



## State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code: <b>4952</b>	NAICS Code: <b>221320</b>	SPDES Number:	<b>NY0026310</b>
Discharge Class (CL):	<b>05</b>	DEC Number:	<b>3-3311-00063/00003</b>
Toxic Class (TX):	<b>T</b>	Effective Date (EDP):	<b>EDP</b>
Major-Sub Drainage Basin:	<b>13 - 01</b>	Expiration Date (ExDP):	<b>ExDP</b>
Water Index Number:	<b>H portion</b>	Item No.:	<b>858.4 - 1</b>
Compact Area:	-	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:	<b>City of Newburgh</b>	Attention:	<b>Todd Venning City Manager</b>
Street:	<b>83 Broadway</b>		
City:	<b>Newburgh</b>	State:	<b>NY</b> Zip Code: <b>12550</b>
Email:	<b>TVenning@cityofnewburgh-ny.gov</b>	Phone:	<b>(845) 569-7301</b>

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL							
Name:	<b>City of Newburgh Wastewater Treatment Plant</b>						
Address / Location:	<b>2 Renwick Street</b>				County:	<b>Orange</b>	
City:	<b>Newburgh</b>			State:	<b>NY</b>	Zip Code:	<b>12550</b>
Facility Location:	Latitude:	<b>41 ° 29 ' 40.7</b>	<b>" N</b>	& Longitude:	<b>74 ° 0 ' 24.7</b>	<b>" W</b>	
Primary Outfall No.:	<b>001</b>	Latitude:	<b>41 ° 29 ' 41.8</b>	<b>" N</b>	& Longitude:	<b>74 ° 0 ' 17.4</b>	<b>" W</b>
Outfall Description:	<b>Treated Sanitary</b>	Receiving Water:	<b>Hudson River</b>		Class:	<b>B</b>	Standard: <b>B</b>

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:**

- CO BWP - Permit Coordinator
- BWP – Permit Writer
- CO BWC - SCIS
- RWE
- RPA
- EPA Region II
- NYSEFC

Permit Administrator:	<b>Rebecca Crist, Deputy Permit Administrator</b>		
Address:	<b>625 Broadway Albany, NY 12233-1750</b>		
Signature:		Date:	<b>/ /</b>

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## SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
<b>002</b>	Combined Sewer Overflow near Mouth of Quassaick Creek	41 ° 29 ' 18 " N	74 ° 0 ' 34.0 " W
Receiving Water: <b>Hudson River</b>			Class: <b>B</b>
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
<b>003</b>	Combined Sewer Overflow near Renwick St.	41 ° 29 ' 37.2 " N	74 ° 0 ' 21.6 " W
Receiving Water: <b>Hudson River</b>			Class: <b>B</b>
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
<b>004</b>	Combined Sewer Overflow near William St.	41 ° 29 ' 44.4 " N	74 ° 0 ' 20.8 " W
Receiving Water: <b>Hudson River</b>			Class: <b>B</b>
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
<b>005</b>	Combined Sewer Overflow near Washington St.	41 ° 29 ' 52.7 " N	74 ° 0 ' 19.2 " W
Receiving Water: <b>Hudson River</b>			Class: <b>B</b>
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
<b>006</b>	Combined Sewer Overflow near First St.	41 ° 30 ' 6.3 " N	74 ° 0 ' 17.6 " W
Receiving Water: <b>Hudson River</b>			Class: <b>B</b>
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
<b>007</b>	Combined Sewer Overflow near Second St.	41 ° 30 ' 10.9 " N	74 ° 0 ' 18.2 " W
Receiving Water: <b>Hudson River</b>			Class: <b>B</b>
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
<b>008</b>	Combined Sewer Overflow near Fourth St.	41 ° 30 ' 16.4 " N	74 ° 0 ' 16.3 " W
Receiving Water: <b>Hudson River</b>			Class: <b>B</b>
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
<b>009</b>	Combined Sewer Overflow near Fifth St.	41 ° 30 ' 19.6 " N	74 ° 0 ' 17.0 " W
Receiving Water: <b>Hudson River</b>			Class: <b>B</b>
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
<b>010</b>	Combined Sewer Overflow near South St.	41 ° 30 ' 23.2 " N	74 ° 0 ' 17.5 " W
Receiving Water: <b>Hudson River</b>			Class: <b>B</b>
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
<b>011</b>	Combined Sewer Overflow near Clinton St.	41 ° 30 ' 32.3 " N	74 ° 0 ' 19.2 " W
Receiving Water: <b>Hudson River</b>			Class: <b>B</b>
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
<b>012</b>	Combined Sewer Overflow near Nicoll St.	41 ° 30 ' 50.2 " N	74 ° 0 ' 22.1 " W
Receiving Water: <b>Hudson River</b>			Class: <b>B</b>
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
<b>013</b>	Combined Sewer Overflow near Park Place	41 ° 31 ' 0.2 " N	74 ° 0 ' 22.5 " W
Receiving Water: <b>Hudson River</b>			Class: <b>B</b>

Outfall	Wastewater Description	Outfall Latitude				Outfall Longitude							
<b>014</b>	Combined Sewer Overflow from Floatables Control and Disinfection Facility	<b>41</b>	°	<b>29</b>	'	<b>35.4</b>	" N	<b>74</b>	°	<b>0</b>	'	<b>1.51</b>	" W
Receiving Water:	<b>Hudson River</b>							Class:	<b>B</b>				

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## DEFINITIONS

TERM	DEFINITION
7-Day Geo Mean	The highest allowable geometric mean of daily discharges over a calendar week.
7-Day Average	The average of all daily discharges for each 7-days in the monitoring period. The sample measurement is the highest of the 7-day averages calculated for the monitoring period.
12-Month Rolling Average (12 MRA)	The current monthly value of a parameter, plus the sum of the monthly values over the previous 11 months for that parameter, divided by the number of months for which samples were collected in the 12-month period.
30-Day Geometric Mean	The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Action Level	Action level means a monitoring requirement characterized by a numerical value that, when exceeded, triggers additional permittee actions and department review to determine if numerical effluent limitations should be imposed.
Compliance Level / Minimum Level	A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136, or otherwise accepted by the Department.
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.
Receiving Water	The classified waters of the state to which the listed outfall discharges.
Sample Frequency / Sample Type / Units	See NYSDEC's "DMR Manual for Completing the Discharge Monitoring Report for the SPDES" for information on sample frequency, type and units.

## PERMIT LIMITS, LEVELS AND MONITORING – 001

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Year-Round	Hudson River	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location		
								Inf.	Eff.	
Flow	Monthly Average	Monitor	MGD			Continuous	Recorder	X		
Flow	12 MRA	9.0	MGD			1/month	Calculated	X		
pH	Daily Minimum	6.0	SU			3/day	Grab		X	
	Daily Maximum	9.0	SU							
Temperature	Daily Maximum	Monitor	°F			3/day	Grab		X	
BOD <sub>5</sub>	Monthly Average	30	mg/L	2,300	lbs/d	2/week	24-hr. Comp.	X	X	1
BOD <sub>5</sub>	7-Day Average	45	mg/L	3,400	lbs/d	2/week	24-hr. Comp.		X	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	2,300	lbs/d	2/week	24-hr. Comp.	X	X	1
Total Suspended Solids (TSS)	7-Day Average	45	mg/L	2,400	lbs/d	2/week	24-hr. Comp.		X	
Settleable Solids	Daily Maximum	0.3	mL/L			3/day	Grab		X	2
Total Kjeldahl Nitrogen (TKN) (as N)	Daily Maximum	Monitor	mg/L			1/month	24-hr. Comp.		X	
Ammonia (as N)	Daily Maximum	Monitor	mg/L			1/month	24-hr. Comp.		X	
Total Mercury	Daily Maximum	50	ng/L			1/month	Grab	X	X	
Total Copper	Daily Maximum	Monitor	mg/L	3.6	lbs/d	1/month	24-hr. Comp.		X	
Total Silver	Daily Maximum	Monitor	mg/L			1/quarter	24-hr. Comp.		X	3
Total Chromium	Daily Maximum	Monitor	mg/L			1/quarter	24-hr. Comp.		X	3
Total Zinc	Daily Maximum	Monitor	mg/L			1/quarter	24-hr. Comp.		X	3
Biennial Pollutant Scan						1/Two Years	-		X	4
EFFLUENT DISINFECTION		Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Required Seasonal from May 1st - October 31st										
Coliform, Fecal	30-Day Geometric Mean	200	No./100 mL			2/week	Grab		X	
Coliform, Fecal	7-Day Geometric Mean	400	No./100 mL			2/week	Grab		X	
Chlorine, Total Residual	Daily Maximum	2.0	mg/L			3/day	Grab		X	

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ACTION LEVEL PARAMETERS	Type	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Total Cadmium	Daily Maximum	Monitor	mg/L	Monitor	lbs/d	1/quarter	24-hr. Comp.		X	3
Total Lead	Daily Maximum	Monitor	mg/L	0.6	lbs/d	1/quarter	24-hr. Comp.		X	3
Total Phenols	Daily Maximum	Monitor	mg/L	3.4	lbs/d	1/quarter	24-hr. Comp.		X	3,5
WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			15	TUa	1/Quarter	See footnote		X	6
WET - Acute Vertebrate	See footnote			15	TUa	1/Quarter	See footnote		X	6
WET - Chronic Invertebrate	See footnote			100	TUc	1/Quarter	See footnote		X	6
WET - Chronic Vertebrate	See footnote			100	TUc	1/Quarter	See footnote		X	6

**FOOTNOTES:**

- Effluent shall not exceed 15% and 15% of influent concentration values for BOD<sub>5</sub> & TSS respectively.
- During periods of wet weather, when the instantaneous plant effluent flow is greater than 18 MGD, the sample shall be excluded from the calculation for the DMR.
- Quarterly samples shall be collected in calendar quarters (Q1 – January 1<sup>st</sup> to March 31<sup>st</sup>; Q2 – April 1<sup>st</sup> to June 30<sup>th</sup>; Q3 – July 1<sup>st</sup> to September 30<sup>th</sup>; Q4 – October 1<sup>st</sup> to December 31<sup>st</sup>).
- Biennial Pollutant Scan: The permittee shall perform effluent sampling every two (2) years for all applicable pollutants identified in the NY-2A Application, Tables A - D. Sampling data shall be collected according to the guidance in the NY-2A application and maintained by the permittee. Monitoring results shall not be submitted on the DMR. Data shall be submitted with the next submission of the NY-2A form.
- Total phenols shall be determined by colorimetric or spectrophotometric analysis using the most sufficiently sensitive method approved under 40 CFR Part 136 for total recoverable phenols.
- Whole Effluent Toxicity (WET) Testing:**  
Testing Requirements – Acute and if directed Chronic WET testing is required. Testing shall be performed in accordance with 40 CFR Part 136 and TOGS 1.3.2 unless prior written approval has been obtained from the Department. The test species shall be Ceriodaphnia dubia (water flea - invertebrate) and Pimephales promelas (fathead minnow - vertebrate). Receiving water collected upstream from the discharge should be used for dilution. All tests conducted should be static-renewal (two 24-hr composite samples with one renewal for Acute tests and three 24-hr composite samples with two renewals for Chronic tests). The appropriate dilution series should be used to generate a definitive test endpoint, otherwise an immediate rerun of the test may be required. WET testing shall be coordinated with the monitoring of chemical and physical parameters limited by this permit so that the resulting analyses are also representative of the sample used for WET testing. The ratio of critical receiving water flow to discharge flow (i.e. dilution ratio) is 50:1 for acute, and 100:1 for chronic. Discharges which are disinfected using chlorine should be dechlorinated prior to WET testing or samples shall be taken immediately prior to the chlorination system.

Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 1 and 6.

Reporting - Toxicity Units shall be calculated and reported on the DMR as follows: TUa = (100)/(48-hr LC50) [note that Acute data is generated by both Acute and Chronic testing] and TUc = (100)/(7-day NOEC) or (100)/(7-day IC25) when Chronic testing has been performed or TUc = (TUa) x (10) when only Acute testing has been performed and is used to predict Chronic test results, where the 48-hr LC50, 7-day NOEC and/or IC25 are all expressed in % effluent. This must be done, including the Chronic prediction from the Acute data, for both species unless otherwise

directed. For Chronic results, report the most sensitive endpoint (i.e. survival, growth and/or reproduction) corresponding to the lowest 7-day NOEC or IC25 and resulting highest TUC. For Acute results, report a TUa of 0.3 if there is no statistically significant mortality in 100% effluent as compared to the control. Report a TUa of 1.0 if there is statistically significant mortality in 100% effluent as compared to the control, but insufficient mortality to generate a 48-hr LC50. Also, in the absence of a 48-hr LC50, use 1.0 TUa for the Chronic prediction from the Acute data, and report a TUC of 10.0.

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

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

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## PERMIT LIMITS, LEVELS AND MONITORING – 014

OUTFALL	LIMITATIONS APPLY:	RECEIVING WATER	EFFECTIVE	EXPIRING
014	During Floatables Control and Disinfection Facility Discharges	Hudson River	Upon Construction Completion of the Treatment Facility <sup>1</sup>	ExDP

PARAMETER	EFFLUENT LIMITATION			MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Sample Frequency	Sample Type	Location		
						Inf.	Eff.	
Flow	Monthly Average	Monitor	MGD	Continuous	Calculated	X		2,3
Flow	Daily Maximum	Monitor	MGD	Continuous	Recorder	X		2,3

PARAMETER (May 1 <sup>st</sup> – October 31 <sup>st</sup> )	ACTION LEVEL			MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	Monitor	MGD	Continuous	Calculated		X	4
Flow	Daily Maximum	Monitor	MGD	Continuous	Recorder		X	4
Coliform, Fecal	Daily Maximum	Monitor	#/100 mL	Daily	Grab		X	2,5
Chlorine, Total Residual	Daily Maximum	0.5	mg/L	Daily	Grab		X	2,6

### Footnotes:

1. Construction Completion shall be in accordance with Order on Consent No. R3-20100107-17.
2. The permittee shall operate the Floatables Control and Disinfection Facility to achieve maximum pollutant reduction reasonably attainable while meeting the TRC action level in accordance with the approved Chlorine Dose-Response Disinfection Performance Study. Monitoring and reporting for all parameters shall occur upon completion of the treatment facility.
3. Discharge through Outfall 014 is prohibited unless influent flows to the Wastewater Treatment Plant comply with the minimum flows in CSO BMP #4.
4. During May 1<sup>st</sup> to October 31<sup>st</sup>, the Floatables Control and Disinfection Facility shall disinfect up to 31 MGD combined sewage before bypassing the chlorine contact tank.
5. During disinfection season and normal staffed hours, when there is a discharge from the facility, fecal coliform effluent monitoring shall occur daily, and within the first 15 minutes of the discharge. Occurrences where fecal coliform monitoring could not be analyzed due to unavailability of laboratory services shall be documented in the monthly operating report
6. The Action Level and monitoring requirements for Total Residual Chlorine (TRC) will be effective during the disinfection season (May 1<sup>st</sup> – October 31<sup>st</sup>). If the Action Level is exceeded, the permittee shall evaluate the cause and take corrective action to reduce the TRC in accordance with approved Chlorine Dose-Response Disinfection Performance Study. Follow up sampling shall be conducted at 1-hour intervals until the levels are below the action level, or discharge from the outfall ceases. The Department will review the data to determine if numerical effluent limits for TRC should be imposed.

## BEST MANAGEMENT PRACTICES FOR COMBINED SEWER OVERFLOWS

The permittee shall implement the following Best Management Practices (BMPs). These BMPs are designed to implement operation & maintenance procedures, utilize the existing treatment facility and collection system to the maximum extent practicable, and implement sewer design, replacement and drainage planning, to maximize pollutant capture and minimize water quality impacts from combined sewer overflows. The BMPs are equivalent to the "Nine Minimum Control Measures" required under the USEPA National Combined Sewer Overflow policy. The EPA's policy is available at <https://www.epa.gov/npdcs/combined-sewer-overflows-csos>

1. CSO Maintenance/Inspection - The permittee shall continue to maintain and implement a written maintenance and inspection program for all CSOs. This program shall include all regulators tributary to these CSOs and shall be conducted during periods of both dry and wet weather. This is to ensure that no discharges occur during dry weather and that the maximum amount of wet weather flow is conveyed to the City of Newburgh POTW for treatment. This program shall consist of inspections with required repair, cleaning and maintenance done as needed. This program shall consist of weekly inspections.

Inspection reports shall be completed indicating visual inspection, any observed flow, incidence of rain or snowmelt, condition of equipment and work required. These reports shall be in a format approved by the Region 3 Office and submitted to the Region with the monthly operating report (Form 92-15-7).

2. Maximum Use of Collection System for Storage - The permittee shall optimize the collection system by operating and maintaining it to minimize the discharge of pollutants from CSOs. It is intended that the maximum amount of in-system storage capacity be used (without causing service backups) to minimize CSOs and convey the maximum amount of combined sewage to the treatment plant in accordance with Item 4 below. This shall be accomplished by an evaluation of the hydraulic capacity of the system but should also include a continuous program of flushing or cleaning to prevent deposition of solids and the adjustment of regulators and weirs to maximize storage.
3. Industrial Pretreatment - The approved Industrial Pretreatment Program shall consider CSOs in the calculation of local limits for indirect discharges. Discharge of persistent toxics upstream of CSOs will be in accordance with guidance under **(NYSDEC Division of Water Technical and Operational Guidance Series (TOGS) 1.3.8 New Discharges to POTWs**. ([http://www.dec.ny.gov/docs/water\\_pdf/togs138.pdf](http://www.dec.ny.gov/docs/water_pdf/togs138.pdf)). For industrial operations characterized by use of batch discharge, consideration shall be given to the feasibility of a schedule of discharge during conditions of no CSO. For industrial discharges characterized by continuous discharge, consideration must be given to the collection system capacity to maximize delivery of waste to the treatment plant. Non-contact cooling water should be excluded from the combined system to the maximum extent practicable. Direct discharges of cooling water must apply for a SPDES permit.

To the maximum extent practicable, consideration shall be given to maximize the capture of nondomestic waste containing toxic pollutants and this wastewater should be given priority over residential/commercial service areas for capture and treatment by the POTW.

4. Maximize Flow to POTW - Factors cited in Item 2. above shall also be considered in maximizing flow to the POTW. Maximum delivery to the POTW is particularly critical in treatment of "first-flush" flows. The treatment plant shall be capable of receiving and treating: the peak design hydraulic loading rates for all process units; i.e., a minimum of 18 MGD through the plant headworks; a minimum of 18 MGD through the primary treatment works and disinfection works if applicable; and a minimum of 13.5 MGD through the secondary treatment works during wet weather. The collection system and headworks must be capable of delivering these flows during wet weather. If the permittee cannot deliver maximum design flow for treatment, the permittee shall submit a plan and schedule for accomplishing this requirement within 6 months after the effective date of this permit.
5. Prohibition of Dry Weather Overflow - Dry weather overflows from the combined sewer system are prohibited. The occurrence of any dry weather overflow shall be promptly abated and reported to the NYSDEC Region 3 Office in accordance with 6 NYCRR Part 750-2.7.

## BEST MANAGEMENT PRACTICES FOR COMBINED SEWER OVERFLOWS (continued)

6. Wet Weather Operating Plan (WWOP) - The permittee shall maximize treatment during wet weather events. This shall be accomplished by having a WWOP containing procedures so as to operate unit processes to treat maximum flows while not appreciably diminishing effluent quality or destabilizing treatment upon return to dry weather operation. A revised WWOP shall be developed in accordance with the DEC guidance, Wet Weather Operating Practices for POTWs With Combined Sewers, ([http://www.dec.ny.gov/docs/water\\_pdf/wwtechtran.pdf](http://www.dec.ny.gov/docs/water_pdf/wwtechtran.pdf)), and submitted to the Regional Water Engineer and the Bureau of Water Permits for review and approval in accordance with the Schedule of Submittals.

**Subsequent revisions of the wet weather operating plan must be submitted whenever the POTW and/or sewer collection system is significantly replaced or modified.**

7. Control of Floatable and Settleable Solids - The discharge of floating solids, oil and grease, or solids of sewage origin which cause deposition in the receiving waters, is a violation of the NYS Narrative Water Quality Standards contained in Part 703. As such, the permittee shall implement best management practices in order to eliminate or minimize the discharge of these substances. All of the measures cited in Items 1, 2, 4 & 5 above shall constitute approvable "BMPs" for mitigation of this problem. If aesthetic problems persist, the permittee should consider additional BMPs including but not limited to: street sweeping, litter control laws, installation of floatables traps in catch basins (such as hoods), booming and skimming of CSOs, and disposable netting on CSO outfalls. In cases of severe or excessive floatables generation, booming and skimming should be considered an interim measure prior to implementation of final control measures. Public education on harmful disposal practices of personal hygienic devices may also be necessary including but not limited to: public broadcast television, printed information inserts in sewer bills, or public health curricula in local schools.
8. Combined Sewer System Replacement - Replacement of combined sewers shall not be designed or constructed unless approved by NYSDEC. When replacement of a combined sewer is necessary it shall be replaced by separate sanitary and storm sewers to the greatest extent possible. These separate sanitary and storm sewers shall be designed and constructed simultaneously but without interconnections to maximum extent practicable. When combined sewers are replaced, the design should contain cross sections which provide sewage velocities which prevent deposition of organic solids during low flow conditions.
9. Combined Sewer/Extension - Combined sewer/extension, when allowed should be accomplished using separate sewers. These sanitary and storm sewer extensions shall be designed and constructed simultaneously but without interconnections. No new source of stormwater shall be connected to any separate sanitary sewer in the collection system.

If separate sewers are to be extended from combined sewers, the permittee shall demonstrate the ability of the sewerage system to convey, and the treatment plant to adequately treat, the increased dry-weather flows. Upon a determination by the Regional Water Engineer an assessment shall be made by the permittee of the effects of the increased flow of sanitary sewage or industrial waste on the strength of CSOs and their frequency of occurrence including the impacts upon best usage of the receiving water. This assessment should use techniques such as collection system and water quality modeling contained in the 1999 Water Environment Federation Manual of Practice FD-17 entitled, Prevention and Control of Sewer System Overflows, 2<sup>nd</sup> edition.

10. Sewage Backups - If, there are documented, recurrent instances of sewage backing up into house(s) or discharges of raw sewage onto the ground surface from surcharging manholes, the permittee shall, upon letter notification from DEC, prohibit further connections that would exacerbate the surcharging/back-up problems.
11. Septage and Hauled Waste - The discharge or release of septage or hauled waste upstream of a CSO is prohibited.
12. Control of Runoff - It is recommended that the impacts of runoff from development and redevelopment in areas served by combined sewers be reduced by requiring compliance with the New York Standards for Erosion and Sediment Control and the quantity control requirements included in the New York State Stormwater Management Design Manual. (<http://www.dec.ny.gov/chemical/8694.html>).

## BEST MANAGEMENT PRACTICES FOR COMBINED SEWER OVERFLOWS (continued)

13. Public Notification – The permittee shall install and maintain identification signs at all CSO outfalls owned and operated by the permittee. The permittee shall place the signs at or near the CSO outfalls and ensure that the signs are easily readable by the public. 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:

<b>N.Y.S. PERMITTED DISCHARGE POINT</b> <b>(wet weather discharge)</b> <b>SPDES PERMIT No.: NY _____</b>	
<b>OUTFALL No. : _____</b>	
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: (    ) - ### - ####	

14. Characterization and Monitoring - The permittee shall characterize the combined sewer system, determine the frequency of overflows, and identify CSO impacts in accordance with Combined Sewer Overflows, Guidance for Nine Minimum Controls, EPA, 1995, Chapter 10. These are minimum requirements, more extensive characterization and monitoring efforts which may be required as part of the Long-Term Control Plan.
15. Annual Report - The permittee shall electronically submit the Combined Sewer Overflows (CSO) Annual Report using nForm (<https://www.dec.ny.gov/chemical/48595.html>), which summarizes the implementation of the above BMPs and the CSO Long-Term Control Plan. The CSO Annual Report shall be submitted by January 31<sup>st</sup> of each year to the Regional Water Engineer and to the Bureau of Water Permits. The complete documentation shall be stored at a central location and be made available to DEC upon request.

## SPECIAL CONDITIONS: CSO CONTROL POLICY

### A. Water Quality Requirements for Combined Sewer Overflows

#### Long-Term Control Plan

The permittee submitted a LTCP in 2013 in accordance with the Guidance for Long-Term Control Plan, EPA, September 1995. On 1/5/2016, the Department and the permittee entered into an Order on Consent (R3-20100107-17) that approved the LTCP and requires the implementation of all required LTCP actions. Implementation of the LTCP is ongoing. The permittee shall continue to effectively operate and maintain the CSO controls identified in the long-term control plan.

In accordance with the approved LTCP, the permittee is required to construct:

- Green infrastructure projects
- Some sewer separations, sewer reconstruction, and new storm drains
- Interceptor improvements
- Floatables control and CSO disinfection facility

#### Water Quality Criterion – Presumption Approach

The permittee shall not discharge any pollutant at a level that causes an in-stream excursion of the applicable water quality requirements. The EPA 1994 CSO Control Policy indicates that a CSO control plan that meets the criteria below would provide an adequate level on control to meet the water quality requirements of the CWA. Following implementation of the approved LTCP, the following criteria shall be an enforceable performance metric under this permit:

- The permittee shall eliminate or capture for treatment, at least 85 percent by volume of the system-wide combined sewage collected in combined sewer system during precipitation events on a system-wide annual average basis.

Any additional discharges of combined sewage flow during wet weather shall receive the minimum treatment specified below:

- Primary clarification or equivalent, and
- Solids and floatables disposal, and
- Disinfection, if required to meet WQS, protect designated uses, and protect human health, including removal of harmful disinfection chemical residuals

### B. Monitoring Requirements – Post Construction Compliance Monitoring Program

1. In accordance with the Schedule of Submittals, the permittee shall submit an updated approvable post-construction monitoring plan (PCCMP) that (a) is adequate to ascertain the effectiveness of the CSO controls and (b) can be used to verify attainment of water quality standards. The PCCMP must include the proposed sampling locations, sampling schedule, details on how effectiveness of the CSO controls will be assessed, and a Quality Assurance Project Plan<sup>1</sup> (QAPP) that details the laboratory that will be performing the analysis<sup>2</sup>, monitoring protocols to be followed, where appropriate, including CSO and ambient monitoring. The sampling schedule shall be developed to target the periods for which CSO events are most likely to occur. Ambient sampling must be conducted, at a minimum, for all pollutants listed in Section B below and for all pollutants for which the 303(d) list identifies CSOs as a source of the pollutant to the receiving water(s). Guidance on CSO post construction compliance monitoring and reporting can be found at: [https://www.epa.gov/sites/default/files/2015-10/documents/final\\_cso\\_pccm\\_guidance.pdf](https://www.epa.gov/sites/default/files/2015-10/documents/final_cso_pccm_guidance.pdf).
2. The PCCM Program sampling shall be implemented, in accordance with the approved PCCMP, for an initial period of two years, beginning in the year following PCCMP approval. Following the initial 2-year PCCM period, subsequent PCCM shall be conducted during years ending in 1 and 6. At a minimum, the following parameters shall be included in the sampling plan:

<sup>1</sup> The QAPP shall be developed as outlined in the EPA Requirements for Quality Assurance Project Plans for Environmental Data Operations, EPA QA/R-5.

<sup>2</sup> All chemical analyses must be conducted by a laboratory certified by the NYS Health Department under the National Environmental Laboratory Approval Program (NELAP) for test or sample results which require certificates of approval. Tests for pH, temperature, dissolved oxygen and settleable solids do not require certificates of approval but a description of the equipment used, and the calibration schedule of appropriate equipment is required.

PARAMETER	Units	Sample Type
BOD <sub>5</sub>	mg/L	Grab
Coliform, Fecal	#/100ml	Grab
Dissolved Oxygen	mg/L	Grab
Floatable Material	-	Visual Observation
Ammonia (as NH <sub>3</sub> )	mg/L	Grab
Phosphorus	mg/L	Grab
Solids, Settleable	mL/L	Grab
Solids, Suspended	mg/L	Grab

3. By March 31<sup>st</sup> of the year following PCCM sampling, the permittee shall submit an approvable PCCM Program Report. The PCCM Program Report shall include:
  - a. Analytical results of the PCCM sampling,
  - b. The number of CSO events and volume of CSO discharged during the PCCM period,
  - c. An assessment of whether CSO receiving water quality complies with applicable water quality standards,
  - d. Recommendations for potential improvements in CSO controls for when water quality standards are not attained, and
  - e. A discussion of whether the CSO controls are meeting the frequency goals of the Presumptive Approach, selected by the permittee in the LTCP, to verify the effectiveness of the CSO controls.

### C. Special Conditions

#### A. Sensitive Area<sup>3</sup> Reassessment

The permittee shall reassess overflows to sensitive areas stated in the LTCP, where elimination or relocation of the overflows is not physically possible or economically achievable. The permittee shall also assess whether new or additional sensitive areas may be affected by overflows that were not initially identified in the LTCP. The permittee shall consider new or improved techniques to eliminate or relocate overflows or changed circumstances that influence economic achievability. The permittee shall prepare and submit to the Regional Water Engineer a report, separately from the PCCM Program Report, that presents the results of this reassessment, feasible improvements to eliminate or minimize overflows to sensitive areas, and the permittee's recommendation regarding the elimination or relocation of these outfalls. The permittee shall submit such reports by December 31<sup>st</sup> in the same year the PCCM Program Report is submitted.

#### B. Reopener

This permit may be modified or revoked and reissued, as provided pursuant to 6 NYCRR 750-1.18, 6 NYCRR 750-1.20, 40 CFR 122.62 and 124.5, for the following reasons:

- I. To include new or revised conditions developed to comply with any state or federal law or regulation that addresses CSOs that are adopted or promulgated subsequent to the effective date of this permit.
- II. To include new or revised conditions if new information, not available at the time of permit issuance, indicates that CSO controls imposed under the permit have failed to ensure the attainment of applicable water quality requirements.

<sup>3</sup> Sensitive areas include designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threatened or endangered species and their habitat, waters with primary contact recreation, public drinking water intakes or their designated protection areas, and shellfish beds, waters listed on the NYSDEC 303(d) list, or any other area determined by the Department.

## STORMWATER POLLUTION PREVENTION REQUIREMENTS

### **NO EXPOSURE CERTIFICATION**

The permittee submitted a Conditional Exclusion for No Exposure Form on 12/8/2022, certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and/or stormwater runoff. 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 NYSDEC website.

**DRAFT**



## MERCURY MINIMIZATION PROGRAM (MMP) - Type I

1. General - The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below, to reduce mercury effluent levels with the goal of achieving the WQBEL of 0.7 ng/L.
2. MMP Elements - The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements as described in detail below:
  - a. Monitoring - Monitoring at Outfall 001, influent and other locations tributary to compliance points shall be performed using either USEPA Method 1631 or another sufficiently sensitive method, as approved under 40 CFR Part 136<sup>4</sup>. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate. Monitoring must be coordinated so that the results can be effectively compared between locations.

Minimum required monitoring is as follows:

- i. Sewage Treatment Plant Influent and/or Effluent – The permittee must collect samples at the location(s) and frequency as specified in the SPDES permit limitations table.
- ii. Key Locations and Potential Mercury Sources –The permit includes reduced monitoring requirements and does not require key location sampling. See section 2.a.iv below.
- iii. Hauled Wastes – The permittee must establish procedures for the acceptance of hauled waste to ensure the hauled waste is not a potential mercury source. Loads which may exceed 500 ng/L,<sup>5</sup> must receive approval from the Department prior to acceptance.
- iv. Decreased Monitoring Requirements - Facilities with EEQ at or below 12 ng/L are eligible for the following:
  - 1) Reduced requirements, through a permittee-initiated permit modification
    - a) Conduct influent monitoring, sampling quarterly, in lieu of monitoring within the collection system, such as at *key locations*; and
    - b) Conduct effluent compliance sampling quarterly.
  - 2) If a facility with reduced requirements reports discharges above 12 ng/L for two of four consecutive effluent samples, the Department may undertake a Department-initiated modification to remove the allowance of reduced requirements.
  - 3) Under the decreased permit requirements, the facility must continue to conduct a status report, as applicable in accordance with 2.c of this MMP, to determine if any waste streams have changed.
- v. Additional monitoring must be completed as required elsewhere in this permit (e.g., locations tributary to compliance points).

<sup>4</sup> Outfall monitoring must be conducted using the methods specified in Table 8 of *DOW 1.3.10*.

<sup>5</sup>A level of 0.2 mg/L (200,000 ng/L) or more is considered hazardous per 40 CFR Part 261.11. 500 ng/L is used here to alert the permittee that there is an unusual concentration of mercury and that it will need to be managed appropriately.



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

- b. Control Strategy - The control strategy must contain the following minimum elements:
- i. Pretreatment/Sewer Use Law - The permittee must review pretreatment program requirements and the Sewer Use Law (SUL) to ensure it is up-to-date and enforceable with applicable permit requirements and will support efforts to achieve a dissolved mercury concentration of 0.70 ng/L in the effluent.
  - ii. Monitoring and Inventory/Inspections for Outfall 001 -
    - 1) Monitoring shall be performed as described in 2.a above. As mercury sources are found, the permittee must enforce its sewer use law to track down and minimize these sources.
    - 2) The permittee must inventory and/or inspect users of its system as necessary to support the MMP.
      - a) Dental Facilities
        1. The permittee must maintain an inventory of each dental facility.
        2. The permittee must inspect each dental facility at least once every five years to verify compliance with the wastewater treatment operation, maintenance, and notification elements of 6 NYCRR 374.4. Alternatively, the permittee may develop and implement an outreach program,<sup>6</sup> which informs users of their responsibilities, and collect the "Amalgam Waste Compliance Report for Dental Dischargers"<sup>7</sup> form, as needed, to satisfy the inspection requirements. The permittee must conduct the outreach program at least once every five years and ensure the "Amalgam Waste Compliance Report for Dental Dischargers" are submitted by new users, as necessary. The outreach program could be supported by a subset of site inspections.
        3. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)a) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.
      - b) Other potential mercury sources
        1. The permittee must maintain an inventory of other *potential mercury sources*.
        2. The permittee must inspect other *potential mercury sources* once every five years. Alternatively, the permittee may develop and implement an outreach program which informs users of their responsibilities as *potential mercury sources*. The permittee must conduct the outreach program at least once every five years. The outreach program should be supported by a subset of site inspections.
        3. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)b) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.
  - iii. Systems with CSO & Type II SSO Outfalls – Permittees must prioritize *potential mercury sources* upstream of CSOs and Type II SSOs for mercury reduction activities and/or controlled-release discharge.
  - iv. Equipment and Materials – Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.
  - v. Bulk Chemical Evaluation – For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. If possible, the permittee must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.

<sup>6</sup> For example, the outreach program could include education about sources of mercury and what to do if a mercury source is found.

<sup>7</sup> The form, "Amalgam Waste Compliance Report for Dental Dischargers," can be found here:  
[https://www.dec.ny.gov/docs/water\\_pdf/dentalform.pdf](https://www.dec.ny.gov/docs/water_pdf/dentalform.pdf)

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

- c. **Status Report - An annual** status report must be developed and maintained on site, in accordance with the Schedule of Additional Submittals, summarizing:
- i. All MMP monitoring results for Outfall 001 for the previous reporting period;
  - ii. A list of known and *potential mercury sources* for Outfall 001
    - 1) If the permittee meets the criteria for MMP Type IV, the permittee must notify the Department for a permittee-initiated modification;
  - iii. All actions undertaken, pursuant to the control strategy, during the previous reporting period;
  - iv. Actions planned, pursuant to the control strategy, for the upcoming reporting period; and
  - v. Progress towards achieving a dissolved mercury concentration of 0.70 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation and/or installation/modification of a treatment system).

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

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

### DEFINITIONS:

**Key location** – a location within the collection/wastewater system (e.g. including but not limited to a specific manhole/access point, tributary sewer/wastewater connection, or user discharge point) identified by the permittee as a potential mercury source. The permittee may adjust key locations based upon sampling and/or best professional judgement.

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

## DISCHARGE NOTIFICATION REQUIREMENTS

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

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

<p><b>N.Y.S. PERMITTED DISCHARGE POINT</b></p> <p><b>SPDES PERMIT No.: NY _____</b></p> <p><b>OUTFALL No. : _____</b></p> <p>For information about this permitted discharge contact:</p> <p>Permittee Name: _____</p> <p>Permittee Contact: _____</p> <p>Permittee Phone: (    ) - ### - #####</p> <p>OR:</p> <p>NYSDEC Division of Water Regional Office Address: _____</p> <p>NYSDEC Division of Water Regional Phone: (    ) - ### - #####</p>
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- (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.

## INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS

- A. **DEFINITIONS:** Generally, terms used in this Section shall be defined as in the General Pretreatment Regulations (40 CFR Part 403). Specifically, the following definitions apply to terms used in this Section:
1. **Categorical Industrial User (CIU):** an industrial user of the POTW that is subject to Categorical Pretreatment Standards under 40 CFR 403.6 and 40 CFR Chapter I, Subchapter N;
  2. **Local Limits:** General Prohibitions, specific prohibitions and specific limits as set forth in 40 CFR 403.5.
  3. **The Publicly Owned Treatment Works (POTW):** as defined by 40 CFR 403.3(q) and that discharges in accordance with this permit.
  4. **Program Submission(s):** requests for approval or modification of the POTW Pretreatment Program submitted in accordance with 40 CFR 403.11 or 403.18 and approved by USEPA on 8/17/1984.
  5. **Significant Industrial User (SIU):**
    - a) CIUs;
    - b) Except as provided in 40 CFR 403.3(v)(3), any other industrial user that discharges an average of 25,000 gallons per day or more of process wastewater (excluding sanitary, non-contact cooling and boiler blowdown wastewater) to the POTW;
    - c) Except as provided in 40 CFR 403.3(v)(3), any other industrial user that contributes a process waste stream which makes up 5 percent or more of the average dry weather hydraulic or organic capacity of the POTW treatment plant;
    - d) Any other industrial user that the permittee designates as having a reasonable potential for adversely affecting the POTW's operation or for violating a pretreatment standard or requirement.
  6. **Substances of Concern:** Substances identified by the New York State Department of Environmental Conservation Industrial Chemical Survey as substances of concern.
- B. **IMPLEMENTATION:** The permittee shall implement a POTW Pretreatment Program in accordance 40 CFR Part 403 and as set forth in the permittee's approved Program Submission(s). Modifications to this program shall be made in accordance with 40 CFR 403.18. Specific program requirements are as follows:
1. **Industrial Survey:** To maintain an updated inventory of industrial dischargers to the POTW the permittee shall:
    - a) Identify, locate and list all industrial users who might be subject to the industrial pretreatment program from the pretreatment program submission and any other necessary, appropriate and available sources. This identification and location list will be updated, at a minimum, every five years. As part of this update the permittee shall collect a current and complete New York State Industrial Chemical Survey form (or equivalent) from each SIU.
    - b) Identify the character and volume of pollutants contributed to the POTW by each industrial user identified in B.1.a above that is classified as a SIU.
    - c) Identify, locate and list, from the pretreatment program submission and any other necessary, appropriate and available sources, all SIUs of the POTW.
  2. **Control Mechanisms:** To provide adequate notice to and control of industrial users of the POTW the permittee shall:
    - a) Inform by certified letter, hand delivery courier, overnight mail, or other means which will provide written acknowledgment of delivery, all industrial users identified in B.1.a. above of applicable pretreatment standards and requirements including the requirement to comply with the local sewer use law, regulation or ordinance and any applicable requirements under section 204(b) and 405 of the Federal Clean Water Act and Subtitles C and D of the Resource Conservation and Recovery Act.

## INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

- b) Control through permit or similar means the contribution to the POTW by each SIU to ensure compliance with applicable pretreatment standards and requirements. Permits shall contain limitations, sampling frequency and type, reporting and self-monitoring requirements as described below, requirements that limitations and conditions be complied with by established deadlines, an expiration date not later than five years from the date of permit issuance, a statement of applicable civil and criminal penalties and the requirement to comply with Local Limits and any other requirements in accordance with 40 CFR 403.8(f)(1).
3. Monitoring and Inspection: To provide adequate, ongoing characterization of non-domestic users of the POTW, the permittee shall:
- Receive and analyze self-monitoring reports and other notices. The permittee shall require all SIUs to submit self-monitoring reports at least every six months unless the permittee collects all such information required for the report, including flow data.
  - The permittee shall adequately inspect each SIU at a minimum frequency of once per year.
  - The permittee shall collect and analyze samples from each SIU for all priority pollutants that can reasonably be expected to be detectable at levels greater than the levels found in domestic sewage at a minimum frequency of once per year.
  - Require, through permits, each SIU to collect at least one 24 hour, flow proportioned composite (where feasible) effluent sample every six months and analyze each of those samples for all priority pollutants that can reasonably be expected to be detectable in that discharge at levels greater than the levels found in domestic sewage. The permittee may perform the aforementioned monitoring in lieu of the SIU except that the permittee must also perform the compliance monitoring described in 3.c.
4. Enforcement: To assure adequate, equitable enforcement of the industrial pretreatment program the permittee shall:
- Investigate instances of noncompliance with pretreatment standards and requirements, as indicated in self-monitoring reports and notices or indicated by analysis, inspection and surveillance activities. Sample taking and analysis and the collection of other information shall be performed with sufficient care to produce evidence admissible in enforcement proceedings or in judicial actions. Enforcement activities shall be conducted in accordance with the permittee's Enforcement Response Plan developed and approved in accordance with 40 CFR Part 403.
  - Enforce compliance with all national pretreatment standards and requirements in 40 CFR Parts 406 - 471.
  - Provide public notification of significant non-compliance as required by 40 CFR 403.8(f)(2)(viii).
  - Pursuant to 40 CFR 403.5(e), when either the Department or the USEPA determines any source contributes pollutants to the POTW in violation of Pretreatment Standards or Requirements the Department or the USEPA shall notify the permittee. Failure by the permittee to commence an appropriate investigation and subsequent enforcement action within 30 days of this notification may result in appropriate enforcement action against the source and permittee.
5. Recordkeeping: The permittee shall maintain and update, as necessary, records identifying the nature, character, and volume of pollutants contributed by SIUs. Records shall be maintained in accordance with 6 NYCRR 750-2.5(c).
6. Staffing: The permittee shall maintain minimum staffing positions committed to implementation of the Industrial Pretreatment Program in accordance with the approved pretreatment program.
- C. SLUDGE DISPOSAL PLAN. The permittee shall notify NYSDEC, and USEPA as long as USEPA remains the approval authority, 60 days prior to any major proposed change in the sludge disposal plan. NYSDEC may require additional pretreatment measures or controls to prevent or abate an interference incident relating to sludge use or disposal.

## INDUSTRIAL PRETREATMENT PROGRAM IMPLEMENTATION REQUIREMENTS (continued)

- D. **REPORTING:** The permittee shall provide to the offices listed on the Monitoring, Reporting and Recording page of this permit and to the Chief-Water Compliance Branch, USEPA Region II, 290 Broadway, New York, NY 10007, a periodic report that briefly describes the permittee's program activities over the previous year. This report shall be submitted in accordance with the Schedule of Submittals to the above noted offices within 60 days of the end of the reporting period. The periodic report shall include:
1. **Industrial Survey:** Updated industrial survey information in accordance with 40 CFR 403.12(i)(1) (including any NYS Industrial Chemical Survey forms updated during the reporting period).
  2. **Implementation Status:** Status of Program Implementation, to include:
    - a) Any interference, upset or permit violations experienced at the POTW directly attributable to industrial users.
    - b) Listing of SIUs issued permits.
    - c) Listing of SIUs inspected and/or monitored during the previous reporting period and summary of results.
    - d) Listing of SIUs notified of promulgated pretreatment standards or applicable local standards who are on compliance schedules. The listing should include for each facility the final date of compliance.
    - e) Summary of POTW monitoring results not already submitted on Discharge Monitoring Reports and toxic loadings from SIU's organized by parameter.
    - f) A summary of additions or deletions to the list of SIUs, with a brief explanation for each deletion.
  3. **Enforcement Status:** Status of enforcement activities to include:
    - a) Listing of SIUs in significant non-compliance (as defined by 40 CFR 403.8(f)(2)(viii) with federal or local pretreatment standards at end of the reporting period.
    - b) Summary of enforcement activities taken against non-complying SIUs. The permittee shall provide a copy of the public notice of significant violators as specified in 40 CFR 403.8(f)(2)(viii).
- E. **ADDITIONAL PRETREATMENT CONDITIONS:**
1. **Notification of Material Change:** Facility shall notify the NYSDEC prior to the addition of any SIUs or CIUs which may materially change the nature of the discharge from the POTW or increase the discharge of one or more substances authorized in this permit or discharge a substance not currently authorized in this permit (6 NYCRR Part 750-2.9(a)(1)). The noticed act is prohibited until the Department determines whether a permit modification is necessary pursuant to 750-2.9(a)(2).



## SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall	Compliance Action	Compliance Date <sup>8</sup>
014	<p><u>Chlorine Dose-Response Disinfection Performance Study – Work Plan</u> The permittee shall submit an approvable work plan for a Chlorine Dose-Response Disinfection Performance Study to demonstrate effective disinfection (maximize pathogen inactivation/kill), identify surrogate wet-weather indicators for real-time control throughout wet-weather events, including Total Chlorine Concentration (C), Contact Time (T) and calculated CT value, and TRC.</p> <p>The Work Plan must include:</p> <ol style="list-style-type: none"> <li>Chlorine dose response testing during at least three different storm events that results in a discharge from the chlorine contact (CCT) (minimum discharge duration should be four hours over the CCT effluent weir)</li> <li>A minimum of two complete dose response tests during each storm event.</li> <li>Sampling/Metering/Calculation of the CT, chlorine dose, influent and effluent fecal coliform and enterococcus, enterococcus log reduction, TRC prior to dichlorination, and effluent TRC must be monitored/metered/calculated at the same frequency during the event</li> </ol>	6-Month prior to the Construction Completion of the Floatables Control and Disinfection Facility (Order on Consent R3-20100107-17)
014	<p><u>Chlorine Dose-Response Disinfection Performance Study – Summary Report</u> The permittee shall submit an approvable report summarizing the results of the Chlorine Dose-Response Disinfection Performance Study including the number of events, duration of events, samples collected, log-reduction calculation during each event, sampling results and analysis of data results must be provided to the Department. The study shall provide performance recommendations to meet the narrative effluent limit to maximize pathogen inactivation for variable storm durations, variations in flow, sufficient CT values, and chlorine dose variances. All data used in the analysis should be provided in a spreadsheet format.</p>	12-Month after Construction Completion of the Floatables Control and Disinfection Facility

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

b) The permittee shall submit a written notice of compliance or non-compliance with each of the above schedule dates no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All such compliance or non-compliance notification shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

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

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

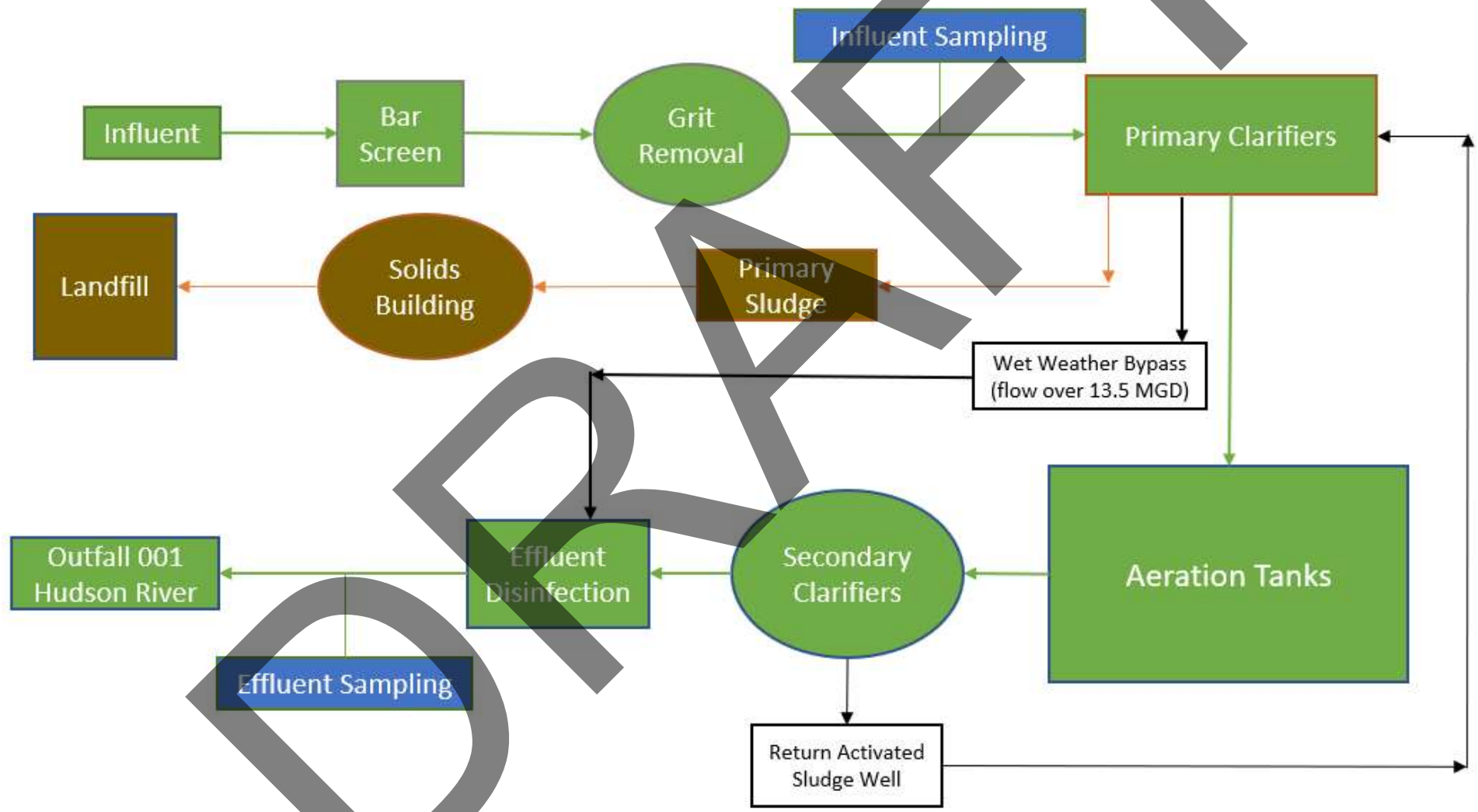
<sup>8</sup> 6 NYCRR Part 750-1.14

# MONITORING LOCATIONS – Outfall 001

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

Influent: after grit removal

Effluent: after chlorine contact tank

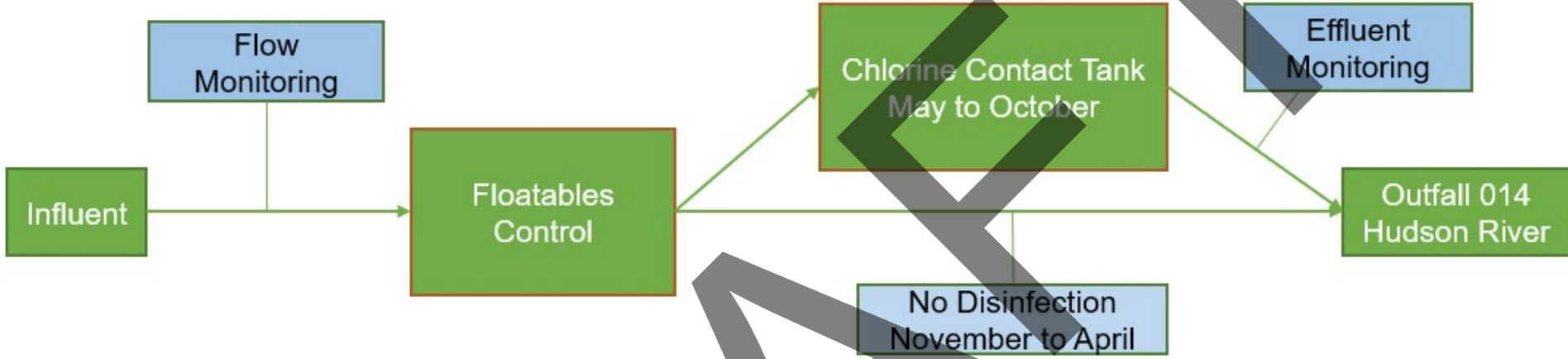




# MONITORING LOCATIONS – Outfall 014

Influent: Before Floatables Control

Effluent: before discharging to outfall



DRAFT

## 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 I as follows:
- B. General Conditions
- |  |   |
|--|---|
| 1. Duty to comply                                | 6 NYCRR 750-2.1(e) & 2.4                |
| 2. Duty to reapply                               | 6 NYCRR 750-1.16(a)                     |
| 3. Need to halt or reduce activity not a defense | 6 NYCRR 750-2.1(g)                      |
| 4. Duty to mitigate                              | 6 NYCRR 750-2.7(f)                      |
| 5. Permit actions                                | 6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h) |
| 6. Property rights                               | 6 NYCRR 750-2.2(b)                      |
| 7. Duty to provide information                   | 6 NYCRR 750-2.1(i)                      |
| 8. Inspection and entry                          | 6 NYCRR 750-2.1(a) & 2.3                |
- C. Operation and Maintenance
- |                                   |                                      |
|-----------------------------------|--------------------------------------|
| 1. Proper Operation & Maintenance | 6 NYCRR 750-2.8                      |
| 2. Bypass                         | 6 NYCRR 750-1.2(a)(17), 2.8(b) & 2.7 |
| 3. Upset                          | 6 NYCRR 750-1.2(a)(94) & 2.8(c)      |
- D. Monitoring and Records
- |                           |  |
|---------------------------|--|
| 1. Monitoring and records | 6 NYCRR 750-2.5(a)(2), 2.5(a)(6), 2.5(c)(1), 2.5(c)(2), & 2.5(d) |
| 2. Signatory requirements | 6 NYCRR 750-1.8 & 2.5(b)   |
- E. Reporting Requirements
- |   |                             |
|---|-----------------------------|
| 1. Reporting requirements                     | 6 NYCRR 750-2.5, 2.7 & 1.17 |
| 2. Anticipated noncompliance                  | 6 NYCRR 750-2.7(a)          |
| 3. Transfers                                  | 6 NYCRR 750-1.17            |
| 4. Monitoring reports                         | 6 NYCRR 750-2.5(e)          |
| 5. Compliance schedules                       | 6 NYCRR 750-1.14(d)         |
| 6. 24-hour reporting                          | 6 NYCRR 750-2.7(c) & (d)    |
| 7. Other noncompliance                        | 6 NYCRR 750-2.7(e)          |
| 8. Other information                          | 6 NYCRR 750-2.1(f)          |
| 9. Additional conditions applicable to a POTW | 6 NYCRR 750-2.9             |
- F. Planned Changes
1. The permittee shall give notice to the Department as soon as possible of planned physical alterations or additions to the permitted facility when:
    - a. The alteration or addition to the permitted facility may meet any of the criteria for determining whether facility is a new source in 40 CFR §122.29(b); or
    - b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject either to effluent limitations in the permit, or to notification requirements under 40 CFR §122.42(a)(1); or
    - c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

In addition to the Department, the permittee shall submit a copy of this notice to the United States Environmental Protection Agency at the following address: U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866.

## GENERAL REQUIREMENTS (continued)

### 2. Notification Requirement for POTWs

All POTWs shall provide adequate notice to the Department and the USEPA of the following:

- a. Any new introduction of pollutants into the POTW from an indirect discharger which would be subject to section 301 or 306 of CWA if it were directly discharging those pollutants; or
- b. Any substantial change in the volume or character of pollutants being introduced into that POTW by a source introducing pollutants into the POTW at the time of issuance of the permit.
- c. For the purposes of this paragraph, adequate notice shall include information on:
  - i. the quality and quantity of effluent introduced into the POTW, and
  - ii. any anticipated impact of the change on the quantity or quality of effluent to be discharged from the POTW.

POTWs shall submit a copy of this notice to the United States Environmental Protection Agency, at the following address:

U.S. EPA Region 2, Clean Water Regulatory Branch, 290 Broadway, 24th Floor, New York, NY 10007-1866

### G. Sludge Management

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

### H. SPDES Permit Program Fee

The permittee shall pay to the Department an annual SPDES permit program fee within 30 days of the date of the first invoice, unless otherwise directed by the Department, 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.

### I. Water Treatment Chemicals (WTCs)

New or increased use and discharge of a WTC requires prior Department review and authorization. At a minimum, the permittee must notify the Department in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The Department 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 Department. 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 in writing by the Department.
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 that 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 Department's website at: <http://www.dec.ny.gov/permits/93245.html>

## RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by NYSDEC. Instructions on the use of NetDMR can be found at <https://www.dec.ny.gov/chemical/103774.html>. **Hardcopy paper DMRs will only be received at the address listed below, directed to the Bureau of Water Compliance, if a waiver from the electronic submittal requirements has been granted by DEC to the facility.**

Attach the monthly "Wastewater Facility Operation Report" (form 92-15-7) and any required DMR attachments electronically to the DMR or with the hardcopy submittal.

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

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

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

Department of Environmental Conservation  
 Regional Water Engineer, Region 3  
 220 White Plains Road, Suite 110, Tarrytown, NY 10591 Phone: (914) 803-8157

- D. Bypass and Sewage Pollutant Right to Know Reporting: In accordance with the Sewage Pollutant Right to Know Act (ECL § 17-0826-a), Publicly Owned Treatment Works (POTWs) are required to notify DEC and Department of Health within two hours of discovery of an untreated or partially treated sewage discharge and to notify the public and adjoining municipalities within four hours of discovery. Information regarding reporting and other requirements of this program may be found on the Department's website. In addition, POTWs are required to provide a five-day incident report and supplemental information to the DEC in accordance with Part 750-2.7(d) by utilizing the Division of Water Report of Noncompliance Event form unless waived by DEC on a case-by-case basis.

- E. Schedule of Additional Submittals:

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

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	Required Action	Due Date
001	<u>WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM</u> The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	Attach to the December DMR

<b>SCHEDULE OF ADDITIONAL SUBMITTALS</b>		
<b>Outfall(s)</b>	<b>Required Action</b>	<b>Due Date</b>
001	<p><u>ANNUAL FLOW CERTIFICATION</u>  The permittee shall submit an Annual Flow Certification form each year in accordance with 750-2.9(C)(4). The form shall be attached to the February DMR or submitted through nForm.</p>	February DMR (March 28 <sup>th</sup> )
001	<p><u>BIENNIAL POLLUTANT SCAN</u>  The permittee shall implement an ongoing monitoring program and perform effluent sampling every two years as specified in footnote of the permit limits table.</p>	Retain and submit with next NY-2A Application
001	<p><u>WHOLE EFFLUENT TOXICITY (WET) TESTING</u>  WET testing shall be performed as required in the footnote of the permit limits table. The toxicity test report including all information requested of this permit shall be attached to your WET DMRs and sent to the <a href="mailto:WET@dec.ny.gov">WET@dec.ny.gov</a> email address.</p>	Within 60 days following the end of each monitoring period
001, 014	<p><u>WET WEATHER OPERATIONS PLAN (WWOP) – WASTEWATER TREATMENT PLANT AND THE FLOATABLES CONTROL AND DISINFECTION FACILITY</u>  The permittee shall submit an updated WWOP for the Wastewater Treatment Facility and Floatables Control and Disinfection Facility.</p> <p>The WWOP shall outline the optimum Wastewater Treatment Plant operational procedures to transition from dry weather operation mode to wet weather operation mode, and back to dry weather operation mode. These procedures shall be used to optimize the treatment of the maximum volume of wet weather flows possible at the treatment plant during wet weather events, while minimizing discharges through combined sewer overflows and meeting the effluent limitations in this permit.</p> <p>The WWOP shall also incorporate recommendations from the approved Chlorine Dose-Response Disinfection Performance Study and outline the optimum Floatables Control and Disinfection Facility operational procedures. These procedures shall be used to optimize the treatment (pathogen kill) of the maximum volume of wet weather flows possible at the treatment plant during wet weather events, while minimizing discharges of TRC to the receiving water.</p>	6-Month after Approval of the Chlorine Dose-Response Disinfection Performance Study
001	<p><u>COMBINED SEWER OVERFLOW (CSO) ANNUAL REPORT</u>  The permittee shall submit a Combined Sewer Overflows (CSO) Annual Report, which summarizes the implementation of BMPs and the Long-Term Control Plan (if applicable) via nForm (<a href="https://www.dec.ny.gov/pubs/95925.html">https://www.dec.ny.gov/pubs/95925.html</a>). Additional information regarding CSO Annual Report is available on-line at <a href="https://www.dec.ny.gov/chemical/48595.html">https://www.dec.ny.gov/chemical/48595.html</a></p>	January 31 <sup>st</sup> Each Year
014	<p><u>PUBLIC NOTIFICATION – INSTALL OUTFALL SIGN FOR OUTFALL 014</u>  Permittee shall install identification sign for outfall 014, owned and operated by the permittee. The sign shall be placed at or near the outfall and be easily readable by the public and follow the guidelines contained in this permit.</p>	In Accordance with Order on Consent No. R3-20100107-17

<b>SCHEDULE OF ADDITIONAL SUBMITTALS</b>		
<b>Outfall(s)</b>	<b>Required Action</b>	<b>Due Date</b>
001, 014	<u>POST-CONSTRUCTION COMPLIANCE MONITORING (PCCM) PLAN</u> Permittee shall submit an updated approvable PCCM plan (PCCMP) that (a) is adequate to ascertain the effectiveness of the CSO controls and (b) can be used to verify attainment of water quality standards. The PCCMP must include the proposed sampling locations, sampling schedule, details on how effectiveness of the CSO controls will be assessed, and a Quality Assurance Project Plan (QAPP) that details the monitoring protocols to be followed, where appropriate, including CSO and ambient monitoring.	6-Month before the Construction Completion of all LTCP projects under Order on Consent No. R3-20100107-17
	<u>PCCM PROGRAM REPORT</u> The permittee shall submit a PCCM Program Report as detailed in the SPECIAL CONDITIONS: CSO CONTROL POLICY section of this permit. The initial report shall be due by March 31 <sup>st</sup> in the year following the initial 2-year sampling period. Subsequent PCCM Program Reports shall be submitted by March 31 <sup>st</sup> in years ending in 2 and 7.	March 31 <sup>st</sup> of PCCMP Approval + 2 Years, and March 31 <sup>st</sup> of subsequent years ending in 2 and 7 thereafter
	<u>SENSITIVE AREA REASSESSMENT REPORT</u> The permittee shall submit a report, separately from the PCCM Program Report, that presents the results of the sensitive area reassessment, feasible improvements to eliminate or minimize overflows to sensitive areas, and the permittee's recommendation regarding the elimination or relocation of these outfalls. The permittee shall submit such reports by December 31 <sup>st</sup> in the same year the PCCM Program Report is submitted.	December 31 <sup>st</sup> of same year PCCM Program Report submitted
001	<u>STORMWATER NO EXPOSURE CERTIFICATION</u> 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 NYSDEC website.	12/8/2025, and every 5 years thereafter
001	<u>MERCURY MINIMIZATION PLAN</u> The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	<b>Maintained Onsite</b> EDP + 12 months, annually thereafter
001	<u>PRETREATMENT PROGRAM</u> Submit a report that briefly describes the permittee's program activities over the previous year. The report shall follow the guidelines contained in this permit and be submitted to the Regional Water Engineer and the Bureau of Water permits as well as the USEPA Region II office.	October 30 <sup>th</sup> Each Year (Within 60 days following the end of each reporting period)

<b>SCHEDULE OF ADDITIONAL SUBMITTALS</b>		
<b>Outfall(s)</b>	<b>Required Action</b>	<b>Due Date</b>
001	<p><u><b>EMERGING CONTAMINANT SHORT-TERM MONITORING PROGRAM</b></u>            The permittee shall collect grab samples of both the influent and effluent from the facility's treatment system(s) associated with the identified outfall for Per- and Polyfluoroalkyl Substances (PFAS) and 1,4-Dioxane (1,4-D), unless permittee receives written notification from the Department during this time that sampling can be discontinued. Samples must be analyzed utilizing EPA draft analytical method 1633 and EPA Method 8270D SIM or 8270E SIM, respectively. The samples must represent normal discharge conditions and treatment operations and shall be obtained on a quarterly basis for at least 4 consecutive quarters, unless written notification from the Department indicates otherwise.            The results shall be reported through the "Emerging Contaminants Survey for POTWs" found at: <a href="https://www.dec.ny.gov/chemical/127939.html">https://www.dec.ny.gov/chemical/127939.html</a>.</p> <p>The permittee shall initiate track down of potential sources by completing the "Emerging Contaminants Investigation Checklist for POTWs" available at the above link.            The Department may periodically request updates and/or additional monitoring to check progress on track down investigations. Elements of the checklist may be used as permit conditions in future permit modifications.</p>	<p>EDP + 14 months</p> <p>Within 90 days of DEC written notification</p>

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

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

Permittee: City of Newburgh  
Facility: Newburgh Wastewater Treatment Plant  
SPDES Number: NY0026310  
USEPA Major/Class 05 Municipal

Date: November 4, 2022 v.1.13  
Permit Writer: Joshua Lin  
Water Quality Reviewer: Joshua Lin  
Full Technical Review

# **SPDES Permit Fact Sheet City of Newburgh Newburgh Wastewater Treatment Plant NY0026310**



**Department of  
Environmental  
Conservation**



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## Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) EBPS permit renewal with changes requested by the permittee has been drafted for the Newburgh Wastewater Treatment Plant. The changes to the permit are summarized below:

### Updates:

- Updated permit format, definitions, and general conditions
- Changed Total Cadmium's action level to monitoring
- Reduced the WET action levels from 32.25 TUa and 215 TUc to 15 TUa and 100 TUc
- Updated the Long Term Control Plan requirement pages to Special Conditions: CSO Control Policy
- Updated Stormwater Pollution Prevention Requirements
- Updated Recording, Reporting and Additional Monitoring Requirements

### New:

- Added new daily maximum Mercury limit of 50 ng/L
- Added new Biennial Pollutant Scan requirement
- Added new limitations for Floatables Control and Disinfection Facility discharges
- Added new Mercury Minimization Program – Type I
- Added Schedule of Compliance for milestones associated with Floatables Control and Disinfection Facility
- Added Monitoring Locations section

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

## Administrative History

- 7/1/2003      The last full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 7/1/2008. The 2003 permit, along with all subsequent modifications, has formed the basis of this permit.
- The permit was administratively renewed in 2008. Per DEC and EPA agreement, DEC no longer administratively renews EPA Major permits after 2012.
- 5/1/2010      The permit was modified to extend disinfection season, extend deadline to submit Long Term Control Plan (LTCP), and update deliverables related to the LTCP.
- 9/15/2015      The current permit was extended pursuant to SAPA<sup>1</sup>.
- 10/27/2022    The City of Newburgh submitted a NY-2A permit application.

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

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<sup>1</sup> State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(I)

## Facility Information

This facility is a publicly owned treatment works that receives flow from domestic and industrial users, including waste from categorical industrial users, with effluent consisting of treated sanitary, stormwater and process wastewater. The collection system consists of both separate and combined sewers. The facility accepts flow from significant industrial users (SIUs).

The current 9 MGD treatment plant consists of:

- Preliminary Treatment: Screening, Grit Removal
- Primary Treatment: Primary Clarification
- Secondary Treatment: Activated Sludge (Aeration & Final Clarification)
- Disinfection: Chlorine Disinfection

Sludge is pressed and hauled to a landfill.

The primary outfall (Outfall 001) is a submerged outfall extending approximately 300 feet from riverbank. Discharge is approximately 20 feet below mean low water level surface. The outfall pipe is 220' of 48-inch pressure rated HDPE, then reduces to 42-inch pressure rated HDPE, where the diffuser assembly begins. The diffuser assembly outfall pipe reduces to 28-inch pressure rated HDPE, with a 28"x14" eccentric reducer for the discharge point. The outfall is anchored with riprap.

The facility does not have any planned improvements. An adjacent and hydraulically connected CSO disinfection and floatables control facility will be built. See description of the project below.

The facility accepts wastewater from the following municipalities:

Municipality	POSS # or SPDES #	Collection System
City of Newburgh	NY0026310	Combined
Town of Newburgh	NYS300057	Separate

The facility accepts wastewater from the following significant industrial users (SIUs):

Significant Industrial User (SIU)	SIC Code	Categorical Reference (if applicable to 40 CFR)
City of Newburgh Water Treatment Plant	4941	NA
Unitex Rental Services	7218	NA
Newburgh Metals	3471	40 CFR 433
Miller Environmental	8999	40 CFR 437

During wet-weather events, combined sewage is also permitted, under special conditions, to be discharged through the following Combined Sewer Overflows (CSOs):

- CSO Outfall 002 – no treatment provided
- CSO Outfall 003 – no treatment provided
- CSO Outfall 004 – no treatment provided
- CSO Outfall 005 – no treatment provided
- CSO Outfall 006 – no treatment provided
- CSO Outfall 007 – no treatment provided
- CSO Outfall 008 – no treatment provided
- CSO Outfall 009 – no treatment provided
- CSO Outfall 010 – no treatment provided
- CSO Outfall 011 – no treatment provided

- CSO Outfall 012 – no treatment provided
- CSO Outfall 013 – no treatment provided
- CSO Outfall 014 – a CSO floatables and disinfection facility directly upstream of the treatment plant is currently under design and construction, as required by the Order on Consent R3-20110107-17 (see Enforcement History). The new CSO facility will be designed with a peak hydraulic capacity of 40 MGD and will include the following:
  - Mechanically raked CSO screens to remove floatables
  - Regulating gate with real-time controls associated with the influent flow to the Newburgh Wastewater Treatment Plant
  - Chlorine contact tanks to disinfect and dechlorinate. The chlorine contact tank will be designed to provide 15 minutes of contact time at a wet weather flow of 31 MGD
  - Chemical addition building that will include chemical storage tanks, chemical dosing pumps and controls for both sodium hypochlorite and sodium bisulfite, odor control and a chemical filling station
  - A new outfall sewer to the Hudson River
  - A pump station to drain the chlorine contact tank to the treatment plant after a wet weather event is completed

## Site Overview



### Enforcement History

The facility is operating under Order on Consent R3-20150521-54/R3-20151028-97, dated 9/28/2016. The Order requires the following compliance actions:

- Develop an engineering report to address SPDES limit violations
- Develop and implement an asset management plan

The facility is also under Order on Consent R3-20110107-17, dated 9/10/2021 to address CSOs. The Order requires the following compliance actions:

- Promote Green Infrastructure
- Sewer Separation and/or Reconstruction
- Interceptor Improvements
- CSO Screening and Disinfection

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

### Existing Effluent Quality

The [Pollutant Summary Table](#) presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports (DMRs) submitted by the permittee for the period 5/1/2017 to 4/30/2022. In addition, data from the NY-2A Application, submitted by the City of Newburgh in October 2022, was used to supplement the DMR information. [Appendix Link](#)

### Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	4952	Treated Sanitary, Stormwater and Process Water	Hudson River, Class B
002 to 014	4952	Combined Sewer Overflows	Hudson River, Class B

**Reach Description:** Hudson River mainstream (6 NYCRR 858.4 Table I – Item 1) is a class B waterbody. The Hudson River is 0.8 mile wide near the outfall location and the nearest discharger is 0.5 mile downstream.

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

### Impaired Waterbody Information

The Hudson River (portion 3) segment (PWL No. 1301-0003) was first listed on the 1998 [NYS 303\(d\) List of Impaired/TMDL Waters](#) of Impaired/TMDL Waters as impaired due to PCBs from Contaminated Sediment. The segment continues to be listed as of the 2018 NYS Section 303(d) List. A TMDL has not been developed to address the impairment, and therefore, there are no applicable wasteload allocations (WLAs) for this facility. The draft 2020-2022 303(d) List proposed to delist the PCBs due to flaws in the original analysis.



### Critical Receiving Water Data & Mixing Zone

The low flow condition for the Hudson River was obtained from USGS gage station 01358000, Hudson River at Green Island located approximately 85 miles upstream of outfall 001. The 1Q10, 7Q10 and 30Q10 flows at the gage were found from the USGS SW Toolbox software and an analysis of data from 1946 to 2021.

***RESULTS: USGS 01358000 HUDSON RIVER AT GREEN ISLAND NY***			
File Edit View Help			
All available data from Apr 1, 1946 through Mar 31, 2021 are included in analysis		Display Options:	01358000
Climatic year defined as Apr 1 - Mar 31.		Copy to Clipboard	
Seasonal Calculation?	No		
Season Or Year Start	1-Apr		
Season Or Year End	31-Mar		
Years Included in Calculations	1946~2021		
Start	1946		
End	2021		
Flow Statistic	Flow Value	Percentile	x-day avg. Excur. per 3 yr.
1B3	1,707.1	0.10%	0.96
4B3	2,658.7	1.12%	0.96
30B3	3,858.9	5.92%	1
Flow Statistic	Flow Value	Percentile	1-day Excur. per 3 yr.
1Q10	1,466.4	0.03%	0
7Q10	2,821.7	1.47%	1.04
30Q10	3,320.4	3.19%	2.08
Harmonic Mean	8,535.8	40.73%	N/A
Harmonic Mean, Adjusted	8,236.7	39.01%	N/A

Double-click on biological flow value (xBy column) to view excursion analysis result for a gage

\*Unit for 1Q10, 7Q10, and 30Q10 flows is CFS

DRAINAGE BASIN RATIO	1Q10	7Q10	30Q10	
Gage Name		Hudson River at Green Island		
Gage ID Number		"01580000"		
Low Flow at Gage (cfs)	1466	2821	3320	SW Toolbox 01358000
Drainage Area at Gage (mi <sup>2</sup> )	8100	8100	8100	USGS Streamstats
Drainage Area at Facility (mi <sup>2</sup> )	12100	12100	12100	USGS Streamstats
Drainage Basin Ratio (facility / gage)	1.5	1.5	1.5	
Calculated Flow at Facility (cfs)	2189.95	4214.09	4959.51	

Facility Flow: 9 MGD (14 CFS)

Dilution Ratio = (Facility Flow + Low Flow) / Facility Flow

The critical flow conditions were adjusted using drainage area comparison. Since the calculated dilution ratios are exceeding the allowable values (50:1 for acute and 100:1 for chronic and HEW), consistent with TOGS 1.3.1, the dilution ratios are being limited to 50:1 for acute and 100:1 for chronic and HEW.

Outfall No.	Acute Dilution Ratio A(A)	Chronic Dilution Ratio A(C)	Human, Aesthetic, Wildlife Dilution Ratio (HEW)	Basis
001	50:1	100:1	100:1	TOGS 1.3.1

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

## Permit Requirements

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

### Whole Effluent Toxicity (WET) Testing

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

- Treatment plants which equal or exceed a discharge of 1MGD. (#7)

Consistent with TOGS 1.3.2, a reasonable potential analysis was performed using the existing WET data for this facility (see data below). It was determined that while the analysis indicated no potential for toxicity in the effluent, WET testing is required based on the criteria listed above and WET action levels are being added to the permit. Given the dilution available and location outside of the Great Lakes basin, the permit requires acute and if necessary chronic WET testing. Samples will be collected quarterly during the years ending 1 and 6. WET testing action levels of 15 TUa and 100 TUC have been included in the permit for each species. The acute action level for each species represent the acute dilution ratio times a factor of 0.3. The chronic action levels represent the chronic dilution ratio.

Test Date	<sup>1</sup> MSS 48H LC50 (%Effluent)	<sup>2</sup> MSS TUa	<sup>3</sup> TUa Action Level	<sup>4</sup> MSS Survival 100% Effluent	<sup>5</sup> Acute Test Result	<sup>6</sup> MSS RPD TUa	<sup>7</sup> Acute WET Limit Required	<sup>8</sup> Predicted MSS TUc	<sup>9</sup> TUc Action Level	<sup>10</sup> Chronic Test Result	<sup>11</sup> MSS RPD TUc	<sup>12</sup> Chronic WET Limit Required
01/21	> 100% (FI)	< 0.3 (FI)	32.3	100% (FI)	Pass	< 0.8	No	< 10.0 (FI)	215.0	Pass	< 26.0	No
04/21	> 100% (FI)	< 0.3 (FI)	32.3	100% (FI)	Pass	< 0.8	No	< 10.0 (FI)	215.0	Pass	< 26.0	No
07/21	> 100% (FI)	< 0.3 (FI)	32.3	100% (FI)	Pass	< 0.8	No	< 10.0 (FI)	215.0	Pass	< 26.0	No
10/21	> 100% (FI)	< 0.3 (FI)	32.3	90% (I)	Pass	< 0.8	No	< 10.0 (FI)	215.0	Pass	< 26.0	No

<sup>1</sup>Most Sensitive Species 48-hour Lethal Concentration: (F=Fish; I=Invertebrate) is the concentration or percentage of effluent that is lethal to 50% of the exposed organisms over a 48-hour period, and often indicates one species is more sensitive than the other during effluent testing.

<sup>2</sup>Most Sensitive Species Toxic Units Acute: is calculated as  $(100 / \text{MSS 48H LC50})$ . However, because  $\leq 0.3$  TUa is defined as the acceptable amount of acute toxicity at the edge of the acute mixing zone, and mathematically  $100 / 100 = 1.0$  (i.e. a "failing result"), non-toxic acute test results are indicated as  $< 0.3$ .

<sup>3</sup>Toxic Unit Acute Action Level/Limit: is calculated as  $[\text{Acute Dilution Factor} \times 0.3 \text{ TUa}]$  representing the maximum allowable effluent TUa at the edge of the acute mixing zone using the seven-day once-in-ten year low flow (7Q10) ensuring acute protection of the receiving water. When the Acute Dilution Factor is  $< 3.3$ , the default Acute Action Level of 0.3 TUa is used representing the maximum allowable effluent TUa at the end of pipe.

<sup>4</sup>Most Sensitive Species Survival in 100% Effluent: is the lowest percentage of surviving organisms in 100% effluent, providing additional evidence of unacceptable acute toxicity when the necessary 50% or greater mortality required to generate an LC50 has not been attained. \*Denotes statistically significant mortality as compared to the control.

<sup>5</sup>Acute Test Result: MSS TUa  $\leq$  TUa Action Level/Limit for passing effluent test result and MSS TUa  $>$  TUa Action Level/Limit for a failing effluent test result. If unacceptable mortality (i.e. statistically significant as compared to the control), this may also be considered a failing test result.

<sup>6</sup>Most Sensitive Species Reasonable Potential Determination Toxic Units Acute: is calculated as  $(\text{MSS TUa} \times 2.6)$ , the Reasonable Potential Multiplier when four quarterly tests have been completed, taking into account the statistical potential for effluent variability to occur causing an exceedance of the toxicity-based action level.

<sup>7</sup>Acute Whole Effluent Toxicity Limit Required: MSS RPD TUa  $\leq$  TUa Action Level, then no toxicity-based limit is required, and the action level remains in place. If MSS RPD TUa  $>$  TUa Action Level, then a toxicity-based limit is required, and the action level becomes the limit. \*\*In low dilution situations, the application of the RPD to the acute results often mathematically suggests the need for acute WET limits even when there is no toxicity evident in 100% effluent (a non-detect). Therefore, this data cannot be used to implement a WET limit.

<sup>8</sup>Predicted Most Sensitive Species Toxic Units Chronic: is calculated as  $(\text{MSS TUa} \times 10)$  the default Acute:Chronic ratio used to predict chronic toxicity from acute test results in the absence of chronic testing. When MSS TUa is  $< 0.3$ ,  $< 1.0$  should be used for the calculation since this is defined as the acceptable amount of chronic toxicity at the edge of the chronic mixing zone. In Class A/SA, B/SB, and C/SC waters, we must ultimately protect for chronic toxicity.

<sup>9</sup>Toxic Unit Chronic Action Level/Limit: is calculated as  $[\text{Chronic Dilution Factor} \times 1.0 \text{ TUc}]$  representing the maximum allowable effluent TUc at the edge of the chronic mixing zone using the seven-day once-in-ten year low flow (7Q10) ensuring chronic protection of the receiving water.

<sup>10</sup>Chronic Test Result: MSS TUc  $\leq$  TUc Action Level/Limit for passing effluent test result and MSS TUc  $>$  TUc Action Level/Limit for a failing effluent test result.

<sup>11</sup>Most Sensitive Species Reasonable Potential Determination Toxic Units Chronic: is calculated as  $(\text{MSS TUc} \times 2.6)$ , the Reasonable Potential Multiplier when four quarterly tests have been completed, taking into account the statistical potential for effluent variability to occur causing an exceedance of the toxicity-based action level.

<sup>12</sup>Chronic Whole Effluent Toxicity Limit Required: MSS RPD TUc  $\leq$  TUc Action Level, then no toxicity-based limit is required, and the action level remains in place. If MSS RPD TUc  $>$  TUc Action Level, then a toxicity-based limit is required, and the action level becomes the limit. \*\*\*In low dilution situations, the combined application of the default ACR and RPD to the acute results often mathematically suggests the need for chronic WET limits even when there is no toxicity evident in 100% effluent (a non-detect). Therefore, this data cannot be used to implement a WET limit.



### Anti-backsliding

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

### [Appendix Link](#)

### Antidegradation

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

### Discharge Notification Act Requirements

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

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

### Requirements for Combined Sewer Overflows (CSOs)

#### [Appendix Link](#)

#### Best Management Practices (BMPs) for Combined Sewer Overflows (CSOs)

The BMPs for CSOs require the permittee to implement operation and maintenance procedures<sup>3</sup>; use the existing treatment plant and collection system to the maximum extent practicable; effect sewer design replacement and drainage planning; maximize pollutant capture; and minimize water quality impacts from combined sewer overflows. The submittal requirements are summarized in the [Schedule of Additional Submittals](#). This requirement is being continued from the previous permit.

#### Long-Term Control Plan (LTCP)

CSO discharges from the permittee are being addressed under the LTCP, submitted 1/1/2013, and approved by the Department on 1/5/2016. LTCP requirements are required under Order on Consent # R3-20100107-17. The LTCP projects are being implemented in five phases:

	Projects
Phase I	Green Infrastructure, and Regulator #2 Upgrade
Phase II	Sewer Separations, Treatment Plant Screening Upgrade, New Storm Drain, and Sewer Reconstruction
Phase III	North Interceptor Improvement
Phase IV	CSO Disinfection
Phase V	South Interceptor Improvement

<sup>2</sup> As prescribed by 6 NYCRR Part 617

<sup>3</sup> See 6 NYCRR 750-2.8(a)(2)

All Phase I projects have been completed and majority of the Phase II projects have been completed. Implementation of Phase III, IV and V projects are ongoing.

### Post-Construction Compliance Monitoring (PCCM)

PCCM is required by all CSO permittees to verify compliance with the EPA National CSO Control policy and evaluate attainment of NYS water quality standards. A PCCM plan was included in LTCP, and the plan recommended sampling to be performed every 5 years in years ending 0 and 5.

The proposed plan included the following activities:

1. Collection of flow and rainfall monitoring data within Newburgh's CSS.
2. Refinement of the Newburgh's CSS model to incorporate the implemented LTCP improvements and recalibration, as necessary
3. Collection of fecal coliform (and potentially other, if necessary) water quality data in Newburgh's receiving waters; and
4. Assessment of Newburgh's compliance with the typical year wet weather percent capture performance criterion.

An updated PCCM plan, to include additional parameters specified in the permit, will be required 6-month prior to the construction completion of all LTCP projects under the Order on Consent # R3-20100107-17.

### Sensitive Area Reassessment

The permit requires the reassessment of the feasibility of eliminating or relocating CSO outfalls discharging to sensitive areas. The reassessment is required once per permit term, or every five years.

### Stormwater Pollution Prevention Requirements

The facility is a publicly owned treatment works  $\geq 1$  MGD that requires SPDES permit coverage under 40 CFR 122.26 (b)(14)(ix).

On 12/8/2022, the permittee submitted a Conditional Exclusion for No Exposure Form, certifying that all industrial activities and materials are completely sheltered from exposure. This condition must be maintained for the exclusion to remain applicable. The schedule of submittals also includes a due date for re-certification every five years as required by 40 CFR 122.26(g)(iii). This requirement is new.

### Mercury<sup>4</sup>

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

The facility is an EPA Major, Class 05 POTW and will receive requirements for implementation of the MMP Type I and the permit includes requirements for the implementation of MMP Type I.

Based on 1 data point of 3.7 ng/L collected as part of the application the facility is expected to meet the new daily max permit limit of 50 ng/L (with monthly sampling frequency). The limit represents the general level currently achievable (GLCA). The data collected will be used to establish an additional 12-month rolling average effluent limit during the next permit review.

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

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

- Additional monitoring
- Control strategy for implementation of the MMP
- Annual status report (maintained onsite)

### Biennial Pollutant Scan

Three effluent samples for applicable parameters must be submitted with an NY-2A Application<sup>5</sup>. The permit includes a requirement to perform biennial sampling (once every two years) of the WWTP effluent for the parameters in the NY-2A Application, Tables A – D. This requirement ensures the data is representative of effluent conditions over the permit term and will be available for the next application submittal and permit review. This requirement is new.

### Industrial Pretreatment Program

The permittee is required to continue implementation of a USEPA-approved pretreatment program in accordance with 40 CFR Part 403 and TOGS 1.3.3. The program specifies continued implementation of an industrial user compliance program, submission of user information, modification of local sewer use law (if necessary), and periodic reporting.

### Emerging Contaminant Monitoring

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

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

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

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

### Schedule(s) of Compliance

A Schedule of Compliance is being included<sup>6</sup> for the following items ([Appendix Link](#)):

- Submittal of an approvable Chlorine Dose-Response Disinfection Performance Study
- Construction milestones for the Floatables Control and Disinfection Facility
- Wet Weather Operations Plan for Floatables Control and Disinfection Facility

<sup>5</sup> Pursuant to 40 CFR 122.21(j)(4)(vi).

<sup>6</sup> Pursuant to 6 NYCRR 750-1.14

Permittee: City of Newburgh  
Facility: Newburgh Wastewater Treatment Plant  
SPDES Number: NY0026310  
USEPA Major/Class 05 Municipal

Date: November 4, 2022 v.1.13  
Permit Writer: Joshua Lin  
Water Quality Reviewer: Joshua Lin  
Full Technical Review

### Schedule(s) of Additional Submittals

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

- Submit Water Treatment Chemical (WTC) Annual Report Form
- Submit Annual Flow Certification
- Perform Biennial Pollutant Scan
- Submit Whole Effluent Toxicity (Wet) Testing
- Submit Wet Weather Operations Plan for Wastewater Treatment Plant
- Submit Combined Sewer Overflow (CSO) Annual Report
- Public Notification – Install Outfall Sign for Outfall 014
- Submit Post-Construction Compliance Monitoring Plan
- Submit Stormwater No Exposure Certification
- Maintain Mercury Minimization Program Reports
- Submit Pretreatment Program Annual Report
- Submit Emerging Contaminant Short-Term Monitoring Program Result

## OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	41° 29' 41" N	74° 0' 17" W	Hudson River	B	H (portion 1) PWL: 1301-0003	13 / 01	89.1 <sup>7</sup>	1410	2720	3200	9	50:1	100:1	100:1

## POLLUTANT SUMMARY TABLE

### Outfall 001

Outfall #	001	Description of Wastewater: Treated Sanitary Waste													
		Type of Treatment: Grit removal, screening, primary clarification, activated sludge, secondary clarification and disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>8</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
<b>General Notes:</b> Existing discharge data from 11/01/2018 to 4/30/2022 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	MGD	12 MRA	9	6.9 Actual Average	60 / 0	9	Design Flow	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	TBEL	
	MGD	Monthly Avg	Monitor	7.0 Actual Average	60 / 0	Monitor	750-1.13 Monitor	Narrative: No alterations that will impair the waters for their best usages.				703.2	-	Monitor	
Consistent with TOGS 1.3.3, a 12-Month Rolling Average flow limitation equal to the average daily design capacity of the treatment plant is specified. Monthly Average flow will continue to be monitored for informational purposes and to calculate pollutant loadings.															
pH	SU	Minimum	6	6.5 min	60 / 0	6.0	TOGS 1.3.3	7.7 <sup>9</sup>	-	6.5 – 8.5	Range	-	-	-	TBEL
		Maximum	9	8.0 max	60 / 0	9.0									
Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given the available dilution an effluent limitation equal to the TBEL is reasonably protective of the WQS.															

<sup>7</sup> Ambient hardness data obtained from RIBS Station 13-LHUD-50.6 (Hudson River in Beacon). Effluent hardness (one sample) reported in the application is 84.1 mg/L.

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

<sup>9</sup> Ambient pH obtained from RIBS Station 13-LHUD-50.3, directly north from the wastewater treatment plant; one sample was taken on 6/15/2018.

Outfall #	001	Description of Wastewater: Treated Sanitary Waste													
		Type of Treatment: Grit removal, screening, primary clarification, activated sludge, secondary clarification and disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>8</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Temperature	°F	Daily Max	Monitor	78 max	60 / 0	Monitor	750-1.13 Monitor	28 °C <sup>10</sup>	Narrative (Estuary): The water temperature at the surface of an estuary shall not be raised to more than 90F at any point			704.2	-	Monitor	
	Consistent with 6 NYCRR 750-1.13(a), monitoring is required and may be used to inform future permitting decisions. This requirement is continued from the previous permit.														
Dissolved Oxygen (DO)	mg/L	Daily Min	<i>Not Currently Required</i>			-	-	7.48	7.45 Critical Point	(Non-Trout) 4.0 mg/L	Narrative	No Reasonable Potential	-	-	No Limitation
	The downstream DO concentration was modeled using the Streeter-Phelps equations and the following assumptions: Effluent DO = 0 mg/l (worst case), Effluent UOD = 211 mg/L; Effluent BOD <sub>5</sub> = 45 mg/L (permit limit), Effluent NOD = 153 mg/L (calculated from highest reported ammonia value, 21 mg/L as N). Reach Description: The model assumed 25 °C for both ambient and effluent temperature and no elevation change. The model was ran for 0.1 mile, and showed that DO standards are maintained and consequently WQBELs for DO, UOD, BOD, and Ammonia are unnecessary.														
5-day Biochemical Oxygen Demand (BOD <sub>5</sub> )	mg/L	Monthly Avg	30	12	52 / 8	30	TOGS 1.3.3	-	See Dissolved Oxygen	No Reasonable Potential	-	-	TBEL		
		7 Day Avg	45	42	60 / 0	45	TOGS 1.3.3								
	lbs/d	Monthly Avg	2300	780	58 / 2	2300	TOGS 1.3.3								
		7 Day Avg	3400	3600	60 / 0	3400	TOGS 1.3.3								
	% Rem	Minimum	85	93 avg	60 / 0	85	TOGS 1.3.3								
Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. See justification for Dissolved Oxygen.															
Total Suspended Solids (TSS)	mg/L	Monthly Avg	30	11	43 / 17	30	TOGS 1.3.3	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.	-	-	TBEL			
		7 Day Avg	45	47	55 / 5	45	TOGS 1.3.3								
	lbs/d	Monthly Avg	2300	720	54 / 6	2300	TOGS 1.3.3								
		7 Day Avg	3400	4300	58 / 2	3400	TOGS 1.3.3								
	% Rem	Minimum	85	84 avg	60 / 0	85	TOGS 1.3.3								
Consistent with TOGS 1.3.3 for POTWs, TBELs reflect secondary treatment standards. Given that adequate dilution is available, an effluent limitation equal to the TBEL, and consistent with TOGS 1.3.3, is reasonably protective of water quality standards.															

<sup>10</sup> Ambient temperature obtained from RIBS Station 13-LHUD-50.3, directly north from the wastewater treatment plant; one sample was taken on 8/14/2018

Outfall #	Description of Wastewater: Treated Sanitary Waste														
	Type of Treatment: Grit removal, screening, primary clarification, activated sludge, secondary clarification and disinfection														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>8</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Settleable Solids	mL/L	Daily Max	0.3	14 avg	25 / 35	0.3	TOGS 1.3.3	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages				703.2	-	TBEL
									Consistent with TOGS 1.3.3, the effluent limitation is equal to the TBEL of 0.3 mL/L for POTWs providing secondary treatment without filtration. Given that adequate dilution is available the TBEL is reasonably protective of WQS. The EEQ is the average of the 60 reported DMR values; 11 of the 60 values are greater than the 0.3 mL/L limit. Excessive flow during wet weather events caused the exceedances, the construction of the CSO floatables control and disinfection facility will address this issue.						
Nitrogen, Ammonia (as N)	mg/L	Daily Max	Monitor	21 max	59 / 0	Monitor	TOGS 1.3.3	0.082	0.29	1.2 Summer	A(C)	No Reasonable Potential	-	-	Monitor
										1.9 Winter					
The WQS for Ammonia was determined from TOGS 1.1.1 from a pH of 7.7 and a temperature of 25 °C (summer) and 10 °C (winter). The pH and temperature of the receiving waterbody were assumed values and consistent with TOGS 1.3.1E. The projected instream concentration was calculated using the maximum reported effluent concentration of 21 mg/L and an ambient upstream concentration of 0.082 mg/L. A multiplier <sup>11</sup> of 1 was applied to the maximum effluent concentration to account for the number of samples. In accordance with TOGS 1.3.1E, the HEW dilution ratio was applied to calculate the projected instream concentration. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no limitation is specified. Monitoring shall continue.															
Total Kjeldahl Nitrogen (TKN) (as N)	mg/L	Daily Max	Monitor	22 max	59 / 0	Monitor	TOGS 1.3.3	-	1.36	No Class B WQS	-	-	-	Monitor	
															The projected instream concentration was calculated using the maximum reported effluent concentration of 22 mg/L and an ambient upstream concentration of zero. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 1 was applied to the projected effluent to account for the number of samples. Since WQS for TKN does not exist for Class B waterbody, there is no reasonable potential. Due to continued detection, monitoring shall continue.
Total Mercury	ng/L	Daily Max	-	3.7	1 / 0	-	-	-	-	0.7	H(FC)	50	GLCA	-	DOW 1.3.10
Coliform, Fecal	#/100 ml	30d Geo Mean	200	25 max	15 / 13	200	TOGS 1.3.3	-	Narrative: The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.				703.4	-	TBEL
		7d Geo Mean	400	584 max	23 / 5	400	TOGS 1.3.3	-							
Consistent with TOGS 1.3.3, effluent disinfection is required seasonally from May 1st - October 31st, due to the class of the receiving waterbody. Fecal coliform limits equal to the TBEL are specified.															

<sup>11</sup> As recommended from EPA's Technical Support Document, Chapter 3.3



Permittee: City of Newburgh  
 Facility: Newburgh Wastewater Treatment Plant  
 SPDES Number: NY0026310  
 USEPA Major/Class 05 Municipal

Date: November 4, 2022 v.1.13  
 Permit Writer: Joshua Lin  
 Water Quality Reviewer: Joshua Lin  
 Full Technical Review

Outfall #	001	Description of Wastewater: Treated Sanitary Waste														
		Type of Treatment: Grit removal, screening, primary clarification, activated sludge, secondary clarification and disinfection														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement	
			Permit Limit	Existing Effluent Quality <sup>8</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL			
Total Residual Chlorine (TRC)	mg/L	Daily Max	2	2 max	30 / 0	2.0	TOGS 1.3.3	-	0.004	0.005	A(C)	No Reasonable Potential	-	0.03	TBEL	
Effluent disinfection is currently required seasonally and will remain a permit requirement. The WQBEL was calculated by multiplying the WQS by the chronic dilution ratio and a decay factor of five. Due to the high dilution, the calculated WQBEL is greater than the TBEL and an effluent limitation of 2.0 mg/L is appropriate. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation																
Total Copper	lb/d	Daily Max	3.6	4.4 max	58 / 0	3.6	Antibacksliding	-	0.84 ug/L dissolved	12 ug/L dissolved	A(A)	No Reasonable Potential	-	-	TBEL	
Since the permit does not require the reporting of concentration data, the maximum concentration of 0.076 mg/L was estimated using maximum loading (4.4 lb/d) and long-term average flow (6.9 mgd). The projected instream concentration was calculated using the estimated maximum effluent concentration of 76 ug/L and an ambient upstream concentration of zero. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 1 was applied to the projected effluent to account for the number of samples. A metals translator of 1.8 was applied to convert between the total and dissolved form in accordance with the TriBasin RIBS calculation. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Due to continued detection and antibacksliding, the existing limit has been continued. For future data evaluation and characterization of effluent, reporting of concentration has been added.																
Total Silver	mg/L	Daily Max	Monitor	<0.001	0 / 18	Monitor	BPJ	-	-	0.0001 dissolved	A(C)	No Reasonable Potential	-	-	Monitor	
Two data points from 2017 were omitted due to detection level issues. The facility switched to a new lab with lower detection levels and since November 2017, 18 samples were collected, and no detections have been reported. Therefore, there is no reasonable potential to cause or contribute to a WQS violation. Therefore, no limitation is specified. Due to expected presence in the influent from categorical industrial users, quarterly monitoring shall continue.																
Total Chromium	mg/L	Daily Max	Monitor	0.017 max	3 / 17	Monitor	BPJ	-	0.00024 dissolved	0.05 dissolved	H(W.S)	No Reasonable Potential	-	-	Monitor	
The projected instream concentration was calculated using the maximum reported effluent concentration of 0.017 mg/L and an ambient upstream concentration of zero. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 1.4 was applied to the projected effluent to account for the number of samples. A metals translator of 1.0 was applied to convert between the total and dissolved form in accordance with the TriBasin RIBS calculation. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Due to continued detection, quarterly monitoring shall continue.																
Total Zinc	mg/L	Daily Max	Monitor	0.092 max	20 / 0	Monitor	BPJ	-	0.0013 dissolved	0.1 dissolved	A(A)	No Reasonable Potential	-	-	Monitor	
The projected instream concentration was calculated using the maximum reported effluent concentration of 0.092 mg/L and an ambient upstream concentration of zero. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 1.4 was applied to the projected effluent to account for the number of samples. A metals translator of 2.0 was applied to convert between the total and dissolved form in accordance with the TriBasin RIBS calculation. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Due to continued detection and expected presence in the influent from categorical industrial users, quarterly monitoring shall continue.																

Outfall #	001	Description of Wastewater: Treated Sanitary Waste													
		Type of Treatment: Grit removal, screening, primary clarification, activated sludge, secondary clarification and disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality <sup>8</sup>	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Total Cadmium	lb/d	Daily Max	0.5 - AL	0.4 max	0 / 18	Monitor	BPJ	-	-	3.4 ug/L dissolved	A(A)	No Reasonable Potential	-	-	Monitor
Two data points from 2017 were omitted due to detection level issues. Since November 2017, 18 samples were collected and no detections have been reported. Therefore, there is no reasonable potential to cause or contribute to a WQS violation. Therefore, no limitation is specified. Due to lack of detections, action level has been changed to quarterly monitoring. For future data evaluation and characterization of effluent, reporting of concentration has been added															
Total Lead	lb/d	Daily Max	0.6 - AL	0.4 max	9 / 11	0.6 - AL	BPJ	-	0.04 ug/L dissolved	3.3 ug/L dissolved	A(C)	No Reasonable Potential	-	-	Action Level
Since the permit does not require the reporting of concentration data, the maximum concentration of 7 ug/L was estimated using maximum loading (0.4 lb/d) and long-term average flow (6.9 mgd). The projected instream concentration was calculated using the estimated maximum effluent concentration of 7 ug/L and an ambient upstream concentration of zero. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 1.4 was applied to the projected effluent to account for the number of samples. A metals translator of 2.5 was applied to convert between the total and dissolved form in accordance with the TriBasin RIBS calculation. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Due to continued detection, action level shall be continued. For future data evaluation and characterization of effluent, reporting of concentration has been added															
Total Phenols	lb/d	Daily Max	3.4 - AL	1.5 max	7 / 13	3.4 - AL	BPJ		0.73 ug/L	No Class B WQS	-	-	-	-	Action Level
Since the permit does not require the reporting of concentration data, the maximum concentration of 26 ug/L was estimated using maximum loading (1.5 lb/d) and long-term average flow (6.9 mgd). The projected instream concentration was calculated using the calculated maximum effluent concentration of 26 ug/L and an ambient upstream concentration of zero. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 1.4 was applied to the projected effluent to account for the number of samples. Since WQS for Total Phenols does not exist for Class B waterbody, there is no reasonable potential. Due to continued detection, action level shall be continued. For future data evaluation and characterization of effluent, reporting of concentration has been added															
Additional Pollutants Detected															
Total Phosphorus (as P)	mg/L	Daily Max	-	2.26	1 / 0	-	-	0.056 <sup>12</sup>	0.2	No Class B WQS	-	-	-	-	No Limitation
The projected instream concentration was calculated using the maximum reported effluent concentration of 2.26 mg/L and an ambient upstream concentration of 0.056 mg/L. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.2 was applied to the projected effluent to account for the number of samples. Since there are no Class B WQS, reasonable potential cannot be determined, thus no limitation or monitoring requirement is specified.															
Total Dissolved Solids (TDS)	mg/L	Daily Max	-	310	1 / 0	-	-	166 <sup>13</sup>	184	500	Narrative	No Reasonable Potential	-		No Limitation
The projected instream concentration was calculated using the maximum reported effluent concentration of 310 mg/L and an ambient upstream concentration of 166 mg/L. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.2 was applied to the projected effluent to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no limitation or monitoring requirement is specified.															

<sup>12</sup> Ambient data obtained from RIBS Station 13-LHUD-50.6 (Hudson River in Beacon). One Sample was taken on 8/14/2018.

<sup>13</sup> Ambient data obtained from RIBS Station 13-LHUD-50.6 (Hudson River in Beacon). One Sample was taken on 8/14/2018.

## 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
  - 6 NYCRR Part 621
  - 6 NYCRR Part 750
  - 6 NYCRR Parts 700 - 704 – Best use and other requirements applicable to water classes
  - 6 NYCRR Parts 800 – 941 - Classification of individual surface waters
- NYSDEC water program policy, referred to as Technical and Operational Guidance Series (TOGS)
- USEPA Office of Water Technical Support Document for Water Quality-based Toxics Control, March 1991, Appendix E

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

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

### Outfall and Receiving Water Information

#### Impaired Waters

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

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

### Existing Effluent Quality

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

### Permit Requirements

#### Basis for Effluent Limitations

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

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

#### Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(i) 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 law<sup>14</sup> and USEPA interpretation<sup>15</sup> anti-backsliding requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

#### Antidegradation Policy

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

#### Effluent Limitations

In developing a permit, the Department determines the technology-based effluent limitations (TBELs) and then evaluates the water quality expected to result from technology controls to determine if any exceedances of water quality criteria in the receiving water might result. If there is a reasonable potential for exceedances of water quality criteria to occur, water quality-based effluent limitations (WQBELs) are developed. A WQBEL is designed

<sup>14</sup> American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)

<sup>15</sup> U.S. EPA, Water Quality Standards; Establishment of Numeric Criteria for Priority Toxic Pollutants for the State of California; 65 Fed. Reg. 31682, 31704 (May 18, 2000); Proposed Water Quality Guidance for the Great Lakes System, 58 Fed. Reg. 20802, 20837 & 20981 (April 16, 1993)

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)*

CWA sections 301(b)(1)(B) and 304(d)(1), 40 CFR 133.102, ECL section 17-0509, and 6 NYCRR 750-1.11 require technology-based controls, known as secondary treatment. These and other requirements are summarized in TOGS 1.3.3. Where the TBEL is more stringent than the WQBEL, the TBEL is applied as a limit in accordance with TOGS 1.3.3. Equivalent secondary treatment, as defined in 40 CFR 133.105, allow for effluent limitations of the more stringent of the consistently achievable concentrations or monthly/weekly averages of 45/65 mg/l, and the minimum monthly average of at least 65% removal. Consistently achievable concentrations are defined in 40 CFR 133.101(f) as the 95th percentile value for the 30-day (monthly) average effluent quality achieved by the facility in a period of two years. The achievable 7-day (weekly) average value is equal to 1.5 times the 30-day average value calculated above. Equivalent secondary treatment applies to those facilities where the principal treatment process is either a trickling filter or a waste stabilization pond; the treatment works provides significant biological treatment of municipal wastewater; and, the effluent concentrations consistently achievable through proper operation and maintenance of the facility cannot meet traditional secondary treatment requirements. There are no federal technology-based standards for toxic pollutants from POTWs. A statistical analysis of existing effluent data, as described in TOGS 1.2.1, may be used to establish other performance-based TBELs.

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

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

#### *Mixing Zone Analyses*

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

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

#### *Critical Flows*

In accordance with TOGS 1.2.1 and 1.3.1, WQBELs are developed using dilution ratios that relate the critical low flow condition of the receiving waterbody to the critical effluent flow. The critical low flow condition used in the dilution ratio will be different depending on whether the limitations are for aquatic or human health protection. For chronic aquatic protection, the critical low flow condition of the waterbody is typically represented by the 7Q10 flow and is calculated as the lowest average flow over a 7-day consecutive period within 10 years. For acute aquatic protection, the critical low flow condition is typically represented by the 1Q10 and is calculated as the lowest 1-day flow within 10 years. However, NYSDEC considers using 50% of the 7Q10 to be equivalent to the 1Q10 flow. For the protection of human health, the critical low flow condition is typically represented by the 30Q10 flow and is calculated as the lowest average flow over a 30-day consecutive period within 10 years. However, NYSDEC considers using 1.2 x 7Q10 to be equivalent to the 30Q10. The 7Q10 or 30Q10 flow is used with the critical effluent flow to calculate



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

#### Reasonable Potential Analysis (RPA)

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

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

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

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

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

### *Whole Effluent Toxicity (WET) Testing:*

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

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

### *Minimum Level of Detection*

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

### *Monitoring Requirements*

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

### *Requirements for Combined Sewer Overflows (CSOs)*

Pollution from combined sewer overflows is controlled with implementation of SPDES permit conditions in accordance with the Division of Water CSO Control strategy (TOGS 1.6.3) and the USEPA CSO Control Policy issued April 11, 1994.



CWA Section 402(q) requires that each permit for a discharge from a municipal combined storm and sanitary sewer shall conform to EPA's Combined Sewer Overflow Control Policy.<sup>[1]</sup> The CSO Control Policy identifies specific requirements for Phase I and Phase II permits. Phase I permits must include requirements for the implementation of the Nine Minimum Controls (NMCs) and development of the Long-Term CSO Control Plan (LTCP).

The 15 CSO Best Management Practices (BMPs) required by NYS under TOGS 1.6.2 are equivalent to the "Nine Minimum Control Measures" required under the USEPA National Combined Sewer Overflow policy (33 USC section 1342(q)). BMPs are technology-based requirements developed in accordance with best professional judgement. These are largely non-structural measures which are designed to maximize pollutant capture and removal from the combined sewer system and the POTW as a whole.

Phase II permits must include requirements to implement the technology-based controls including the NMCs determined on a BPJ basis, as well as requirements which ensure that the selected CSO controls are implemented, operated, and maintained as described in the long-term CSO control plan (LTCP). These requirements are critical to meeting the objectives of the Policy, including to bring all CSO discharge points into compliance with the technology-based and water quality-based requirements of the CWA, and to minimize the water quality, aquatic biota, and human health impacts from CSOs.

Additionally, the 1994 CSO Control Policy requires permits include a requirement for CSO communities who have developed an approved LTCP to reassess overflows to sensitive areas in those cases where elimination or relocation of the overflows is not physically possible and economically achievable. The reassessment should be based on consideration of new or improved techniques to eliminate or relocate overflows or changed circumstance that influence economic achievability.

## 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.

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<sup>[1]</sup> Available at <https://www.epa.gov/sites/production/files/2015-10/documents/owm0111.pdf>

Permittee: City of Newburgh  
Facility: Newburgh Wastewater Treatment Plant  
SPDES Number: NY0026310  
USEPA Major/Class 05 Municipal

Date: November 4, 2022 v.1.13  
Permit Writer: Joshua Lin  
Water Quality Reviewer: Joshua Lin  
Full Technical Review

### Schedule(s) of Additional Submittals

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