENTS

NO EXPOSURE CERTIFICATION

The permittee submitted a Conditional Exclusion for No Exposure Form on 01-26-2024, certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and stormwater runoff except as allowed under 40 CFR 122.26(g)(2). The permittee must maintain a condition of no exposure for the exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to stormwater, the permittee must notify the Regional Water Engineer. The permittee must recertify a condition of no exposure every five years by completing the "No Exposure Certification Form" found on the DEC website.



Effective Date: TBD SPDES Number: **NY0281662**

Page 7 of 17 v.1.24

BEST MANAGEMENT PRACTICES (BMPs) FOR INDUSTRIAL FACILITIES

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

- 1. <u>General</u> The permittee shall develop, maintain, and implement a Best Management Practices (BMP) plan to prevent releases of significant amounts of pollutants to the waters of the State through plant site runoff; spillage and leaks; sludge or waste disposal; and stormwater discharges including, but not limited to, drainage from raw material storage. The BMP plan shall be documented in narrative form and shall include the 13 minimum BMPs and any necessary plot plans, drawings, or maps. Other documents already prepared for the facility such as a Safety Manual or a Spill Prevention, Control and Countermeasure (SPCC) plan may be used as part of the plan and may be incorporated by reference. A copy of the current BMP plan shall be submitted to the DEC as required in item (2.) below and a copy must be maintained at the facility and shall be available to authorized DEC representatives upon request.
- 2. <u>Compliance Deadlines</u> –The initial BMP plan shall be submitted in accordance with the Schedule of Submittals to the Regional Water Engineer. The BMP plan shall be implemented within 6 months of submission, unless a different time frame is approved by the Department. The BMP plan <u>shall be reviewed annually</u> and shall be modified whenever (a) changes at the facility materially increase the potential for releases of pollutants; (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, <u>as an attachment to the December Discharge Monitoring Report (DMR)</u>, that the annual review has been completed. Subsequent modifications to or renewal of this permit does not reset or revise these deadlines unless a new deadline is set explicitly by such permit modification or renewal.

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

Effective Date: TBD SPDES Number: **NY0281662**Page 8 of 17 v.1.24

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. <u>Facilities with Petroleum or Chemical Bulk Storage (PBS and CBS) Areas</u> Compliance must be maintained with all applicable regulations including those involving releases, registration, handling and storage (6 NYCRR 595-599 and 612-614). Stormwater discharges from handling and storage areas should be eliminated where practical.

A. <u>Spill Cleanup</u> - All spilled or leaked substances must be removed from secondary containment systems as soon as practical and for CBS storage areas within 24 hours, unless written authorization is received from the DEC. The containment system must be thoroughly cleaned to remove any residual contamination which could cause contamination of stormwater and the resulting discharge of pollutants to waters of the State. Following spill cleanup the affected area must be completely flushed with clean water three times and the water removed after each flushing for proper disposal in an on-site or off-site wastewater treatment plant designed to treat such water and permitted to discharge such wastewater. Alternately, the permittee may test the first batch of stormwater following the spill cleanup to determine discharge acceptability. If the water contains no pollutants at concentrations above the applicable effluent limits or Action Levels it may be discharged. Otherwise it must be disposed of as noted above. See *Discharge Monitoring* below for the list of parameters to be sampled for.

B. <u>Discharge Operation</u> - Stormwater must be removed before it compromises the required containment system capacity. Each discharge may only proceed with the prior approval of the permittee staff person responsible for ensuring SPDES permit compliance. Bulk storage secondary containment drainage systems must be locked in a closed position except when the operator is in the process of draining accumulated stormwater. Transfer area secondary containment drainage systems must be locked in a closed position during all transfers to or from these systems and must not be reopened unless the transfer area is clean of contaminants. Stormwater discharges from secondary containment systems should be avoided during periods of precipitation. A logbook shall be maintained on site noting the date, time and personnel supervising each discharge.

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.

Effective Date: TBD SPDES Number: NY0281662

Page 9 of 17 v.1.24

BMPs FOR INDUSTRIAL FACILITIES (continued)

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

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

(i) Bulk Storage Secondary Containment Systems:

- (a) The volume of each discharge from each outlet must be monitored. Discharge volume may be calculated by measuring the depth of water within the containment area times the wetted area converted to gallons or by other suitable methods. A representative sample shall be collected of the first discharge* following any cleaned up spill or leak. The sample must be analyzed for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present**.
- (b) Every fourth discharge* from each outlet must be sampled for pH, the substance(s) stored within the containment area and any other pollutants the permittee knows or has reason to believe are present.**
- (ii) Transfer Area Secondary Containment Systems:
 - The first discharge* following any spill or leak must be sampled for flow, pH, the substance(s) transferred in that area and any other pollutants the permittee knows or has reason to believe are present**.
- E. <u>Discharge Reporting</u> Any results of monitoring required above, excluding screening data, must be submitted to the Department by appending them to the corresponding DMR. Failure to perform the required discharge monitoring and reporting shall constitute a violation of the terms of the SPDES permit.
- F. <u>Prohibited Discharges</u> In all cases, any discharge which contains a visible sheen, foam, or odor, or may cause or contribute to a violation of water quality is prohibited. The following discharges are prohibited unless specifically authorized elsewhere in this SPDES permit: spills or leaks, tank bottoms, maintenance wastewaters, wash waters where detergents or other chemicals have been used, tank hydrotest and ballast waters, contained firefighting runoff, fire training water contaminated by contact with pollutants or containing foam or fire retardant additives, and unnecessary discharges of water or wastewater into secondary containment systems.
- * Discharge includes stormwater discharges and snow and ice removal. If applicable, a representative sample of snow and/or ice should be collected and allowed to melt prior to assessment.
- ** If the stored substance is gasoline or aviation fuel then sample for oil & grease, benzene, ethylbenzene, naphthalene, toluene and total xylenes. If the stored substance is kerosene, diesel fuel, fuel oil, or lubricating oil then sample for oil & grease and polynuclear aromatic hydrocarbons (PAHs). The analytical methods selected for monitoring the stored substances are to be the most sensitive in detecting and quantifying the target analytes as approved under 40 CFR Part 136 and in compliance with NYSDOH ELAP certified methods or as directed by the Department. If the substance(s) are listed in the tables of SPDES Application Form NY-2C then sampling is required. Contact the facility inspector for further guidance. In all cases flow and pH monitoring is required.

Effective Date: TBD SPDES Number: **NY0281662**Page 10 of 17 v.1.24

MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

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

- 1. <u>General</u> The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below.
- 2. <u>MMP Elements</u> The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements² as described in detail below:
 - a. <u>Conditional Exclusion Certification</u> A certification (Appendix D of *DOW 1.3.10*), signed in accordance with 750-1.8 Signature of SPDES forms, must be submitted once every five (5) years for Outfalls 001 & 002 to the Regional Water Engineer and to the Bureau of Water Permits certifying that Outfalls 001 and 002 for the facility are neither a mercury source nor receives flows from a mercury source. Criteria to determine if a facility has a mercury source are as follows:
 - The facility is or receives discharge from 1) individually permitted combined sewer overflow (CSOs)³ communities and/or 2) Type II sanitary sewer overflow (SSO)⁴ facilities;
 - One or more effluent samples which exceed 12 ng/L, including samples taken as a result of the SPDES application process;
 - Internal or tributary waste stream samples exceed the GLCA effluent limitation <u>AND</u> the final effluent samples are less than the GLCA due primarily to dilution by uncontaminated or less contaminated waste streams. Both components of this criterion may include samples taken as a result of the SPDES application process;
 - A permit application or other information indicates that mercury is handled on site and could be discharged through outfalls;
 - Outfalls which contain legacy mercury contamination;
 - The facility's collection system receives discharges from a dental and/or categorical industrial user (CIU)⁵ that may discharge mercury;
 - The facility accepts hauled wastes; or,
 - The facility is defined as a categorical industry that may discharge mercury. This may also include dentists, universities, hospitals, or laboratories which have their own SPDES permit.
 - b. <u>Control Strategy</u> The control strategy must contain the following minimum elements:
 - i. <u>Equipment and Materials</u> Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.
 - ii. <u>Bulk Chemical Evaluation</u> For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. If possible, the permittee must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.

²Neither 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.

³ CSO permits are included under the 05 and 07 permit classifications.

⁴These are overflow retention facilities (ORFs) and are included under the 05 and 07 permit classifications.

⁵ CIUs include those listed under Federal Regulation in 40 CFR Part 400.

Effective Date: TBD SPDES Number: **NY0281662**Page 11 of 17 v.1.24

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

c. <u>Status Report</u> - An **annual** status report must be developed and maintained on site, in accordance with the <u>Schedule of Additional Submittals</u>, summarizing:

- i. Review of criteria to determine if the facility has a potential mercury source;
 - a. If the permittee no longer meets the criteria for MMP Type IV, the permittee must notify the DEC for a permittee-initiated permit modification;
- ii. All actions undertaken, pursuant to the control strategy, during the previous year; and
- iii. Actions planned, pursuant to the control strategy, for the upcoming year.

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

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

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

DEFINITIONS:

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

Effective Date: TBD SPDES Number: **NY0281662**Page 12 of 17 v.1.24

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: () - ### -####

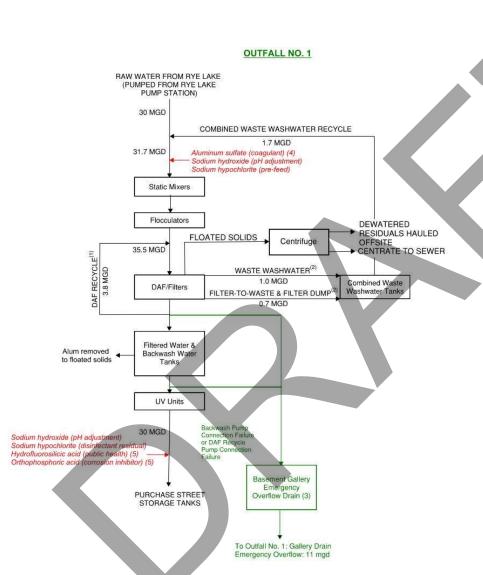
- (e) Upon request, the permittee shall make available electronic or hard copies of the sampling data to the public. In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained (either electronically or as a hard copy) on record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

Effective Date: TBD SPDES Number: NY0281662 Page 13 of 17 v.1.24

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:

Effluent: Outfall 001 and outfall 002

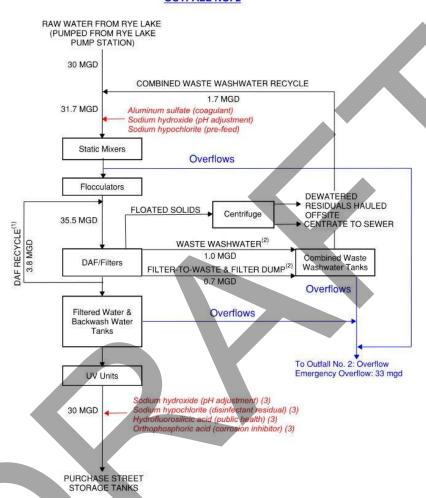


- (1) DAF recycle at 12% of plant flow (raw water + combined waste washwater recycle).
 (2) Assumes 24 hours filter runtime with all filters online (7 at 30 mgd).
 (3) Basement Gallery Emergency Overflow Drain begins discharging water to Outfall No. 1 after the gallery fills to the overflow sump curb. There is approximately 30,000 gallons of capacity on the gallery floor between the trench drain (discharge to sewer) and the overflow sump curb.
- (4) Aluminum sulfate (alum) would not be present in any discharges from Outfall No. 1. It is removed through the filtration process.

 (5) Hydrofluorosilicic acid or orthophosphoric acid would not be present in any emergency discharge from Outfall
- No. 1. Mechanical failures may result in overflows that contain hydrofluorosilicic acid or orthophosphoric acid dodded at the second chemical injection point). However, these overflows would total volumes of less than 30,000 gallons over a 10-minute period. These low-flow overflows (maximum 30,000 gallons) would be directed to the sewer (Blind Brook WWTP) and would not be discharged from Outfall No. 1.

Effective Date: TBD SPDES Number: NY0281662 Page 14 of 17 v.1.24

OUTFALL NO. 2



DAF recycle at 12% of plant flow (raw water + combined waste washwater recycle).
 Assumes 24 hours filter runtime with all filters online (7 at 30 mgd).
 The second chemical injection point is after the potential emergency overflows to Outfall No. 2. Therefore, chemicals added at the second chemical injection point would not be present in an emergency discharge from Outfall No. 2 (sodium hydroxide, sodium hypochlorite, hydrofluorosilicic acid, orthophosphoric acid).

Effective Date: TBD SPDES Number: **NY0281662**Page 15 of 17 v.1.24

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

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

C. Operation and Maintenance

 1.
 Proper Operation & Maintenance
 6 NYCRR 750-2.8

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

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

D. Monitoring and Records

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

E. Reporting Requirements

Reporting requirements for non-POTWs 6 NYCRR 750-2.5, 2.6, 2.7, &1.17 1. 2. Anticipated noncompliance 6 NYCRR 750-2.7(a) 6 NYCRR 750-1.17 3. Transfers 6 NYCRR 750-2.5(e) Monitoring reports 4. Compliance schedules 6 NYCRR 750-1.14(d) 5. 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

Effective Date: TBD SPDES Number: **NY0281662**Page 16 of 17 v.1.24

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

A. The monitoring information required by this permit shall be retained for a period of at least five years from the date of the sampling for subsequent inspection by the Department or its designated agent.

B. <u>Discharge Monitoring Reports (DMRs):</u> Completed DMR forms shall be submitted for each 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 https://www.dec.ny.gov/chemical/103774.html. Hardcopy paper DMRs will only be accepted if a waiver from the electronic submittal requirements has been granted by DEC to the facility.

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

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

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

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

Phone: (518) 402-8111

Email: DOW.r3@dec.ny.gov

Phone: (845) 256-3000

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
001,002	EMERGING CONTAMINANT SHORT-TERM MONITORING The permittee shall collect grab samples of both the influent and effluent from the facility's treatment system(s) associated with the identified outfall for Perand Polyfluoroalkyl Substances (PFAS) utilizing EPA draft analytical method 1633 and 1,4-Dioxane (1,4-D) utilizing EPA Method 8270D SIM or 8270E SIM. The samples must represent normal discharge conditions and treatment operations and shall be obtained on a monthly basis for at least 3 consecutive months. The results shall be reported through the "Emerging Contaminants Survey for Industrial Facilities" found at: https://www.dec.ny.gov/chemical/127939.html . The permittee shall initiate track down of potential sources by completing the "Emerging Contaminants Investigation Checklist for Industrial Facilities" available at the above link. The DEC may periodically request updates or additional monitoring to check progress on track down investigations. Elements of the checklist may be used as permit conditions in future permit modifications. A sample of water collected from either outfall would be considered representative of discharges from both outfalls would suffice.	EDP + 6 months Within 90 days of DEC written notification

Effective Date: TBD SPDES Number: **NY0281662**Page 17 of 17 v.1.24

Outfall(s)	SCHEDULE OF ADDITIONAL SUBMITTALS - Required Action	Due Date
001,002	BMP PLAN The permittee shall annually review the completed BMP plan and submit this to DEC by the annual due date. The BMP plan shall be modified whenever: (a) changes at the facility materially increase the potential for releases of pollutants, (b) actual releases indicate the plan is inadequate, or (c) a letter from the DEC identifies inadequacies in the plan. The permittee shall certify in writing, as an attachment to the December Discharge Monitoring Report (DMR), that the annual review has been completed. All BMP plan revisions must be submitted to the Regional Water Engineer within 30 days.	EDP + 6 Months, Annually thereafter on January 28 th
001,002	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM 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.	Annually on January 28 th
001,002	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	Maintained Onsite EDP + 12 months, annually thereafter
001,002	Short term monitoring for mercury Upon startup of the facility, DEC requires sampling to be conducted within 6 months of discharge. The facility must collect one sample of Total Mercury utilizing USEPA Method 1631E. The facility must provide the results of this sampling to DEC within 12 months of startup. If the sampling measures >12 ng/L, MMP Type IV will no longer apply to the facility and DEC will require a permit modification and will include an effluent limitation of 50 ng/L in the permit. A sample of water collected from either outfall would be considered representative of discharges from both outfalls would suffice.	Start Up + 12 months
001,002	MERCURY - CONDITIONAL EXCLUSION CERTIFICATION Permittee must submit a mercury conditional exclusion certification every five years in order to maintain MMP Type IV status.	Start Up +12 months, and every 5 years thereafter based on certification
003	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.	1/26/2029 and every 5 years thereafter

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

Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662 USEPA Major/Class 03 Industrial Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

SPDES Permit Fact Sheet WJWW Westchester Joint Water Works (WJWW) NY0281662



Facility: Westchester Joint Water Works (WJWW) SPDES Number: NY0281662 USEPA Major/Class 03 Industrial

Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar Water Quality Reviewer: Aseem Kumar Full Technical Review

Contents

Summary of Permit Changes	3
Administrative History	3
Facility Information	3
Existing Effluent Quality	3
Additional Site-Specific Concerns	3
Receiving Water Information	4
Critical Receiving Water Data & Mixing Zone	8
Permit Requirements	8
Whole Effluent Toxicity (WET) Testing	8
Antidegradation	8
Discharge Notification Act Requirements	8
Best Management Practices (BMPs) for Industrial Facilities	8
Stormwater Pollution Prevention Requirements	8
Mercury	9
Schedule(s) of Compliance	9
Schedule(s) of Additional Submittals	9
OUTFALL AND RECEIVING WATER SUMMARY TABLE	10
POLLUTANT SUMMARY TABLE	10
Outfall 001	10
POLLUTANT SUMMARY TABLE	12
Outfall 002	12
Appendix: Regulatory and Technical Basis of Permit Authorizations	14
Regulatory References	14
Outfall and Receiving Water Information	14
Interstate Water Pollution Control Agencies	15
Existing Effluent Quality	15
Permit Requirements	15

Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662

USEPA Major/Class 03 Industrial

Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

Summary of Permit Changes

A new State Pollutant Discharge Elimination System (SPDES) permit has been drafted for the Westchester Joint Water Works (WJWW).

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

Administrative History

10/14/2022 The WJWW submitted a NY-2C permit application. This is a new project.

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

Facility Information

This is an industrial facility (SIC code 4941) that produces drinking water. Effluent consists of emergency processed drinking water. The current treatment system will be constructed in 2024. Under typical operating conditions, the water filtration process would not result in discharges to proposed outfalls # 001 or 002. Under catastrophic conditions, an emergency overflow drain discharging to Outfall # 001 would be used to prevent flooding in the filter plant basement (the "gallery"). Outfall # 002 would only be used to convey overflow from components of the treatment plant under emergency conditions. Outfall # 002 would also be used for discharge during startup and process testing.

Proposed impervious features, including the plant building, a driveway, parking lot, walkways and supporting utilities and ancillary facilities, would total approximately 2.4 acres. Stormwater runoff from impervious surfaces would be collected and conveyed to a stormwater treatment train comprised of a pocket wetland, bioretention cell, and detention chamber system. An overflow control structure is provided for the underground detention chamber system to control the release of stormwater from the site via Outfall # 003.

 Treatment: There is no treatment, Effluent is made of emergency process wastewater that would be discharged to prevent flooding through gallery drain as an emergency discharge (outfall # 001) and as an emergency discharge for Plant Overflow/Startup testing (outfall # 002).

Existing Effluent Quality

The <u>Pollutant Summary Table</u> presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from the application submitted by the permittee.

Additional Site-Specific Concerns

The facility is located within the NYC drinking water watershed which places additional requirements in the SPDES permit.

Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662 USEPA Major/Class 03 Industrial Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

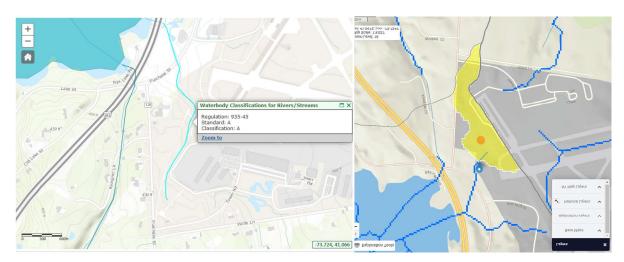
Full Technical Review

Receiving Water Information

The facility proposes to discharge via the following outfalls:

Outfall #	SIC Code	Wastewater Type	Receiving Water
001	4941	Gallery Drain Gallery Drain – Emergency Discharge of drinking water	Unnamed Tributary of Kensico Reservoir (ISEL Stream)
002	4941	Plant Overflow/Startup testing	Unnamed Tributary of Kensico Reservoir (ISEL Stream)
003	4941	Unregulated Stormwater	Unnamed Tributary of Kensico Reservoir (ISEL Stream)

Reach Description: Outfalls # 001 and # 002 discharge to an unnamed tributary of Kensico Reservoir. Per 6NYCRR Part 935.6-45, the receiving water is class A and due to small drainage area, the stream is considered intermittent (ER-3-P 1063). The unnamed tributary flows into Rye Lake, classified as AA. The Lake is listed on PWL (PWL ID# 1702-0059; ER-3-P 1063)) and is not impaired.

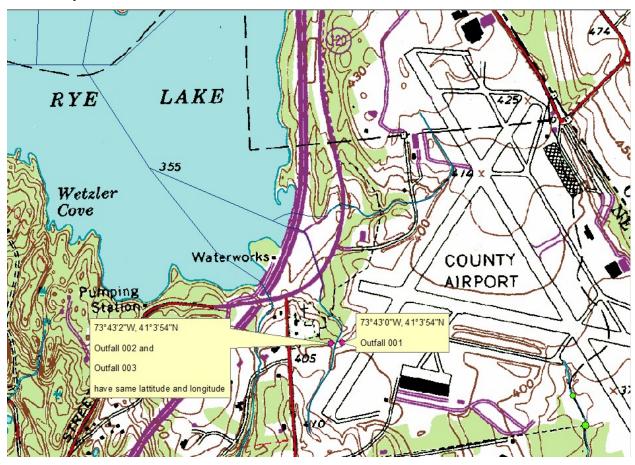


Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662 USEPA Major/Class 03 Industrial Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review



The latitude and longitude are accurate to the degree, minutes, second. All three outfalls are located close together. Outfall #001 is located approximately 70 feet from Outfalls #002 and #003. Outfalls # 002 and # 003 share the same headwall and are essentially at the same latitude and longitude.

- Outfall # 001: 41° 03' 54" Lat, -73° 43' 00" Long
- Outfall # 002: 41° 03' 54" Lat, -73° 43' 02" Long
- Outfall # 003: 41° 03' 54" Lat, -73° 43' 02" Long (Note outfall only discharges stormwater flows)

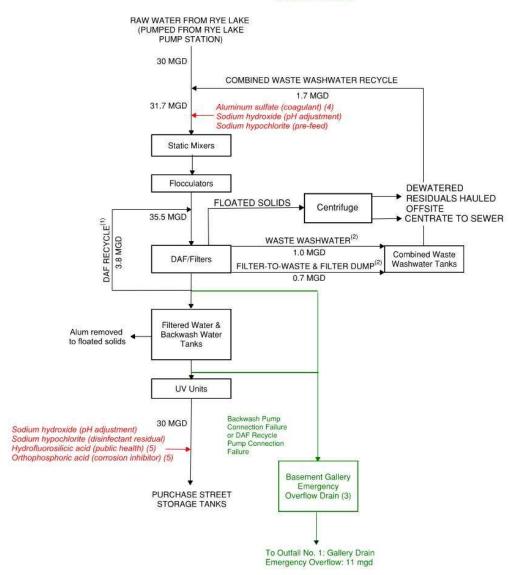
Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662 USEPA Major/Class 03 Industrial Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

OUTFALL NO. 1



- (1) DAF recycle at 12% of plant flow (raw water + combined waste washwater recycle).
- (2) Assumes 24 hours filter runtime with all filters online (7 at 30 mgd).

 (3) Basement Gallery Emergency Overflow Drain begins discharging water to Outfall No. 1 after the gallery fills to the overflow sump curb. There is approximately 30,000 gallons of capacity on the gallery floor between the trench
- drain (discharge to sewer) and the overflow sump curb.

 (4) Aluminum sulfate (alum) would not be present in any discharges from Outfall No. 1. It is removed through the
- (5) Hydrofluorosilicic acid or orthophosphoric acid would not be present in any emergency discharge from Outfall No. 1. Mechanical failures may result in overflows that contain hydrofluorosilicic acid or orthophosphoric acid (added at the second chemical injection point). However, these overflows would total volumes of less than 30,000 gallons over a 10-minute period. These low-flow overflows (maximum 30,000 gallons) would be directed to the sewer (Blind Brook WWTP) and would not be discharged from Outfall No. 1.

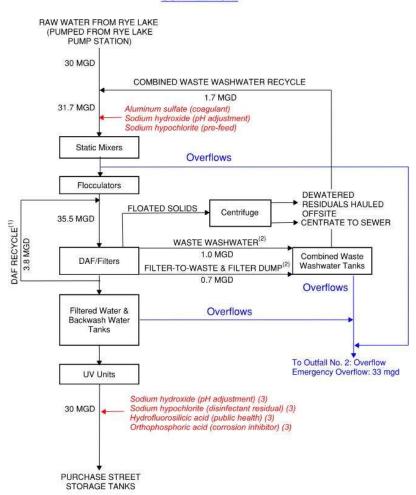
Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662 USEPA Major/Class 03 Industrial Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

OUTFALL NO. 2



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

⁽¹⁾ DAF recycle at 12% of plant flow (raw water + combined waste washwater recycle).

⁽²⁾ Assumes 24 hours filter runtime with all filters online (7 at 30 mgd).(3) The second chemical injection point is after the potential emergency overflows to Outfall

⁽³⁾ The second chemical injection point is after the potential emergency overflows to Outfal No. 2. Therefore, chemicals added at the second chemical injection point would not be present in an emergency discharge from Outfall No. 2 (sodium hydroxide, sodium hypochlorite, hydrofluorosilicic acid, orthophosphoric acid).

Permittee: WJWW

Facility: Westshooter, Joint Weter Works (W IV)

Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662

1. NTU201002

USEPA Major/Class 03 Industrial

Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

Critical Receiving Water Data & Mixing Zone

The facility discharges to an intermittent stream, and therefore a chronic dilution ratio of 1:1 is applicable for the protection of Acute, Chronic, Human, Aesthetic, Wildlife.

Outfall #	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis							
001	1:1	1:1	1:1	TOGS 1.3.1 ISEL Limits							
002	1:1	1:1	1:1	TOGS 1.3.1 ISEL Limits							
003	Unregulated Stormwater										

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

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

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)¹ determination. Appendix Link

Discharge Notification Act Requirements

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

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

Best Management Practices (BMPs) for Industrial Facilities

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

Stormwater Pollution Prevention Requirements

The facility discharges stormwater associated with industrial activity. As per 750-1.5(a)(10) acts do not require permit as discharges composed of stormwater, to which no pollutant(s) have been added by industrial, commercial, or other activity, and otherwise not regulated pursuant to 40 CFR parts 121, 122, 123 and 124 (see section 750-1.24 of this subpart), unless the particular storm water discharges has been identified by the regional administrator or the department, as a significant contributor of pollution.

¹ As prescribed by 6 NYCRR Part 617

Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662

USEPA Major/Class 03 Industrial

Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

Mercury²

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 a new proposed drinking water treatment facility that is outside of the Great Lakes Basin. The facility claims to have no mercury source. The permittee filled out the conditional exclusion form-even though the permittee was not able to sample their effluent (one of the items on the form). The DEC is requiring MMP Type IV based on the "expected" concentration in the effluent.

Upon startup of the facility, DEC requires sampling to be conducted within 6 months of discharge. The facility must collect one sample of Total Mercury utilizing USEPA Method 1631E. The facility must provide the results of this sampling to DEC within 12 months of startup. If the sampling measures >12 ng/L, MMP Type IV will no longer apply to the facility and DEC will require a permit modification and will include an effluent limitation of 50 ng/L in the permit.

Schedule(s) of Compliance

A Schedule of Compliance is being included³ for the following items (Appendix Link):

Schedule(s) of Additional Submittals

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

- **BMP Plans**
- Short term monitoring for mercury.
 - o Upon startup of the facility, DEC requires sampling to be conducted within 6 months of discharge. The facility must collect one sample of Total Mercury utilizing USEPA Method 1631E. The facility must provide the results of this sampling to DEC within 12 months of startup. If the sampling measures >12 ng/L, MMP Type IV will no longer apply to the facility and DEC will require a permit modification and will include an effluent limitation of 50 ng/L in the permit.
 - o A sample of water collected from either outfall would be considered representative of discharges from both outfalls would suffice.
- Mercury Minimization Plan
 - The permittee must complete and maintain onsite mercury minimization status report in accordance with the requirements of this permit.

² In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.

³ Pursuant to 6 NYCRR 750-1.14

Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662 USEPA Major/Class 03 Industrial Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

OUTFALL AND RECEIVING WATER SUMMARY TABLE

					Water Index No. /	Major /					Critical	Dil	ution R	atio
Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Priority Waterbody Listing (PWL) No.	Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Effluent Flow (MGD)	A(A)	A(C)	HEW
001	41° 03' 54" N	73° 43' 00" W	Unnamed Tributary. of Kensico Reservoir	А	ER-3-P 1063-12	17 / 02	125 ⁴	-	-	-	11 ⁵	1:1	1:1	1:1
002	41° 03' 54" N	73° 43' 02" W	Unnamed Tributary. of Kensico Reservoir	Α	ER-3-P 1063-12	17 / 02	125 ⁴	-	-	-	30 ⁶	1:1	1:1	1:1

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	Description	of Wast	tewater: G	Sallery Drain –	- Emergenc	y Discharge								
Outfall #		Type of Tre	of Treatment: None												
			Exis	ting Disch	arge Data	-	TBELs		Wa	ater Quality	/ Data & WO	QBELs			Desig for
Effluent Parameter	Units	Averaging Period	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	ML	Basis for Permit Requirement
General Notes: standard and W						provided b	y the permittee.	All applical	ble water q	uality stan	dards were i	reviewed for o	developmer	t of th	e WQBELs. The
Flow	MG	Monthly Total	-	-	-	- Monitor No alterations that will impair the waters for their best usages. 703.2					-	Monitor			
		ıtfall is utilize y total of volu				y. When di	scharge occurs,	the permit	tee shall be	e required	to monitor	total volume	of flow disc	harge	d and report the
рН	SU	Minimum	-	-	-	6.0	TOGS 1.2.1			65 05	Dongo	6.5 - 8.5	703.3		WOREL
		Maximum	-	_	-	9.0	1003 1.2.1	-	-	6.5 – 8.5	Range	6.5 - 6.5	703.3	-	WQBEL
		tent with TOC VQS is appro		TBELs ref	lect the availa	ble treatme	nt technology list	ed in Attac	hment C. G	iven that a	idequate dili	ution is not av	ailable, an e	effluen	it limitation equal

⁴ Ambient hardness data obtained from Hardness by Watershed Memo dated Feb-29-1984 located in CEDR location L:\DOW\CEDR\DOW General\SPDES\Guidance

⁵ This is for emergency discharge only

⁶ This is for Plant Overflow/Startup testing

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

Permittee: WJWW Facility: Westchester Joint Water Works (WJWW) SPDES Number: NY0281662

USEPA Major/Class 03 Industrial

Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar Full Technical Review

O4fell #	001	Description	of Was	tewater: G	Sallery Drain –	Emergenc	y Discharge								
Outfall #		Type of Tre	atment:	None											
			Exis	ting Discha	arge Data		TBELs		Wa	Water Quality Data & Wo		QBELs			Dania far
Effluent Parameter	Units	Averaging Period	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	ML	Basis for Permit Requirement
	mg/L	Monthly Avg				20	TOGS 1.2.1		1	other was	tes that will	10	TOGS		
Total Suspended Solids (TSS)		Daily Max	-	-	-	40	TOGS 1.2.1	-	cause dep waters for (703.2)			Daily Max	1.3.1	-	ISEL
							SEL) are applied ration and Plan re						mflow is av	ailable	for dilution.
Settleable Solids	mL/L	Daily Max	-	-	-	0.1	TOGS 1.2.1	-	None from	sewage, other was osition or	industrial tes that will impair the	0.1	TOGS 1.3.1B	-	ISEL
					ges to intermit daily max is th		is should receive propriate.	the highe		f treatmer	nt that can r	easonably be	achieved b	by prac	ctical technolog
Total Residual Chlorine (TRC)	mg/L	Daily Max	-	-	-	2.0	TOGS 1.3.3	-	-	0.005	A(C)	0.005	703.5	0.03	ML
		the low dilut detection of				s than the	TBEL and less t	han the mi	nimum leve	el of detec	tion. Theref	ore, an efflue	nt limitatior	n equa	I to the minimur
Additional Poll	utants (Considered													
	mg/L	Monthly Avg				2.0	TOGS 1.2.1	-	-	-	-	-	-	<u> </u>	TBEL
Aluminum	9. =	Daily Max				4.0	TOGS 1.2.1	-	-	_	_	-	-		TBEL
	TOGS Emerge where t	1.2.1 for Che ency Dischar	micals - ge of Drii alum wou	Attachmer	nt C (Model Te er to save the	chnology E plant from t	nits for total Alum BPJ Limits) 4/2 m Tooding. By settin hich the TBEL is	g/L. The p	ermittee sh ninum limit a	ould ensuat the TBE	ire stabilized EL, and indic	d pH to meet pating that the	permit limit actual wat	of 6.5 ter trea	– 8.5 for tment process
Phosphorus	mg/l	Daily Max	-	-	-	-	-	-			-	-		See note below	
	Phosph	orus is not li	sted in N	Y-2C appl	ication as a po	ollutant of c	oncern; therefore	, phospho	rs is not cor	nsidered f	or water qua	ality evaluation	n.	-	
Total Copper	μg/l	Daily Max	-	10.3	1	-	-	-	-	10.84	A(C)	10.84	703.5		Monitor
							n. Estimated rep ded as It shows				the water of	quality standa	rd (10.84	µg/I), t	herefore it is no

Facility: Westchester Joint Water Works (WJWW) SPDES Number: NY0281662

USEPA Major/Class 03 Industrial

Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

POLLUTANT SUMMARY TABLE

Outfall 002

0 (6.11.4)	000	Description	of Was	tewater: F	lant Overflow	/Startup tes	ting								
Outfall #	002	Type of Tre	atment:	None											
			Exis	ting Disch	arge Data	TBELs			Wa	ater Quality	y Data & W	QBELs			D . (
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality ⁸	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Basis for Permit Requirement
		g discharge was obtained from the application provided by the permittee. All applicable water quality standards were reviewed for development of the WQE hown below represent the most stringent.									e WQBELs. The				
Flow	MG	Monthly Total	-	-	-	Monitor	Monitor 750-1.13	No altera		ill impair th	ne waters fo	r their best	-	-	TBEL
								utfall is util	ized for em			nly. When dis	charge occ	urs, th	e permittee shall
рН	SU	Minimum	-	-	-	6.0	TOGS 1.2.1			6.5 – 8.5	Range	6.5 - 8.5	703.3		WQBEL
		Maximum	-	-	-	9.0	1003 1.2.1	-	-	0.5 – 6.5	Range	0.5 - 0.5	703.3	-	WQBEL
		tent with TOO VQS is appro		TBELs ref	lect the availa	ble treatme	nt technology list	ed in Attac	chment C. G	iven that a	idequate dil	ution is not av	∕ailable, an	effluer	t limitation equal
	mg/L	Monthly Avg				20	TOGS 1.2.1			other wast	es that will	10	TOGS		
Total Suspended Solids (TSS)		Daily Max	-	-	-	40	TOGS 1.2.1	-	cause dep waters for (703.2)			Daily Max	1.3.1	-	ISEL
1001140 (100)							SEL) are applied ation and Plan re		t discharge:				mflow is av	ailable	for dilution.
Settleable Solids	mL/L	Daily Max	-	-	-	0.1	TOGS 1.2.1	-	None from wastes or cause dep waters for (703.2)	other wast osition or i	es that will mpair the	0.1	TOGS 1.3.1B	-	ISEL
					ges to intermit daily max is t			the highe		f treatmen	t that can re	easonably be	achieved b	y prac	tical technology.
Total Residual Chlorine (TRC)	mg/L	Daily Max	-	-	-	2.0	TOGS 1.3.3	-	-	0.005	A(C)	0.005	703.5	0.03	ML
(1110)							ain a permit requequal to the mini						s less than t	he TB	EL and less than

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

Permittee: WJWW Facility: Westchester Joint Water Works (WJWW) SPDES Number: NY0281662

USEPA Major/Class 03 Industrial

Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

O. 46-11 #	000	Description	of Was	tewater: P	Plant Overflow	/Startup tes	sting								
Outfall #	002	Type of Tre	atment:	None											
			Exis	ting Discha	arge Data		TBELs		Wa	ater Qualit	y Data & Wo	QBELs			Б : (
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality ⁸	# of Data Points Detects / Non- Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Basis for Permit Requirement
Additional Pol	lutants	Considered													
		Monthly Avg				2.0	TOGS 1.2.1	_	_	_	-	-	-		TBEL
Aluminum	mg/L	Daily Max				4.0	TOGS 1.2.1	-	-	_	-	-	-	-	TBEL
	TOGS Emerg	1.2.1 for Che ency Dischar	emicals - ge of Dri alum wo	Attachmer nking Wate	nt C (Model Te er to save the	chnology E plant from	nits for total Alum BPJ Limits) 4/2 m flooding. By settir hich the TBEL is	g/L. The p ng the alun	permittee sh ninum limit	ould ensu at the TBE	re stabilized L, and indic	I pH to meet a cating that the	permit limit actual wat	of 6.5 er trea	8.5 for itment process
	μg/l	Daily Max	-	-	-	-	-	-	-	-	-	-	-		See note below
Phosphorus	Phosph	phorus is not listed in NY-2C application as a pollutant of concern; therefore, phosphors is not considered for water quality evaluation													
Total Copper	mg/l	Daily Max	-	10.3	1	-	-	-	-	10.84	A(C)	10.84	703.5		Monitor
							n. Estimated rep nded as It shows				the water of	quality standa	ard (10.84 µ	. .ig/l), t	herefore it is no

Outfall 003 – Stormwater – No monitoring required.

Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662 USEPA Major/Class 03 Industrial Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

Appendix: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

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

Outfall and Receiving Water Information

Impaired Waters

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

Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662 USEPA Major/Class 03 Industrial Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

Interstate Water Pollution Control Agencies

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

Existing Effluent Quality

The existing effluent quality is determined from a statistical evaluation of effluent data in accordance with TOGS 1.2.1 and the USEPA Office of Water, <u>Technical Support Document for Water Quality-based Toxics Control</u>, March 1991, Appendix E (TSD). The existing effluent quality is equal to the 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 <u>Pollutant Summary Table</u> identifies the number of sample data points available.

Permit Requirements

Basis for Effluent Limitations

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

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

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(/) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this factsheet. Consistent with current case law⁹ and USEPA interpretation¹⁰ 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

⁹ American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)

¹⁰ 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)

Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662 USEPA Major/Class 03 Industrial Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

the antidegradation policy, SPDES applications have been reviewed in accordance with the State Environmental Quality Review Act (SEQR) as prescribed by 6 NYCRR Part 617.

Effluent Limitations

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

Technology-based Effluent Limitations (TBELs) for Industrial Facilities

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

USEPA Effluent Limitation Guidelines (ELGs) Applicable to Facility

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

Best Professional Judgement (BPJ)

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

Water Quality-Based Effluent Limitations (WQBELs)

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

Mixing Zone Analyses

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

Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662 USEPA Major/Class 03 Industrial Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

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

Critical Flows

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

Reasonable Potential Analysis (RPA)

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

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

The Department uses modeling tools to estimate the expected concentrations of the pollutant in the receiving water and develop WQBELs. These tools were developed in part using the methodology referenced above. If the estimated concentration of the pollutant in the receiving water is expected to exceed the ambient water quality standard or guidance value (i.e. numeric interpretation of a narrative water quality standard), then there is a reasonable potential that the discharge may cause or contribute to an exceedance of any State water quality standard adopted

Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662 USEPA Major/Class 03 Industrial Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

pursuant to NYS ECL 17-0301. If a TMDL is in place, the facility's WLA for that pollutant is applied as the WQBEL.

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

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

Whole Effluent Toxicity (WET) Testing:

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

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

Minimum Level of Detection

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

Monitoring Requirements

CWA section 308, 40 CFR 122.44(i), 6 NYCRR 750-1.13, and 750-2.5 require that monitoring be included in permits to determine compliance with effluent limitations. Additional effluent monitoring may also be required to

Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662 USEPA Major/Class 03 Industrial Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

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

Other Conditions

Mercury

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

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

Schedules of Compliance

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

Emerging Contaminant Monitoring

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

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

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

Permittee: WJWW Facility: Westchester Joint Water Works (WJWW)

SPDES Number: NY0281662

USEPA Major/Class 03 Industrial

Date: June 28, 2024 v.1.13 Permit Writer: Aseem Kumar

Water Quality Reviewer: Aseem Kumar

Full Technical Review

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

A sample of water collected from either outfall would be considered representative of discharges from both outfalls would suffice.

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.