State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**4952**	NAICS Code:	**221320**	SPDES Number:	**NY0020389**
Discharge Class (CL):	**05**			DEC Number:	**4-1926-00008/ 00001-0**
Toxic Class (TX):	**T**			Effective Date (EDP):	**X/X/XXXX**
Major-Sub Drainage Basin:	**13 - 01**			Expiration Date (ExDP):	**X/X/XXXX**
Water Index Number:	**H portion**	Item No.:	**3**	Modification Dates (EDPM):	
Compact Area:	**-**				

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

PERMITTEE NAME AND ADDRESS					
Name:	**Village of Catskill**	Attention:	**Peter Grasse, Village President**		
Street:	**422 Main Street**				
City:	**Catskill**	State:	**NY**	Zip Code:	**12414**
Email:	**pgrasse@villageofcatskillny.gov**	Phone:	**518-943-3830**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL														
Name:	**Catskill Wastewater Treatment Plant**													
Address / Location:	**422 Main Street**									County:	**Greene**			
City:	**Catskill**					State:	**NY**			Zip Code:	**12414**			
Facility Location:		Latitude:	**42**	°	**12**	'	**43.9**	" N	& Longitude:	**-73**	°	**51**	'	**20.3**	" W
Primary Outfall No.:	**001**	Latitude:	**42**	°	**12**	'	**45**	" N	& Longitude:	**-73**	°	**51**	'	**12**	" W
Outfall Description:	**Treated Sanitary**	Receiving Water:	**Hudson River**						Class:	**A**	Standard:	**-**		

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

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

DISTRIBUTION:
BWP Permit Coordinator (permit.coordinator@dec.ny.gov)
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Permit Administrator:	
Address:	625 Broadway Albany, NY 12233-1750
Signature	Date

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SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
002	Combined Sewer Overflow – Main Street	**42** ° **13** ' **07** " N	**73** ° **52** ' **05** " W
Receiving Water:	Catskill Creek (Lower, Main Stem)		Class: **C**
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
003A	Combined Sewer Overflow - Main Street between Henry and Greene Streets, Diversion Manhole A	**42** ° **12** ' **50** " N	**73** ° **51** ' **47** " W
Receiving Water:	Catskill Creek (Lower, Main Stem)		Class: **C**
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
004	Combined Sewer Overflow – Canal Street	**42** ° **13** ' **08** " N	**73** ° **52** ' **01** " W
Receiving Water:	Catskill Creek (Lower, Main Stem)		Class: **C**
Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
007A	Combined Sewer Overflow – Main Street at Diversion Manhole	**42** ° **13** ' **01** " N	**73** ° **52** ' **03** " W
Receiving Water:	Catskill Creek (Lower, Main Stem)		Class: **C**

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 DEC review to determine if numerical effluent limitations should be imposed.
Compliance Level / Minimum Level	A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136, or otherwise accepted by the DEC.
Daily Discharge	The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
Daily Maximum	The highest allowable Daily Discharge.
Daily Minimum	The lowest allowable Daily Discharge.
Effective Date of Permit (EDP or EDPM)	The date this permit is in effect.
Effluent Limitations	Effluent limitation means any restriction on quantities, quality, rates and concentrations of chemical, physical, biological, and other constituents of effluents that are discharged into waters of the state.
Expiration Date of Permit (ExDP)	The date this permit is no longer in effect.
Instantaneous Maximum	The maximum level that may not be exceeded at any instant in time.
Instantaneous Minimum	The minimum level that must be maintained at all instants in time.
Monthly Average	The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Outfall	The terminus of a sewer system, or the point of emergence of any waterborne sewage, industrial waste or other wastes or the effluent therefrom, into the waters of the State.
Range	The minimum and maximum instantaneous measurements for the reporting period must remain between the two values shown.
Receiving Water	The classified waters of the state to which the listed outfall discharges.
Sample Frequency / Sample Type / Units	See 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

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

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
								Location		
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	1.55	MGD			Continuous	Recorder		X	
Flow	Daily Maximum	Monitor	MGD			Continuous	Recorder		X	
pH	Daily Minimum	6.0	SU			2 / Day	Grab		X	
	Daily Maximum	9.0	SU							
Temperature	Daily Maximum	Monitor	ºF			2 / Day	Grab		X	
$CBOD_5$	Monthly Average	25	mg/L	320	lbs/d	1 / Week	24-hr. Comp.	X	X	1
$CBOD_5$	7-Day Average	40	mg/L	490	lbs/d	1 / Week	24-hr. Comp.		X	
Total Suspended Solids (TSS)	Monthly Average	30	mg/L	390	lbs/d	1 / Week	24-hr. Comp.	X	X	1
Total Suspended Solids (TSS)	7-Day Average	45	mg/L	580	lbs/d	1 / Week	24-hr. Comp.		X	
Settleable Solids	Daily Maximum	0.3	mL/L			2/ Day	Grab		X	
Ammonia (as N)	Monthly Average	Monitor	mg/L	Monitor	lbs/d	Monthly	24-hr. Comp.		X	
Total Mercury	Daily Maximum	50	ng/L			Monthly	Grab	X	X	
Biennial Pollutant Scan						1/Two Years	See footnote		X	3
ACTION LEVEL PARAMETERS	Type	Action Level	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Bis (2-ethylhexyl) Phthalate	Daily Maximum	9.3	µg/L			2/ Year	24-hr. Comp.		X	5,7
Copper, Total	Daily Maximum	93	µg/L			Quarterly	24-hr. Comp.		X	2,5

EFFLUENT DISINFECTION Required All Year		Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Coliform, Fecal	30-Day Geometric Mean	200	No./ 100 mL			1 / Week	Grab		X	
Coliform, Fecal	7-Day Geometric Mean	400	No./ 100 mL			1 / Week	Grab		X	
Chlorine, Total Residual	Daily Maximum	2.0	mg/L			2 / Day	Grab		X	4

WHOLE EFFLUENT TOXICITY (WET) TESTING		Limit	Units	Action Level	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
WET - Acute Invertebrate	See footnote			15	TUa	Quarterly	See footnote		X	2,6
WET - Acute Vertebrate	See footnote			15	TUa	Quarterly	See footnote		X	2,6
WET - Chronic Invertebrate	See footnote			100	TUc	Quarterly	See footnote		X	2,6
WET - Chronic Vertebrate	See footnote			100	TUc	Quarterly	See footnote		X	2,6

FOOTNOTES:

1. Effluent shall not exceed 15% and 15% of influent concentration values for $CBOD_5$ & TSS respectively. Do not calculate percentage removals on days when daily avg. flow exceeds 1.55 MGD.

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

3. 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.

4. Sampling and reporting for total residual chlorine are only necessary if chlorine is used for disinfection, elsewhere in the treatment process, or the facility otherwise has reasonable potential to discharge chlorine. Otherwise, the permittee shall report NODI-9 on the DMR.

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

6. **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 DEC. 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.

   Monitoring Period - WET testing shall be performed quarterly (calendar quarters) during calendar years ending in 2 and 7.

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

7. 2/ Year samples shall be reported on the March and September DMRs.

LEACHATE SPECIAL CONDITIONS

The disposal of landfill leachate at the Catskill STP shall not be permitted when the STP flow exceeds 1,000 gallons per minute. The leachate shall be discharged from the tank trucks into the wet well at no greater than 50 gpm. Leachate shall not be pumped into the plant during storm events.

The following landfills are known by the Department to be discharging to the permittees collection system.

- Town of Catskill Landfill

Any new leachate sources accepted by the Village of Catskill WWTP shall be subject to the requirements of T.O.G.S 1.3.8 – New Discharges To Publicly Owned Treatment Works.

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/npdes/combined-sewer-overflows-csos

1. CSO Maintenance/Inspection - The permittee shall continue to maintain and inspect 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 Village of Catskill 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 4 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). 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 3.1 MGD through the plant headworks; a minimum of 3.1 MGD through the primary treatment works and disinfection works if applicable; and a minimum of 2.3 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 12 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 4 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. The WWOP shall be developed in accordance with the DEC guidance, Wet Weather Operating Practices for POTWs With Combined Sewers, (https://extapps.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.

   The submission of a WWOP is a one-time requirement that shall be done to the Department's satisfaction once. However, a revised wet weather operating plan must be submitted whenever the POTW or sewer collection system is replaced or modified. When this permit is administratively renewed by DEC letter entitled "SPDES NOTICE/RENEWAL APPLICATION/PERMIT", the permittee is not required to repeat the submission. The above due dates are independent from the effective date of the permit stated in the letter of "SPDES NOTICE/RENEWAL APPLICATION/PERMIT".

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 & 6 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 DEC. 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. Should the Regional Water Engineer determine additional justification for sewer extension is necessary, the permittee shall assess the effects of the increased flow of sanitary sewage or industrial waste on the character and frequency of CSOs and the effects on the best use 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, 2nd 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 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:

> **N.Y.S. PERMITTED DISCHARGE POINT**
> **(wet weather discharge)**
> **SPDES PERMIT No.: NY_____**
>
> **OUTFALL No. :____**
>
> For information about this permitted discharge contact:
>
> Permittee Name:
>
> Permittee Contact:
>
> Permittee Phone: ( ) - ### - ####
>
> OR:
>
> NYSDEC Division of Water Regional Office Address:
>
> NYSDEC Division of Water Regional Phone: ( ) - ### -####

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 31st of each year. 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

On June 29, 2007, the permittee and the Department entered into an Order on Consent (R4-2007-0406-38, "2007 Order"), requiring compliance with the USEPA CSO Control Policy requirements, including a Combined Sewer System Characterization, Monitoring, and Modeling Plan ("CSS Plan") and initial LTCP. On July 13, 2010, the permittee and the Department entered into a new Order on Consent (R4-2010-0615-57, "2010 Order") and extended compliance schedule for submission of a revised CSS Plan and a LTCP. The permittee initially submitted an LTCP in December 2012, which was determined to be incomplete. In a Letter Agreement to the Order on Consent, executed September 19, 2016, the permittee was required to submit a revised LTCP. The revised LTCP was submitted in accordance with the Guidance for Long-Term Control Plan, EPA, September 1995, and accepted by the Department on September 12, 2018. An amendment to the LTCP was submitted in March 2020, which was approved by the Department May 6, 2021.

On February 21, 2020, the Department and the permittee entered into a new Order on Consent (R4-2020-0124-10, "2020 Order"), superseding the 2007 Order, 2010 Order, and 2016 Letter Agreement, and requiring the implementation of all required LTCP actions and the post-construction compliance monitoring program. The 2020 Order was modified by Letter Agreement (R4-2020-0124-10M) on June 7, 2023 to extend milestones in the schedule of compliance. The Village of Catskill requested further extension of the deadlines set in the 2023 Modified Order, which was approved, effective May 24, 2024, in a Letter Agreement to the 2020 Order (R4-2020-0124-10M2). On January, 8, 2025, the Order was modified by Letter Agreement (R4-2020-0124-10M3), to remove the annual sampling requirements under the Post-Construction Compliance Monitoring Plan (PCCMP). 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 upon implementation.

In accordance with the approved LTCP, as amended, the permittee is required to do the following:

- Improve weirs at CSO outfalls
- Install mechanical screening equipment at WWTP
- Separate sewers/eliminate CSOs at Outfalls 002, 003A, 004, and 007A
- Eliminate all CSO discharges & abandon/close all CSO outfalls
- Submit a SPDES permit modification request once all CSO discharges have been eliminated and all CSO outfalls have been closed

Water Quality Criterion – Demonstration 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's approved LTCP has demonstrated that the selected control program will be adequate to meet the water quality-based requirements of the CWA.

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[1] (QAPP) that details the laboratory that will be performing the analysis[2], 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:

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

[2] 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.

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 achievement of the LTCP Goal of eliminating all CSO discharges (see 2020 Order, as modified). Following the initial 2-year PCCM period, subsequent PCCM shall be conducted during years ending in 1 and 6.

PARAMETER		Units	Sample Type
BOD_5		mg/L	Grab
Coliform, Fecal		#/100ml	Grab
Dissolved Oxygen		mg/L	Grab
Floatable Material		-	Visual Observation
Ammonia (as NH_3)		mg/L	Grab
Phosphorus		mg/L	Grab
Solids, Settleable		mL/L	Grab
Solids, Suspended		mg/L	Grab

3. By March 31st 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

1. Sensitive Area[3] 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 31st in the same years the PCCM Program Report is submitted**.**

2. 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 of 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.

STORMWATER POLLUTION PREVENTION REQUIREMENTS

NO EXPOSURE CERTIFICATION

[3] Sensitive areas include designated Outstanding National Resource Waters, National Marine Sanctuaries, waters with threated 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.

The permittee submitted a Conditional Exclusion for No Exposure Form on 9/1/2023, certifying that all industrial activities and materials are completely sheltered from exposure to rain, snow, snowmelt, and stormwater runoff except as allowed under 40 CFR 122.26(g)(2). The permittee must maintain a condition of no exposure for the exclusion to remain applicable. If conditions change resulting in the exposure of materials and activities to stormwater, the permittee must notify the Regional Water Engineer. The permittee must recertify a condition of no exposure every five years by completing the "No Exposure Certification Form" found on the DEC website.

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[4]. 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 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 permittee must sample *key locations*, chosen to identify *potential mercury sources*, at least semi-annually. Sampling of discharges from dental facilities in compliance with 6 NYCRR 374.4 is not required.

      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,[5] must receive approval from the DEC 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 DEC may undertake a Department-initiated modification to remove the allowance of reduced requirements.
         3) Under the decreased permit requirements, the facility must continue to conduct 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).

   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

[4] Outfall monitoring must be conducted using the methods specified in Table 8 of *DOW 1.3.10.*
[5] 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.

permittee must enforce its sewer use law to track down and minimize these sources.

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

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,[6] which informs users of their responsibilities, and collect the "Amalgam Waste Compliance Report for Dental Dischargers"[7] 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 DEC 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 DEC 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.

[6] For example, the outreach program could include education about sources of mercury and what to do if a mercury source is found.
[7] The form, "Amalgam Waste Compliance Report for Dental Dischargers," can be found here: 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 the previous reporting period;
   ii. A list of known and *potential mercury sources* for Outfall 001
      1) If the permittee meets the criteria for MMP Type IV, the permittee must notify the DEC for a permittee-initiated modification;
   iii. All actions undertaken, pursuant to the control strategy, during the previous reporting period;
   iv. Actions planned, pursuant to the control strategy, for the upcoming reporting period; and
   v. Progress towards achieving a dissolved mercury concentration of 0.70 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation and/or installation/modification of a treatment system).

   The permittee must maintain a file with all MMP documentation. The file must be available for review by 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 DEC identifies inadequacies in the MMP.

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

DEFINITIONS:

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:

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

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

OR:

NYSDEC Division of Water Regional Office Address:

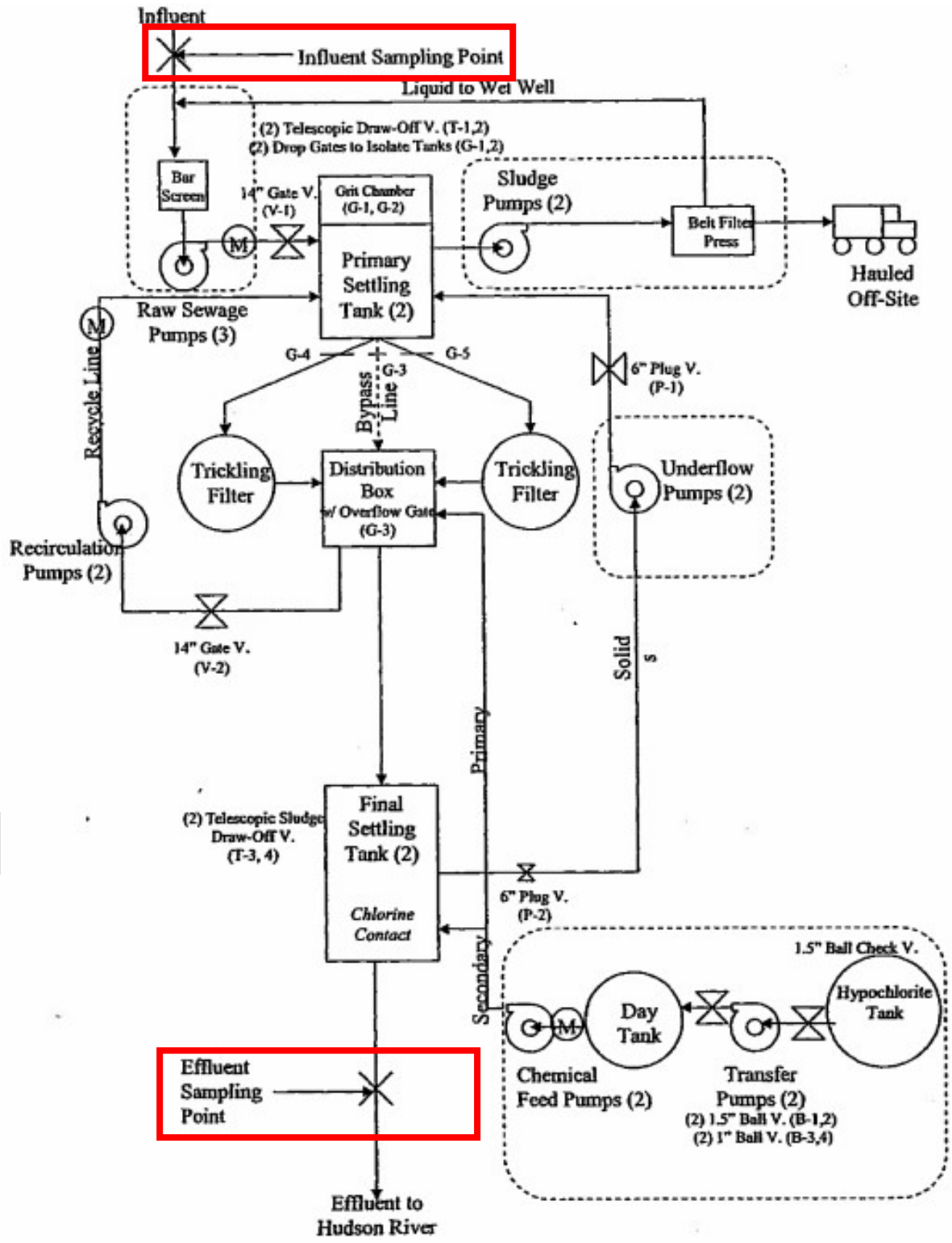
NYSDEC Division of Water Regional Phone: ( ) - ### - ####

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

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

MONITORING LOCATIONS

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



GENERAL REQUIREMENTS

A. The regulations in 6 NYCRR Part 750 are hereby incorporated by reference and the conditions are enforceable requirements under this permit. The permittee shall comply with all requirements set forth in this permit and with all the applicable requirements of 6 NYCRR Part 750 incorporated into this permit by reference, including but not limited to the regulations in paragraphs B through 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 DEC 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 DEC, 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 DEC, and shall comply with all applicable requirements of ECL 72-0602 and 6 NYCRR Parts 480, 481 and 485. Note that if there is inconsistency between the fees specified in ECL 72-0602 and 6 NYCRR Part 485, the ECL 72-0602 fees govern.

I. Water Treatment Chemicals (WTCs)
   New or increased use and discharge of a WTC requires prior DEC review and authorization. At a minimum, the permittee must notify the DEC in writing of its intent to change WTC use by submitting a completed *WTC Notification Form* for each proposed WTC. The DEC will review that submittal and determine if a SPDES permit modification is necessary or whether WTC review and authorization may proceed outside of the formal permit administrative process. The majority of WTC authorizations do not require SPDES permit modification. In any event, use and discharge of a WTC shall not proceed without prior authorization from the DEC. Examples of WTCs include biocides, coagulants, conditioners, corrosion inhibitors, defoamers, deposit control agents, flocculants, scale inhibitors, sequestrants, and settling aids.
   1. WTC use shall not exceed the rate explicitly authorized by this permit or otherwise authorized in writing by the DEC.
   2. The permittee shall maintain a logbook of all WTC use, noting for each WTC the date, time, exact location, and amount of each dosage, and the name of the individual applying or measuring the chemical. The logbook must also document that adequate process controls are in place to ensure 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 DEC's website at: http://www.dec.ny.gov/permits/93245.html

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

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

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by DEC. Instructions on the use of NetDMR can be found at https://www.dec.ny.gov/chemical/8461.html. **Hardcopy paper DMRs will only be accepted 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 Regional Water Engineer and Bureau of Water Permits at the following addresses:

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

Department of Environmental Conservation
Regional Water Engineer, Region 4
1130 North Westcott Road, Schenectady, New York, 12306-2014 Phone: (518) 357-2045

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 DEC'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	EMERGING CONTAMINANT SHORT-TERM MONITORING PROGRAM 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 DEC during this time that sampling can be discontinued. Samples must be analyzed utilizing EPA 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 DEC indicates otherwise. Emerging Contaminants results must be reported utilizing the template provided and should be kept on file with the permittee until all 4 sampling event results are obtained. Once all 4 sampling event results are received, they shall be reported together to the DEC through the "Emerging Contaminants Survey for POTWs" found at: Emerging Contaminants In NY's Waters - NYSDEC. The template, instructions for the laboratory, and chain of custody form are also available at this link. If results indicate the presence of Emerging Contaminants, the permittee shall initiate track down of potential sources by completing the "Emerging Contaminants Investigation Checklist for POTWs" available at the above link. The DEC may periodically request updates or additional monitoring to check progress on track down investigations. Elements of the checklist may be used as permit conditions in future permit modifications.	EDP + 18 months Within 90 days of DEC written notification
001	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	December DMR (January 28th)
001	ANNUAL FLOW CERTIFICATION 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.	February DMR (March 28th)
001	BIENNIAL POLLUTANT SCAN The permittee shall implement an ongoing monitoring program and perform effluent sampling every two years as specified in footnote of the permit limits table.	Retain and submit with next NY-2A Application
001	WHOLE EFFLUENT TOXICITY (WET) TESTING WET testing shall be performed as required in the footnote of the permit limits table. The toxicity test report including all information requested of this permit shall be attached to your WET DMRs and sent to the WET@dec.ny.gov email address.	Within 60 days following the end of each monitoring period

SCHEDULE OF ADDITIONAL SUBMITTALS

Outfall(s)	Required Action	Due Date
N/A	REVISED WET WEATHER OPERATING PLAN The permittee shall submit an updated Wet Weather Operation Plan (WWOP). The WWOP shall outline the optimum 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 the permitted CSOs and meeting the effluent limitations in this permit.	EDP + 6 months
N/A	COMBINED SEWER OVERFLOW (CSO) ANNUAL REPORT 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 (https://www.dec.ny.gov/pubs/95925.html). Additional information regarding CSO Annual Report is available on-line at https://www.dec.ny.gov/chemical/48595.html.	January 31st Each Year
N/A	POST-CONSTRUCTION COMPLIANCE MONITORING PLAN (PCCMP) The permittee shall submit an updated approvable 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.	EDP + 6 Months
N/A	POST-CONSTRUCTION COMPLIANCE MONITORING (PCCM) PROGRAM REPORT The permittee shall submit a PCCM Program Report as detailed in the SPECIAL CONDITIONS: CSO CONTROL POLICY section of this permit. The initial 2-year sampling period shall begin in the year following achievement of the LTCP Goal of eliminating all CSO discharges. The initial report shall be due by March 31st in the year following the initial 2-year sampling period. Once the initial PCCM Report has been submitted, subsequent PCCM Program Reports shall be submitted by March 31st in years ending in 2 and 7.	March 31st of LTCP Goal (Eliminate all CSO Discharges) + 2 Years, and March 31st of subsequent years ending in 2 and 7 thereafter
N/A	SENSITIVE AREA REASSESSMENT REPORT 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 31st in the same year the PCCM Program Report is submitted. Until a PCCM Program Report is submitted as required above, a Sensitive Area Reassessment Report is not required.	December 31st of same year PCCM Program Report submitted (Years ending in 2 and 7)
001	STORMWATER NO EXPOSURE CERTIFICATION Permittee must recertify every five years a condition of no exposure to stormwater in order to continue to qualify for the no exposure exclusion. The No Exposure Certification Form can be found on the DEC website.	9/1/2028 and every 5 years thereafter

SCHEDULE OF ADDITIONAL SUBMITTALS		
Outfall(s)	**Required Action**	**Due Date**
001	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	***Maintained Onsite*** EDP + 12 months, annually thereafter

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.

SPDES Permit Fact Sheet
Village of Catskill
Catskill Wastewater Treatment Plant
NY0020389

Contents

Summary of Permit Changes

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

Added

- Daily Maximum limit of 50 ng/L for Total Mercury
- Acute and Chronic WET Action Levels of 15 TUa and 100 TUc, respectively. WET Testing reporting requirements also added to the Schedule of Additional Submittals.
- To the Schedule of Additional Submittals:
    - Emerging Contaminant Short-Term Monitoring Program
    - Water Treatment Chemical (WTC) Annual Report Form
    - Annual Flow Certification
    - Biennial Pollutant Scan
    - Whole Effluent Toxicity (WET) Testing Reports
    - Revised Wet Weather Operating Plan
    - Combined Sewer Overflow (CSO) Annual Report
    - Updated Post-Construction Compliance Monitoring Plan (PCCMP)
    - PCCM Program Report
    - Sensitive Area Reassessment Report
    - Stormwater No Exposure Re-certification
    - Mercury Minimization Plan (MMP) Type I

Removed

- Flow and pH monitoring for influent
- Temperature monitoring for influent; Temperature Monthly Average monitoring
- TKN and UOD monitoring
- $CBOD_5$ and TSS Daily Maximum monitoring
- BOD_5 and TSS Percent Removals Daily Minimum monitoring
- Settleable Solids monitoring for influent; Settleable Solids Monthly Average monitoring
- Ammonia Daily Maximum monitoring
- Fecal Coliform Daily Maximum monitoring
- Total Residual Chlorine Monthly Average monitoring
- Action Levels for Total Zinc, Chloroform, Toluene, Total Cyanide, and Available (Free) Cyanide. The Mercury Action Level will be replaced with a daily maximum limit of 50 ng/L.

Updated

- Permit format, definitions, and general conditions
- Percent Removal changed from BOD_5 to $CBOD_5$, for consistency with $CBOD_5$ limits
- Seasonal Percent Removals for $CBOD_5$ and TSS replaced with year-round limits
- Ammonia monitoring requirements, from Weekly to Monthly
- Action Levels for Total Copper and Bis (2-ethylhexyl) phthalate were updated from mass (lbs/d) to concentration (µg/L).
- Total Residual Chlorine sample frequency changed from 1/Day to 2/Day in accordance with TOGS 1.3.3 Appendix A
- Best Management Practices (BMPs) for CSOs

Corrected

- Latitude and longitude of Outfall 001 to 42°12'45"N, 73°51'12"W

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

Administrative History

5/20/2008 The last full technical review was performed. The 4/1/2006 permit was modified in accordance with the Environmental Benefit Permit Strategy (EBPS) to address Combined Sewer Overflow (CSO) abatement. The modified permit became effective with an expiration date of 3/31/2011. The 2008 permit and all subsequent modifications have formed the basis of this permit.

3/31/2011 The current permit was allowed to stay in effect pursuant to SAPA[1].

3/31/2016 The current permit was allowed to stay in effect pursuant to SAPA[2].

4/3/2023 DEC issued a Request for Information (RFI) to modify and renew the SPDES permit due to the facility's EBPS score[3]. At the time of the RFI, the facility had an EBPS score of 210 and ranking of 102.

4/8/2023 The Village of Catskill submitted a request for an extension of the 8/11/2023 RFI response deadline. DEC granted the request and extended the deadline to 9/1/2023.

9/1/2023 The Village of Catskill submitted a NY-2A application in response to the RFI.

9/15/2023 DEC issued a Request for Additional Information (RFAI), due on 10/2/2023 and later granted extension until 10/16/2023.

10/16/2023 The Village of Catskill submitted a response to the RFAI.

1/8/2025 Order on Consent (R4-2020-0124-10M3) was modified by Letter Agreement to remove the annual sampling requirements under the Post-Construction Compliance Monitoring Plan (PCCMP); PCCM requirements will thereafter be controlled by this permit and any subsequent permits.

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

[1] State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(*l*)
[2] State Administrative Procedures Act Section 401(2) and 6 NYCRR 621.11(*l*)
[3] Pursuant to 6 NYCRR 750-1.18 and NYS Environmental Benefit Permit Strategy (EBPS)

Facility Information

This facility is a publicly owned treatment works that receives flow from domestic and commercial users, with effluent consisting of treated sanitary and stormwater. The Village WWTP facility does not have any significant industrial users (SIUs). Although the facility accepts landfill leachate from the Town of Catskill landfill, the amounts accepted do not qualify this waste as an SIU. The Village does not accept any additional septage or hauled waste.

The collection system currently consists of both separate and combined sewers. However, the Village is working toward full separation of the collection system, in accordance with the approved Long-Term Control Plan (LTCP). More detail about the LTCP is included in the Enforcement History and Requirements for Combined Sewer Overflows (CSOs) sections below.

The current 1.55 MGD treatment plant consists of:

- Preliminary Treatment: mechanical bar screening (screenings are conveyed to a washer/compactor, to a screw conveyor, and then to a dumpster which is disposed of as municipal waste); two grit chambers
- Primary Treatment: two primary clarifiers
- Secondary Treatment: two trickling filters, two secondary clarifiers
- Tertiary Treatment: none
- Disinfection: liquid chlorination (injected in two places, once before and once after the final settling tank)

Sludge flows from the two primary clarifiers, through two sludge pumps, then to a belt press for dewatering. Solids are then stored in a 30-yard dumpster and are hauled off-site approximately twice per month.

The primary outfall (Outfall 001) consists of a 24" outfall pipe that discharges into to the Hudson River, a Class A waterbody. The outfall pipe, oriented at a right angle to the riverbank, extends about 350 feet into the river at a depth of approximately 10 feet below the normal water level.

The permittee listed the following planned upgrades/improvements on the NY-2A Application[4]:

- Upgrading equipment and controls at the WWTP, rehabbing existing clarifiers; these changes are currently scheduled to begin by 4/1/2025 and end on 12/31/2028
- Combined sewer separation by installing new piping and lining existing piping, eliminating CSOs 002, 003A, and 004; these changes are currently scheduled to begin by 4/1/2025 and end on 12/31/2027
- Combined sewer separation by installing new piping and lining existing piping, eliminating CSO 007A; these changes are currently scheduled to begin by 4/1/2026 and end on 12/31/2028
- Improvements to existing pump stations to increase the pumping capacity of the system; these changes are currently scheduled to begin by 4/1/2026 and end on 12/31/2028

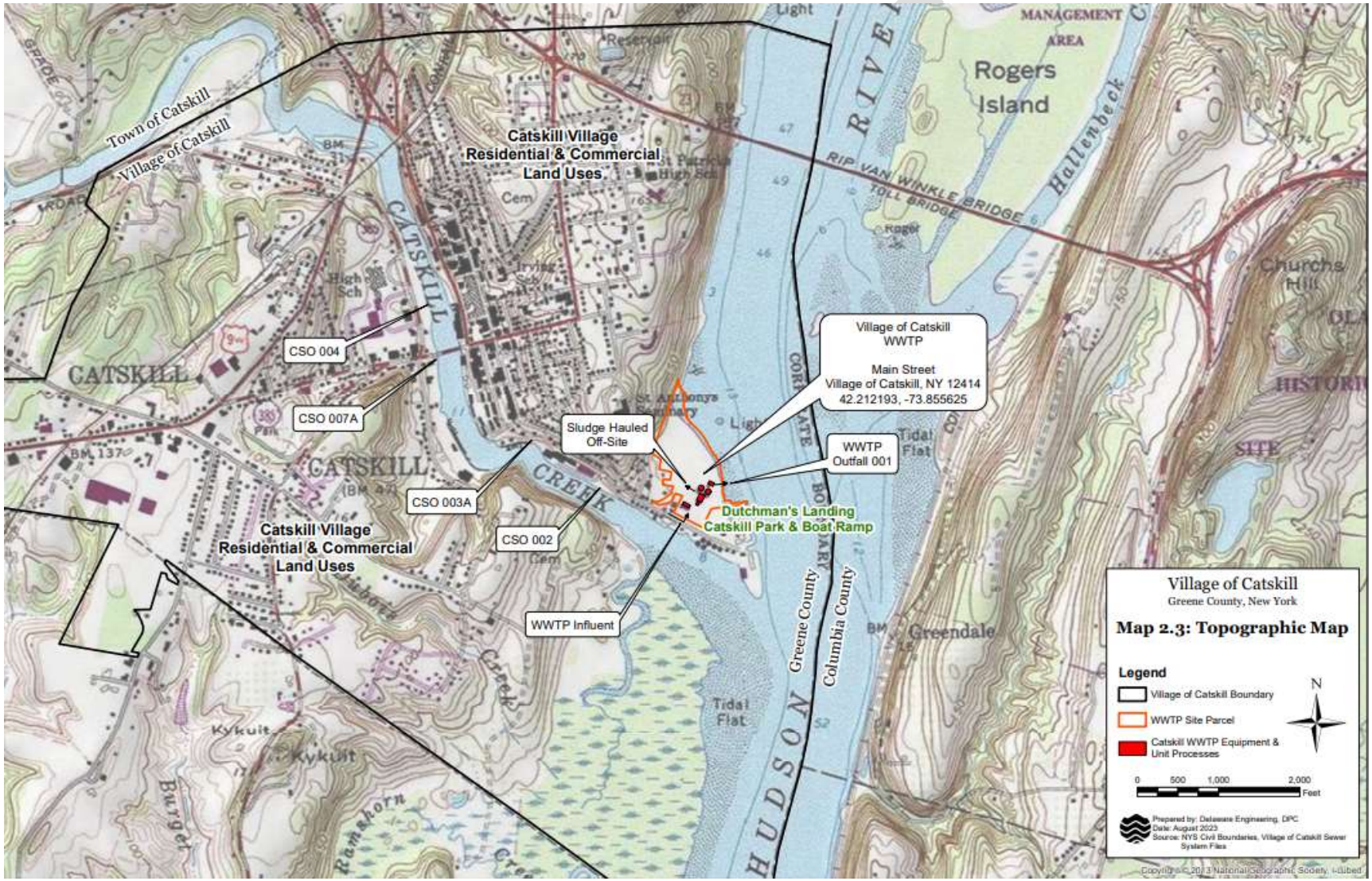
[4] The dates listed by the permittee in the NY-2A application have since been extended by Letter Agreement executed on May 24, 2024.

The facility accepts wastewater from the following municipalities:

Municipality	POSS # or SPDES #	Collection System
Village of Catskill	NY0020389	Combined and Separate
Catskill (T): Leeds/Jefferson Heights SD	NYS400033	Separate

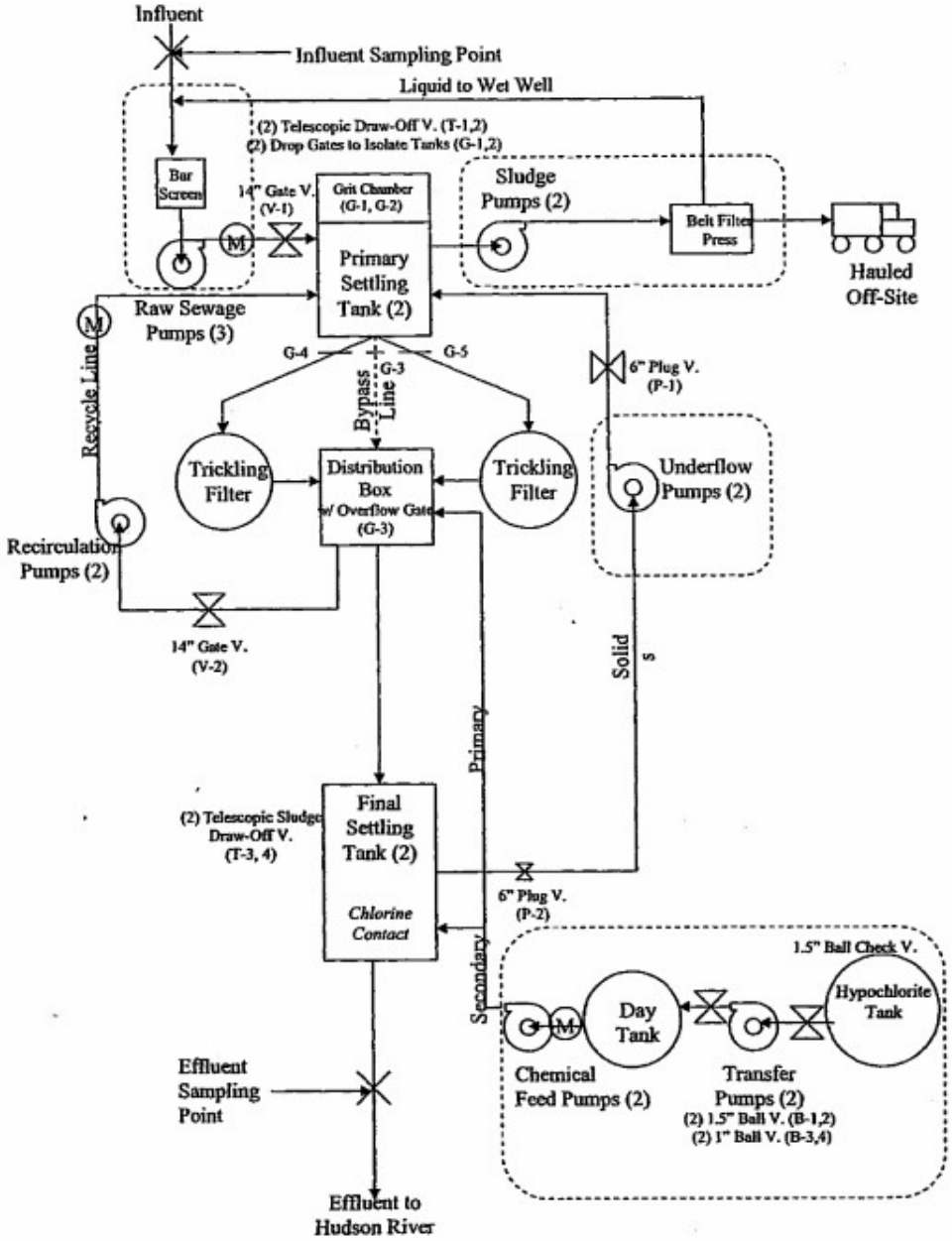
During wet-weather events, combined sewage is also permitted, under special conditions, to be discharged through the Combined Sewer Overflow (CSO) outfalls 002, 003A, 004, and 007A (see Enforcement History). The 2008 permit included three additional CSO outfalls (Outfalls 003B, 005, and 006), which the Village has since eliminated through LTCP projects. The four remaining CSOs each discharge into the lower portion of the Catskill Creek (PWL 1309-0010), a Class C waterbody. The topographic map in the following section shows the location of each CSO.

Site Overview



Topographic Map of Facility Area Submitted by Permittee with NY-2A Application

Satellite Image of Facility and Immediate Area



Treatment Facility Schematic provided by Permittee in NY-2A Application

Enforcement History

On June 29, 2007, the permittee and the Department entered into an Order on Consent (R4-2007-0406-38, "2007 Order"), requiring compliance with the USEPA CSO Control Policy requirements, including a Combined Sewer System Characterization, Monitoring, and Modeling Plan ("CSS Plan") and initial LTCP. On July 13, 2010, the permittee and the Department entered into a new Order on Consent (R4-2010-0615-57, "2010 Order") and extended compliance schedule for submission of a revised CSO Plan and a LTCP. The permittee initially submitted an LTCP in December 2012, which was determined to be incomplete. In a Letter Agreement to the Order on Consent, executed on September 19, 2016, the permittee was required to submit a revised LTCP. The revised LTCP was submitted in accordance with the Guidance for Long-Term Control Plan, EPA, September 1995, and accepted by the Department on September 12, 2018. An amendment to the LTCP was submitted in March 2020, which was approved by the Department May 6, 2021.

On February 21, 2020, the Department and the permittee entered into a new Order on Consent (R4-2020-0124-10, "2020 Order"), superseding the 2007 Order, 2010 Order, and 2016 Letter Agreement, and requiring the implementation of all required LTCP actions and the post-construction compliance monitoring program. The 2020 Order was modified by Letter Agreement (R4-2020-0124-10M) on June 7, 2023 to extend milestones in the schedule of compliance. The Village of Catskill requested further extension of the deadlines set in the 2023 Modified Order, which was approved, effective May 24, 2024, in a Letter Agreement to the 2020 Order (R4-2020-0124-10M2). On January 8, 2025, the Order was further modified by Letter Agreement (R4-2020-0124-10M3), as described in the Post-Construction Compliance Monitoring (PCCM) section of this Fact Sheet. Implementation of the LTCP is ongoing.

According to the DEC-approved LTCP, the following CSO outfalls, listed in the 2008 permit, have since been eliminated:

- 003B: Main Street between Henry and Greene Streets, Diversion Manhole B. Cut, capped, and filled with concrete in October 2015.
- 005: Allen Street. Plugged in May 2008.
- 006: Bushnell Avenue: Capped and plugged in October 2010.

These three eliminated CSO outfalls will be removed from the permit.

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 the NY-2A application submitted by the permittee and Discharge Monitoring Reports for the period 8/1/2018 to 7/31/2023. Appendix Link

Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	N/A	Treated sanitary sewage	Hudson River, Class A
002	N/A	CSO – Main Street	Catskill Creek, Class C
003A	N/A	CSO – Main Street between Henry and Greene Streets, Diversion Manhole A	Catskill Creek, Class C
004	N/A	CSO – Canal Street	Catskill Creek, Class C
007A	N/A	CSO – Main Street at Diversion Manhole	Catskill Creek, Class C
003B	Former Outfall 003B – CSO – Main Street between Henry and Greene Streets, Diversion Manhole B – Plugged in 2015, Removing from Permit		
005	Former Outfall 005 – CSO – Plugged in 2008, Removing from Permit		
006	Former Outfall 006 – CSO – Plugged in 2010, Removing from Permit		

Reach Description:

Outfall 001 discharges to the following portion of the Hudson River (PWL ID 1301-0276), which is a Class A waterbody in this location:

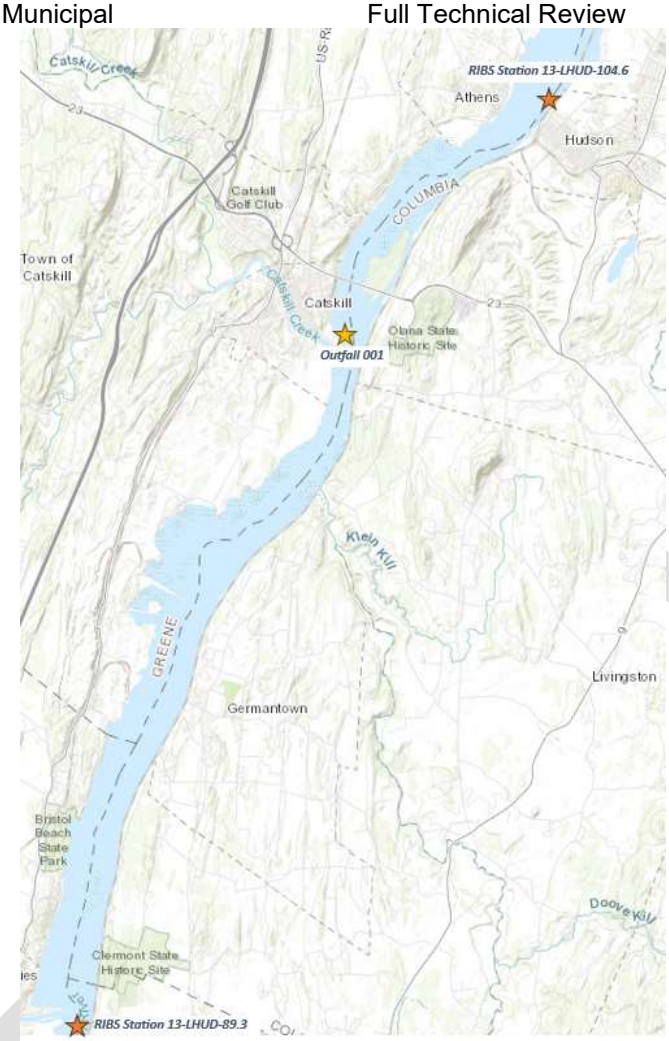
> H portion, from boundary formed by east-west line through light no. 28 on southern end of Esopus Island to boundary formed by east-west line through light no. 72 off south end of Houghtaling Island (6 NYCRR 858.4 – Table I – Item 3)

Outfalls 002, 003A, 004, and 007A discharge to the following portion of the Catskill Creek (PWL ID 1309-0010), which is a Class C waterbody in this portion:

> H-193 portion from mouth to trib. 2 (6 NYCRR 863.6 – Table I – Item 410)

USGS Gage 01361450, Hudson River at Catskill, NY, was used to obtain ambient hardness and pH data. The gage is located approximately 0.5 miles downstream from Outfall 001.

Summer temperature data from RIBS Station 13-LHUD-104.6, located approximately 4.9 miles upstream of Outfall 001, and RIBS Station 13-LHUD-89.3, located approximately 11.5 miles downstream of Outfall 001, were used to calculate the summer ammonia water quality standard. In accordance with TOGS 1.3.1E, due to the lack of ambient temperature data for winter, an assumption of 10°C was made to calculate the winter ammonia water quality standard. In addition, summer pH data from USGS Gage 01361450 were used to calculate summer ammonia WQS.



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

Impaired Waterbody Information

The Hudson River segment (PWL No. 1301-0276) was first listed on the 1998 New York State Section 303(d) List 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.

Critical Receiving Water Data & Mixing Zone

Consistent with the prior permit, the acute and chronic dilution ratios will remain 50:1 and 100:1, respectively.

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)

The requirement for WET testing is new. No previous WET data was available to perform a reasonable potential analysis. Consistent with TOGS 1.3.2, given the dilution available and location outside of the Great Lakes basin, the permit requires acute and if directed chronic WET testing. 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 represents the acute dilution ratio times a factor of 0.3. The chronic Action Levels represent the chronic dilution ratio. Starting in 2027, samples will be collected quarterly (calendar quarters) during calendar years ending in 2 and 7.

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)[5] 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 updated 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[6]; 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.

[5] As prescribed by 6 NYCRR Part 617
[6] See 6 NYCRR 750-2.8(a)(2)

Long-Term Control Plan (LTCP)

CSO discharges from the permittee are being addressed under the LTCP as approved by the Department on 9/12/2018 and 05/06/2021. LTCP requirements are included under the 2020 Order, which was last modified by Letter Agreement on 1/8/2025.

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 submitted on 3/15/2019 and revised in response to DEC comments on 05/5/2019. The PCCM plan was approved pursuant to the 2020 Order, which also requires PCCM monitoring and reporting. Baseline PCCM was conducted in 2019 and has been conducted in accordance with the PCCM plan thereafter.

On January 8, 2025, the Order was modified by Letter Agreement (R4-2020-0124-10M3), to remove the annual sampling requirements under the Post-Construction Compliance Monitoring Plan (PCCMP). Under the Letter Agreement, the Village is required to comply with the remaining requirements in the existing PCCMP until this permit is issued; PCCM requirements will thereafter be controlled by this permit and any subsequent permits. This permit requires the Village to submit a new PCCMP, as outlined in the Schedule of Additional Submittals. In addition, this permit requires PCCM Monitoring in years ending in 1 and 6 and must be submitted in a PCCM report the following year.

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 ≥ 1 MGD that requires SPDES permit coverage under 40 CFR 122.26 (b)(14)(ix).

On 9/1/2023, 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[7]

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

The Discharge Class 05 facility has a design flow of ≥1 MGD and is not located in the Great Lakes Basin. On 9/1/2023, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does have a mercury source listed in Part III.A.3. of DOW 1.3.10. Therefore, consistent with DOW 1.3.10, the permit includes requirements for the implementation of MMP Type I.

Based on 1 data point of 4.9 ng/L collected as part of the application and 4 data points collected as part of a DEC-required one-year monitoring program in 2008-2009 (maximum value of 22.6 ng/L; 99% lognormal value of 48 ng/L), 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.

[7] 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 of key locations, as defined in the MMP
- Control strategy for implementation of the MMP
- Annual status report (maintained onsite)

Biennial Pollutant Scan

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 sampling will provide the required three effluent samples from applicable parameters for submittal with the next NY-2A Application[8]. 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.

Emerging Contaminant Monitoring

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

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

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

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

Schedule(s) of Additional Submittals

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

- Emerging Contaminant Short-Term Monitoring Program
- Water Treatment Chemical (WTC) Annual Report Form
- Annual Flow Certification
- Biennial Pollutant Scan pursuant to 40 CFR 122.21(j)(4)
- Whole Effluent Toxicity (WET) Testing Reports
- Revised Wet Weather Operating Plan
- CSO Annual Report
- New Post-Construction Compliance Monitoring Plan (PCCMP)
- PCCM Program Report
- Sensitive Area Reassessment Report
- Stormwater No Exposure re-certification every five years as required by 40 CFR 122.26(g)(iii)

[8] Pursuant to 40 CFR 122.21(j)(4)(vi).

- Mercury Minimization Plan (MMP) Type I requirements pursuant to DEC policy (DOW 1.3.10)

Special Conditions

The disposal of landfill leachate at the Village of Catskill Wastewater Treatment Plant shall not be permitted when the WWTP flow exceeds 1,000 gallons per minute. The leachate shall be discharged from the tank trucks into the wet well at no greater than 50 GPM. Leachate shall not be pumped into the plant during storm events.

The following landfills are known by the Department to be discharging into the permittee's collection system: Town of Catskill Landfill.

Any new leachate sources accepted by the Village of Catskill WWTP shall be subject to the requirements of Technical and Operational Guidance Series (TOGS) 1.3.8 (New Discharges to Publicly Owned Treatment Works). This requirement is continued from the last permit.

In addition, the permit contains Special Conditions related to the CSO Control Policy. These conditions are in accordance with the approved Long-Term Control Plan, amended as described in the Enforcement History section of this fact sheet.

OUTFALL AND RECEIVING WATER SUMMARY TABLE

Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Water Index No. / Priority Waterbody Listing (PWL) No.	Major / Sub Basin	Hardness (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Critical Effluent Flow (MGD)	Dilution Ratio		
												A(A)	A(C)	HEW
001	42° 12' 45" N	73° 51' 12" W	Hudson River	A	H (portion 4b) / PWL: 1301-0276	13 / 01	70[9]	1702[10]	3267[10]	3837[10]	1.55	50:1	100:1	100:1
002	42° 13' 07" N	73° 52' 05" W	Catskill Creek (Lower, Main Stem)	C	H-193 portion from mouth to trib. 2/ PWL: 1309-0010	13 / 09	-	-	-	-	-	-	-	-
003A	42° 12' 50" N	73° 51' 47" W	Catskill Creek (Lower, Main Stem)	C	H-193 portion from mouth to trib. 2/ PWL: 1309-0010	13 / 09	-	-	-	-	-	-	-	-
004	42° 13' 08" N	73° 52' 01" W	Catskill Creek (Lower, Main Stem)	C	H-193 portion from mouth to trib. 2/ PWL: 1309-0010	13 / 09	-	-	-	-	-	-	-	-
007A	42° 13' 01" N	73° 52' 03" W	Catskill Creek (Lower, Main Stem)	C	H-193 portion from mouth to trib. 2/ PWL: 1309-0010	13 / 09	-	-	-	-	-	-	-	-

[9] USGS Gage 01361450, Hudson River at Catskill, was used to obtain ambient hardness data. An average was taken from 62 data points, resulting in a hardness value of 70 mg/L as $CaCO_3$.

[10] 1Q10, 7Q10, and 30Q10 were obtained using USGS Hydrologic Toolbox and data from Gage 1358000, Hudson River at Green Island, NY, located approximately 40 miles upstream. Results were adjusted to account for the location difference between the gage and Outfall 001 using a drainage basin ratio analysis. The drainage areas were taken from USGS Streamstats.

Permittee: Village of Catskill
Facility: Catskill Wastewater Treatment Plant
SPDES Number: NY0020389
USEPA Major/Class 05 Municipal

Date: Date v.1.21
Permit Writer: Samantha McCart
Water Quality Reviewer: Samantha McCart
Full Technical Review

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	**Description of Wastewater:** treated sanitary sewage													
		Type of Treatment: Bar screening, primary clarification, trickling filters, secondary clarification, chlorine disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[11]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
General Notes: Existing discharge data from 8/1/2018 to 7/31/2023 was obtained from Discharge Monitoring Reports provided by the permittee, except where noted otherwise. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	MGD	Monthly Avg	1.55	1.0 Actual Average	60/0	**1.55**	Design Flow	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	**TBEL**
	MGD	Daily Max	Monitor	4.4 Actual Max	60/0	**Monitor**	Monitor							-	**Monitor**
	The monthly average flow limit will remain at the Design Flow Rate reported on Item 1.10 of the NY-2A application, which is 1.55 MGD. The daily max flow will continue to be monitored for informational purposes and to calculate pollutant loadings. The requirement to monitor influent for this parameter will be discontinued.														
pH	SU	Minimum	6.0	6.0 Actual Min	60/0	**6.0**	TOGS 1.3.3	7.5[12]	-	6.5 – 8.5	Range	No Reasonable Potential	-	-	**TBEL**
	SU	Maximum	9.0	7.6 Actual 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 protective of the water quality standards (WQS). The requirement to monitor influent for this parameter will be discontinued.														
Temperature	°F	Monthly Avg	Monitor	16 Actual Avg	60/0	-	-	Narrative (Non-Trout): The water temperature at the surface of a stream shall not be raised to more than 90F at any point and... shall not be raised or lowered to more than 5F over the temperature that existed before the addition					704.2	-	**Discontinued**
	°F	Daily Max	**Monitor**	27 Actual Max	60/0	Monitor	750-1.13 Monitor								**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. Daily Maximum temperature data are sufficient to determine whether the effluent has reasonable potential to cause or contribute to an exceedance of water quality standards; for this reason, Daily Maximum temperature monitoring will remain in the permit while Monthly Average monitoring will be discontinued from the permit. The requirement to monitor influent for this parameter will be discontinued.														

[11] Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)
[12] Average ambient pH using 18 data points collected from 1997-2017 at the closest upstream RIBS site, 13-LHUD-104.6.

5-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)	mg/L	Monthly Avg	**25**	11	60/0	25	TOGS 1.3.3	-	-	-	-	-	**TBEL**
		7 Day Avg	**40**	*	*	40	TOGS 1.3.3						
		Daily Max	Monitor	28	60/0	-	-	-	-	-	-		**Discontinued**
	lbs/day	Monthly Avg	**320**	110	60/0	320	TOGS 1.3.3	-	-	-	-	-	**TBEL**
		7 Day Avg	**490**	440	60/0	490	Antibacksliding						**Antibacksliding**
		Daily Max	Monitor	**	**	-	-	-	-	-	-		**Discontinued**

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 WQS.

The Monthly Average mass limitation was obtained by multiplying the concentration limit of 25 mg/L by the design flow of 1.55 MGD and a conversion factor of 8.34. The 7-Day Average mass limitation can be obtained by multiplying the concentration limit of 40 mg/L by the design flow of 1.55 MGD and a conversion factor of 8.34; this results in a 7-Day Average mass limitation of 520 lbs/day. However, the previous 7-Day Average mass limitation of 490 lbs/day, which is more stringent, will be kept in the permit to prevent backsliding.

TOGS 1.3.3 does not include a TBEL for Daily Maximum; it only includes TBELs for Monthly Average and 7-day Average. For this reason, Monthly Average and 7-day Average limits will remain in the permit, while monitoring for Daily Maximum (both mg/L and lbs/day) will be discontinued.

*The 40 mg/L limit was coded in NetDMR as a Daily Maximum limit instead of a 7-day Average limit; for this reason, 7-day average data was not included in DMRs. The Daily Max (mg/L) monitoring data that was collected was used to calculate reasonable potential for the 7-day average parameter.

**Daily Max (lbs/day) monitoring was included in the previous permit but this parameter was not coded in NetDMR; for this reason, Daily Max data was not included in DMRs.

5-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$)*	% Rem	Daily Minimum	Monitor	71% Actual Min 88% Actual Avg	60/0	Monitor	750-1.13 Monitor	-	-	-	-	-	**Discontinued**
	% Rem (Jun 1 – Nov 30)	Monthly Avg	85	97%* 95%ile LN 95%* Actual Avg 90%* Actual Min	30/0	**85**	TOGS 1.3.3, 40 CFR § 133.102(a)(4)(iii)	-	-	-	-	-	**TBEL**
	% Rem (Dec 1 – May 31)	Monthly Avg	80	94%* 95%ile LN 92%* Actual Avg 84%* Actual Min	30/0			-	-	-	-	-	**TBEL**
	* Although the parameters for percent removal were written in the 2008 permit as BOD_5, not $CBOD_5$, they were coded in NetDMR as $CBOD_5$ limits. Therefore, the data reported on DMRs was for "Carbonaceous Oxygen Demand, Percent Removal." This will be corrected in the new permit and all percent removal requirements will be for $CBOD_5$. TBELs: The data over the last 5 years indicate that 85% or greater monthly average percent removal is "consistently achievable through proper operation and maintenance" (as defined by TOGS 1.3.3 and 40 CFR 133.101(f)) in both the wet and dry seasons. In addition, the monthly average percent removal has only dropped below 85% once in the past 5 years. This occurred in March of 2019 and has not occurred again in the past 4.5 years. Therefore, seasonal CBOD5 percent removal limits are not necessary, and a year-round limit will be set at 85% removal, which is the 30-day average CBOD5 percent removal required in 40 CFR 133.102(a)(3). Given that adequate dilution is available the TBEL is protective of WQS. TOGS 1.3.3 does not include a TBEL for Daily Minimum percent removal; it only includes a TBEL for Monthly Average percent removal. For this reason, a Monthly Average percent removal limit will remain in the permit, while monitoring for Daily Minimum percent removal will be discontinued. Percent removals shall not be calculated on days when daily average flow exceeds 1.55 MGD. This requirement will be included in a footnote in the permit.												
Ultimate Oxygen Demand (UOD)	mg/L	Monthly Avg	Monitor	96	60/0	Monitor	750-1.13 Monitor	-	-	-	-	-	**Discontinued**
	lbs/day	Monthly Avg	Monitor	800	60/0	Monitor	750-1.13 Monitor	-	-	-	-	-	**Discontinued**
	There are no TBELS for UOD. Given that adequate dilution is available, consistent with TOGS 1.3.3, effluent limitations for $CBOD_5$ are adequately protective of WQS. Therefore, monitoring for UOD has been discontinued.												

Total Suspended Solids (TSS)	mg/L	Monthly Avg	**30**	13	60/0	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.	703.2	-	**TBEL**
		7 Day Avg	**45**	33	60/0	45	TOGS 1.3.3					
		Daily Max	Monitor	*	*	-	-					**Discontinued**
	lbs/d	Monthly Avg	**390**	120	60/0	390	TOGS 1.3.3					**TBEL**
		7 Day Avg	**580**	500	60/0	580	TOGS 1.3.3					
		Daily Max	Monitor	*	*	-	-					**Discontinued**
	% Rem	Daily Min	Monitor	70% Actual Min 92% Actual Avg	60/0	-	-					**Discontinued**
	% Rem (Jun 1 – Nov 30)	Monthly Avg	85	98% 95%ile LN 97% Actual Avg 95% Actual Min	30/0	**85**	TOGS 1.3.3, 40 CFR 13.102(b)(3)					**TBEL**
	% Rem (Dec 1 – May 31)	Monthly Avg	75	96% 95%ile LN 95% Actual Avg 90%* Actual Min	30/0							

* Daily Max (mg/L and lb/day) monitoring was included in the last permit, but these parameters were not coded in NetDMR; for this reason, Daily Max data was not included in DMRs.

TBELs: The data over the last 5 years indicate that 85% or greater monthly average percent removal is "consistently achievable through proper operation and maintenance" (as defined by TOGS 1.3.3 and 40 CFR 133.101(f)) in both the wet and dry seasons. The lowest monthly average percent removal over the last 5 years was 90% (December 2019 and March 2021). Therefore, seasonal TSS percent removal limits are not necessary, and a year-round limit will be set at 85% removal, which is the 30-day average TSS percent removal required in 40 CFR 133.102(b)(3).

TOGS 1.3.3 does not include TBELs for TSS Daily Maximum or Daily Minimum; it only includes Monthly Average and 7-day Average TBELs. For this reason, Monthly Average and 7-day Average limits will remain in the permit, while monitoring for Daily Maximum and Daily Minimum will be discontinued.

Given that adequate dilution is available, the TBELs are protective of WQS.

Percent removals shall not be calculated on days when daily average flow exceeds 1.55 MGD. This requirement will be included in a footnote in the permit.

	mg/L	Daily Max	-	400	1/0	-	-	16	41	Narrative: Shall be kept as low as practicable to maintain the best usage of waters but in no case shall it exceed 500 mg/L.	703.3	-	**No Limitation**
Total Dissolved Solids	Permittee reported one data point on the NY-2A application of 400 mg/L. The WQS for TDS was determined from 6 NYCRR 703.3. The projected instream concentration was calculated using the maximum reported effluent concentration of 400 mg/L and an assumed ambient upstream concentration of 16 mg/L (taken from the average of 21 data points reported at USGS Gage 01361450 Hudson River at Catskill). A multiplier of 6.2, as recommended in EPA's Technical Support Document Chapter 3.3, was applied to the projected effluent to account for the number of samples. Chronic dilution was applied. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no numeric WQBEL, other than that found in the narrative standard found in 6 NYCRR 703.3, is specified.												
Settleable Solids	mL/L	Monthly Avg	Monitor	0.10	1/59	-	-	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages	703.2	-	**Discontinued**
	mL/L	Daily Max	**0.3**	0.10	2/58	0.3	TOGS 1.3.3	-			-	**TBEL**
	TOGS 1.3.3 does not include TBELs for Monthly Average Settleable Solids; it only includes a Daily Maximum TBEL. For this reason, a Daily Maximum limit will remain in the permit, while monitoring for Monthly Average will be discontinued. 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 protective of WQS. The requirement to monitor influent for this parameter will be discontinued.												

	mg/L	Monthly Avg	**Monitor**	14	25/0	Monitor	750-1.13 Monitor	0.082	0.38	1.4	A(C)	No Reasonable Potential	TOGS 1.1.1	-	**Monitor**
	lb/d	Monthly Avg	**Monitor**	98	25/0	Monitor	750-1.13 Monitor	-	-	-	-	-			
Nitrogen, Ammonia (as N) June 1st – Oct. 31st (SUMMER)	Although the previous permit included Ammonia (as N) monitoring, ammonia was coded in NetDMR as Ammonia (as NH_3); the parameter will remain in the permit as Ammonia (as N) and should be coded in NetDMR and reported on DMRs as Ammonia (as N). This is consistent with the laboratory reporting units. For the reasonable potential analysis, reported values were converted to Ammonia (as N). Values can be converted using the equation: Ammonia (as N) = Ammonia (as NH_3) x 0.8224. The WQS for Ammonia was determined from TOGS 1.1.1 from a summer pH of 7.5 SU (calculated from the 75th-80th percentile values of 65 summer data points collected at USGS Gage 0136450); this value is consistent with the assumed pH value provided in TOGS 1.3.1E. An assumed summer temperature value of 25°C was also used to determine the WQS, consistent with TOGS 1.3.1E. On the NY-2A application, the permittee reported a maximum Ammonia (as N) value of 27.8 mg/L. The DMR Monthly Operator reports show that this value was from July of 2021, so it is a summer maximum. However, the permittee confirmed that the 27.8 mg/L value represents a value for Ammonia (as NH_3), which is equal to 22.9 mg/L of Ammonia (as N). The projected instream concentration was calculated using the maximum reported effluent concentration of 22.9 mg/L (as N) and an ambient upstream concentration of 0.082 mg/L (assumed value and consistent with TOGS 1.3.1D). A multiplier[13] of 1.3 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. Ammonia (as N) monitoring will remain in the permit pursuant to TOGS 1.3.3 and 6 NYCRR 750-1.13 to assist in future permit development; monitoring will be monthly.														

[13] As recommended from EPA's Technical Support Document, Chapter 3.3

Nitrogen, Ammonia (as N) Nov. 1st – May 31st (WINTER)	mg/L	Monthly Avg	**Monitor**	13	35/0	Monitor	750-1.13 Monitor	0.082	0.58	1.9	A(C)	No Reasonable Potential	TOGS 1.1.1	-	**Monitor**
	lb/d	Monthly Avg	**Monitor**	99	35/0	Monitor	750-1.13 Monitor	-	-	-	-	-			
	Although the previous permit included Ammonia (as N) monitoring, ammonia was coded in NetDMR as Ammonia (as NH_3); the parameter will remain in the permit as Ammonia (as N) and should be coded in NetDMR and reported on DMRs as Ammonia (as N). This is consistent with the laboratory reporting units. For the reasonable potential analysis, reported values were converted to Ammonia (as N). Values can be converted using the equation: Ammonia (as N) = Ammonia (as NH_3) x 0.8224. The WQS for Ammonia was determined from TOGS 1.1.1 from a winter pH of 7.50 and a temperature of 10°C (assumed values and consistent with TOGS 1.3.1E). The projected instream concentration was calculated using the maximum reported effluent concentration of 50 mg/L (as NH_3) which is equal to 41.2 mg/L (as N) and an ambient upstream concentration of 0.082 mg/L. A multiplier[14] of 1.2 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. Ammonia (as N) monitoring will remain in the permit pursuant to TOGS 1.3.3 and 6 NYCRR 750-1.13 to assist in future permit development; monitoring will be monthly.														
Total Kjeldahl Nitrogen (TKN)	mg/L	Monthly Avg	Monitor	20	60/0	Monitor	750-1.13 Monitor	-	-	-	-	-	-	-	**Discontinued**
	lb/day	Monthly Avg	Monitor	150	60/0	Monitor	750-1.13 Monitor	-	-	-	-	-	-	-	**Discontinued**
	There are no TBELs or WQS for TKN; therefore, no limitations are specified. TKN monitoring will be removed from the permit.														
Total Nitrogen (as N)	mg/L	Daily Max	-	16 Actual Max	1/0	-	-	Narrative: None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.				-	-	-	**No Limitation**
	Permittee reported one data point of 16.4 mg/L on the NY-2A application. There are no TBELs or WQS for Total Nitrogen; therefore, no numeric limitations are specified.														
Phosphorus, Total (as P)	mg/L	Daily Max	-	2.7 Actual Max	1/0	-	-	Narrative: None in amounts that will result in growths of algae, weeds and slimes that will impair the waters for their best usages.				-	-	-	**No Limitation**
	Permittee reported one data point of 2.7 mg/L on the NY-2A application. There are no TBELs for Total Phosphorous. The facility is not located within the Chesapeake Bay Watershed, the Lake Champlain Watershed, the Great Lakes Watershed, or any connecting channels, and there are no applicable TMDLs. The facility is not located upstream of a lake or lake watershed. Therefore, there are no applicable numeric WQS. Therefore, no numeric limitations are specified.														

[14] As recommended from EPA's Technical Support Document, Chapter 3.3

	µg/L	Daily Max	Monitor	12000	6/5	**9.3**	-	0	0.39	5 0.6	H(WS) A(C)	No Reasonable Potential	703.5	-	**Action Level**
	lbs/d	Daily Max	0.12 -AL	0.76	5/5	-	-	-	-	-	-	-	-	-	**Discontinued**
Bis (2-ethylhexyl) Phthalate	Data were taken from DMRs (10 values) and one additional value of 23 µg/L reported on the NY-2A application. The projected instream concentration was calculated using a maximum reported effluent concentration of 23 µg/L, chronic dilution ratio, and ambient upstream concentration of 0 mg/L. As recommended in EPA's Technical Support Document, Chapter 3.3, a multiplier of 1.70 was applied to the effluent concentration to account for the number of samples. There is no reasonable potential to exceed water quality. TOGS 1.3.1E states, "the ambient standard for this parameter is below the accepted detection limit," and "available data does not indicate that Bis is a water quality limiting substance." For these reasons, a WQBEL was not calculated. However, there is currently an Action Level in the permit of 0.12 lb/d and the EEQ was calculated as 0.76 lb/d, using the 99th percentile delta-lognormal of the reported values. TOGS 1.3.1E says "until contamination and detection level issues are more thoroughly evaluated, effluent limits based on technology or action levels will be recommended." In addition, a maximum daily load has been developed for bis (2-ethylhexyl) phthalate and an action level is necessary to protect downstream water quality in accordance with 6 NYCRR Part 701.1 For these reasons, the Action Level will remain in the permit. However, the existing Action level of 0.12 lbs/day was converted from lbs/day to µg/L so that the data collected to facilitate reasonable potential analysis during the next full technical review. To convert from lbs/day to mg/L, the following formula was used: FLOW (MGD) x Concentration (mg/L) X 8.34 = Mass (lbs/day); then the concentration was converted from mg/L to µg/L.														
	µg/L	Daily Max	Monitor	170	10/0	-	-	0	0.05	7	H(WS)	No Reasonable Potential	703.5	-	**Discontinued**
	lbs/d	Daily Max	0.07-AL	0.08	10/0	-	-	-	-	-	-	-	-	-	**Discontinued**
Chloroform	Concentration data: The maximum daily discharge of 3.2 µg/L that was reported on the 2A application was not used for analysis, because that value was flagged by the laboratory as estimated below the reporting level. The actual maximum value reported on the DMRs was 2.9 µg/L and the 99th percentile lognormal using the 10 data points from the DMRs is 170 µg/L. Mass data: The actual maximum value reported on the DMRs was 0.058 lbs/day and the 99th percentile lognormal using the 10 data points from the DMRs is 0.08 lbs/d. The projected instream concentration was calculated using a maximum reported effluent concentration of 2.9 µg/L, HEW dilution ratio, and ambient upstream concentration of 0 µg/L. As recommended in EPA's Technical Support Document, Chapter 3.3, a multiplier of 1.70 was applied to the effluent concentration to account for the number of samples. There is no reasonable potential to exceed water quality. Therefore, the Action Level (lbs/day) and monitoring (µg/L) will be discontinued.														

Copper, Total	µg/L	Daily Max	Monitor	26	20/0	**93**	-	0	0.70	200 9.6* 6.6**	H(WS) A(A) A(C)	No Reasonable Potential	703.5	-	**Action Level**
	lbs/d	Daily Max	1.2-AL	0.47	20/0	-	-	0	-	-	-		-	-	**Discontinued**
	Copper was detected in the effluent as reported in the NY-2A application and the permit contains an action level for copper. The projected instream concentration was calculated using the maximum reported effluent concentration of 26 µg/L and an ambient upstream concentration of 0. 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. Metals translators of 1.042 for acute and chronic and 1.0 for HEW were applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. The A(A) and A(C) WQSs for copper were calculated using a hardness of 70 mg/L (taken from 62 data points collected as USGS Station 01361450 Hudson River at Catskill) and the formulas provided in TOGS 1.1.1 and 6 NYCRR 703.5. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified. However, a maximum daily load has been developed for Total Copper and an Action Level has been retained in the permit to protect downstream water quality in accordance with 6 NYCRR Part 701.1. However, the existing Action level of 1.2 lbs/day was converted from lbs/day to µg/L so that the data collected to facilitate reasonable potential analysis during the next full technical review. To convert from lbs/day to mg/L, the following formula was used: FLOW (MGD) x Concentration (mg/L) X 8.34 = Mass (lbs/day); then the concentration was converted from mg/L to µg/L.														
Cyanide, Available (Free)	µg/L	Action Level	Monitor	2.0 Actual Max	2/2	-	-	0	0.05	5.2* 22	A(C) A(A)	No Reasonable Potential	703.5	-	**Discontinued**
	Data for Available Cyanide were taken from the following sources: four data points collected pursuant to the one-year quarterly monitoring program for cyanide required in the last permit (June 2008 through March 2009). The actual maximum value, of 2 µg/L was used to calculate EEQ. The projected instream concentration was calculated using the maximum reported effluent concentration of 2.0 µg/L, a multiplier of 2.60, the chronic dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified and no Action Level is necessary. * As free cyanide: the sum of HCN and CN− expressed as CN.														
Cyanide, Total	µg/L	Action Level	Monitor	12 Actual Max	1/4	-	-	0	0.28	200 9000	H(WS) H(FC)	No Reasonable Potential	703.5	-	**Discontinued**
	Data for Total Cyanide were taken from the following sources: four data points collected pursuant to the one-year quarterly monitoring program for cyanide required in the last permit (June 2008 through March 2009) and one data point reported on the NY-2A application. The actual maximum value, reported in the NY-2A application, of 12 µg/L was used to calculate EEQ. The projected instream concentration was calculated using the maximum reported effluent concentration of 12 µg/L, a multiplier of 2.30, the HEW dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified and no Action Level is necessary.														

Mercury, Total	ng/L	Daily Max	-	23 Actual Max	5/0	**50**	GLCA	-	0.091	0.7	H(FC)	-	1.3.10	-	**DOW 1.3.10**
	ng/L	Action Level	Monitor	23 Actual Max	5/0	-	-	-	-	-	-	-	-	-	**Discontinued**
	Data for Total Mercury were taken from the following sources: four data points collected pursuant to the one-year quarterly monitoring program for mercury required in the last permit (June 2008 through March 2009) and one data point reported on the NY-2A application. The Actual Maximum value of this data (23 ng/L reported in December of 2008) was used to report the EEQ, although the more recent sample submitted with the application was much lower at 4.9 ng/L. The 99th percentile lognormal value, considering all five data points, is 48 ng/L. A 50 ng/L limit is required by DOW 1.3.10 because the data demonstrate that the facility is capable of meeting effluent limitations at or below 50 ng/L, which is the General Level Currently Achievable (GLCA). Action Levels for Mercury have been discontinued because they are being replaced with a 50 ng/L enforceable limit as required by DOW 1.3.10. See also Mercury section of this fact sheet.														
Toluene	µg/L	Daily Max	Monitor	16	7/3	-	-	0	0.02	5 6000 100 480	H(WS) H(FC) A(C) A(A)	No Reasonable Potential	TOGS 1.1.1	-	**Discontinued**
	lbs/d	Action Level	0.14-AL	0.08	8/2	-	-	-	-	-	-	-	-	-	**Discontinued**
	Data were taken from DMRs (10 values); the maximum value of 1.1 µg/L reported on the NY-2A application was already reflected in the DMRs. There are no TBELs for Toluene. The projected instream concentration was calculated using the maximum reported effluent concentration of 1.1 µg/L, a multiplier of 1.70, the HEW dilution ratio, and an assumed negligible upstream ambient concentration. The multiplier was selected from EPA's Technical Support Document Chapter 3.3 to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified and the Action Level (lbs/day) and monitoring (µg/L) will be discontinued.														
Zinc	µg/L	Daily Max	Monitor	160	20/0	-	-	0	3.8	2000 61 87 5000	H(WS) A(C) A(A) E	No Reasonable Potential	TOGS 1.1.1	-	**Discontinued**
	lbs/d	Action Level	5.1	2.9	20/0	-	-	-	-	-	-	-	-	-	**Discontinued**
	Data were taken from DMRs (20 values); the maximum value of 138 µg/L reported on the NY-2A application was already reflected in the DMRs. The projected instream concentration was calculated using the maximum reported effluent concentration of 138 µg/L and an ambient upstream concentration of 0. 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. Metals translators of 1.022 for acute, 1.014 for chronic, and 1.0 for HEW were applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. The A(A) and A(C) WQSs for zinc were calculated using a hardness of 70 mg/L (taken from 62 data points collected as USGS Station 01361450 Hudson River at Catskill) and the formulas provided in TOGS 1.1.1 and 6 NYCRR 703.5. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified. In addition, there are no applicable TBELs for zinc. Therefore, the action level will be discontinued and no limitation is specified.														

Coliform, Fecal	#/100 ml	30d Geo Mean	**200**	37	41/19	200	TOGS 1.3.3	-	Narrative: The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.				703.4	-	**TBEL**
	#/100 ml	7d Geo Mean	**400**	480	41/19	400	TOGS 1.3.3	-							
	#/100 ml	Daily Max	Monitor	*	*	-	-	-	-				-	-	**Discontinued**
	*Daily Max data was not coded in NetDMR; for this reason, Daily Max data was not included in DMRs. A maximum discharge of 8160 cfu/ 100mL was reported on the NY-2A application; based on a review of the DMRs, that data point represents the 7-day geometric mean for September 2022, and it is an extreme outlier. For this reason, the EEQ of 480 reported here for 7-day geometric mean does not include that data point. TOGS 1.3.3 does not include TBELs for Daily Maximum Fecal Coliform; it only includes 30-day geometric mean and 7-day geometric mean TBELs. For this reason, 30-day geometric mean and 7-day geometric mean limits will remain in the permit, while monitoring for Daily Maximum will be discontinued. The EEQ was also compared to the narrative water quality standards and there is no reasonable potential. Consistent with TOGS 1.3.3, effluent disinfection is required year-round due to the class of the receiving waterbody. Fecal coliform effluent limitations equal to the TBEL are specified.														
Total Residual Chlorine (TRC)	mg/L	Daily Max	2.0	2.3	60/0	**2.0**	TOGS 1.3.3	-	-	0.005	A(C)	2.5	TOGS 1.3.1	-	**TBEL**
	mg/L	Monthly Avg	Monitor	1.8	60/0	-	-	-	-	-	-	-	-	-	**Discontinued**
	lb/d	Monthly Avg	Monitor	*	*	-	-	-	-	-	-	-	-	-	**Discontinued**
	Effluent disinfection is currently required year-round 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. TOGS 1.3.3 does not include TBELs for Monthly Average Total Residual Chlorine; it only includes a TBEL for Daily Maximum TRC. For this reason, a Daily Maximum limit will remain in the permit, while monitoring for Monthly Average will be discontinued.														

Additional Pollutants Detected

Nitrate (as N)	mg/L	Daily Max	-	1.6 Actual Max	1/0	-	-	0	0.10	10	H(WS)	No Reasonable Potential	703.5	-	**No Limitation**
	Nitrate was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using the maximum reported effluent concentration of 1.64 mg/L and an ambient upstream concentration of 0. 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 WQBEL is specified. In addition, there are no TBELs for nitrate. Therefore, no limitation is specified.														
Nitrite (as N)	mg/L	Daily Max	-	0.13 Actual Max	1/0	-	-	0	0.01	1.0	H(WS)	No Reasonable Potential	703.5	-	**No Limitation**
	Nitrite was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using the maximum reported effluent concentration of 0.13 mg/L and an ambient upstream concentration of 0. 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 WQBEL is specified. In addition, there are no TBELs for nitrite. Therefore, no limitation is specified.														
Nitrate and Nitrite (as N)	mg/L	Daily Max	-	1.7*	1/0	-	-	0	0.11	10	H(WS)	No Reasonable Potential	703.5	-	**No Limitation**
	*Nitrate and nitrite were separately detected in the effluent as reported in the NY-2A application and they were added together to get a total nitrate and nitrite. The projected instream concentration was calculated using the maximum reported effluent concentration of 1.77 mg/L and an ambient upstream concentration of 0. 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 WQBEL is specified. In addition, there are no TBELs for nitrate plus nitrite. Therefore, no limitation is specified.														
Chromium, Total Recoverable	µg/L	Daily Max	-	1.0 Actual Max	1/0	-	-	0	0.06	50 55 430	H(WS) A(C) A(A)	No Reasonable Potential	703.5	-	**No Limitation**
	Total chromium was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using the maximum reported effluent concentration of 1.0 µg/L and an ambient upstream concentration of 0. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.20 was applied to the projected effluent to account for the number of samples. Metals translators of 3.165 for acute, 1.163 for chronic, and 1.0 for HEW were applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. The A(A) and A(C) WQSs for total chromium were calculated using a hardness of 70 mg/L (taken from 62 data points collected as USGS Station 01361450 Hudson River at Catskill) and the formulas provided in TOGS 1.1.1 and 6 NYCRR 703.5. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified. In addition, there are no TBELs for Total Chromium. Therefore, no limitation is specified.														

Lead, Total Recoverable	µg/L	Daily Max	-	1.0 Actual Max	1/0	-	-	0	0.05	50 2.6 66	H(WS) A(C) A(A)	No Reasonable Potential	703.5	-	**No Limitation**
	Total recoverable lead was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using the maximum reported effluent concentration of 1.0 µg/L and an ambient upstream concentration of 0. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.20 was applied to the projected effluent to account for the number of samples. Metals translators of 1.186 for acute and chronic and 1.0 for HEW were applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. The A(A) and A(C) WQSs for total recoverable lead were calculated using a hardness of 70 mg/L (taken from 62 data points collected as USGS Station 01361450 Hudson River at Catskill) and the formulas provided in TOGS 1.1.1 and 6 NYCRR 703.5. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified. In addition, there are no TBELs for Total Lead. Therefore, no limitation is specified.														
Nickel, Total Recoverable	µg/L	Daily Max	-	2.0 Actual Max	1/0	-	-	0	0.12	100 38 350	H(WS) A(C) A(A)	No Reasonable Potential	703.5	-	**No Limitation**
	Total recoverable nickel was detected in the effluent as reported in the NY-2A application. The projected instream concentration was calculated using the maximum reported effluent concentration of 2.0 µg/L and an ambient upstream concentration of 0. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 6.20 was applied to the projected effluent to account for the number of samples. Metals translators of 1.002 for acute, 1.003 for chronic, and 1.0 for HEW were applied to convert between the total and dissolved form in accordance with the EPA Document 823-B-96-007. The A(A) and A(C) WQSs for total recoverable nickel were calculated using a hardness of 70 mg/L (taken from 62 data points collected as USGS Station 01361450 Hudson River at Catskill) and the formulas provided in TOGS 1.1.1 and 6 NYCRR 703.5. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified. In addition, there are no TBELs for Total Nickel. Therefore, no limitation is specified.														
Dichlorobromomethane	µg/L	Daily Max	-	0.43 Actual Max	1/9	-	-	0	0.01	50	H(WS)	No Reasonable Potential	TOGS 1.1.1	-	**No Limitation**
	Dichlorobromomethane was detected in the effluent as reported in the NY-2A application. The permittee reported a maximum daily discharge of 0.43 µg/L, and the remaining samples included in the 2A application were non-detects. The projected instream concentration was calculated using the maximum reported effluent concentration of 0.43 µg/L and an ambient upstream concentration of 0. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 1.70 was applied to the projected effluent to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified. In addition, there are no TBELs for dichlorobromomethane. Therefore, no limitation is specified.														

Tetrachloro-ethylene	µg/L	Daily Max	-	0.74 Actual Max	1/9	-	-	0	0.01	0.7 1	H(WS) H(FC)	No Reasonable Potential	TOGS 1.1.1	-	**No Limitation**
	Tetrachloroethylene (tetrachloroethene) was detected in the effluent as reported in the NY-2A application. The permittee reported a maximum daily discharge of 0.74 µg/L, and the remaining samples included in the 2A application were non-detects. The projected instream concentration was calculated using the maximum reported effluent concentration of 0.74 µg/L and an ambient upstream concentration of 0. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 1.70 was applied to the projected effluent to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified. In addition, there are no TBELs for tetrachloroethylene. Therefore, no limitation is specified.														
Total Phenols (Phenolic compounds)	µg/L	Daily Max	-	6.5* Actual Max	1/9 Phenol 3/7 m&p-cresol	-	-	0	0.11	1 µg/L 5.0 µg/L	E(WS) E(FS)	No Reasonable Potential	703.5	-	**No Limitation**
	Phenol and m&p cresol (3&4-Methylphenol) were detected in the effluent as reported in the NY-2A application. The permittee reported a maximum daily discharge of 1.6 µg/L for Phenol. The remaining Phenol samples were non-detects. There was one non-estimated detection of m&p-cresol in the effluent at 4.9 µg/L; two other detections, which were both lower than 4.9 µg/L, were each flagged with a "J" qualifier by the lab, which means that the reported concentration is considered estimated. The remaining m&p-cresol samples were non-detects. Therefore, the maximum discharges of 1.6 µg/L were used for Phenol and 4.9 µg/L was used for m&p-cresol in the reasonable potential analysis for Total Phenols. *The EEQ for Total Phenols was determined by adding the Actual Max discharge of 1.6 µg/L for Phenol to the Actual Max discharge of m&p-cresol of 4.9 µg/L. Since both Phenol and m&p-cresol are unchlorinated phenolic compounds, the two applicable water quality standards are 1 µg/L for Phenolic Compounds (total phenols) and 5 µg/L for Total unchlorinated phenols. The 1 µg/L WQS was used for the reasonable potential analysis since it is the more conservative standard. The WQS for Phenol itself, in both 6 NYCRR 703.5 and on TOGS 1.1.1, simply refers to the entries for Phenolic compounds and Total unchlorinated Phenols; since there is no separate WQS for Phenol alone, no separate RP analysis was completed for Phenol alone. In addition, there is no separate WQS for m&p-cresol (3&4-Methylphenol) alone, so no separate RP analysis was completed for m&p-cresol alone. The projected instream concentration was calculated using the maximum reported effluent concentration of 6.5 µg/L and an ambient upstream concentration of 0. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 1.70 was applied to the projected effluent to account for the number of samples. A comparison of the projected instream concentration to the WQS indicates no reasonable potential to cause or contribute to a WQS violation. Therefore, no WQBEL is specified. In addition, there are no TBELs for Total Phenols. Therefore, no limitation is specified.														

	µg/L	Daily Max	-	2.3 Actual Max	2/7	-	-	0	0.04	50*	H(WS)	No Reasonable Potential	TOGS 1.1.1	-	**No Limitation**
Diethyl phthalate	Diethyl phthalate (DEP) was detected in the effluent as reported in the NY-2A application. The permittee reported a maximum daily discharge of 2.3 µg/L, and the remaining samples included in the 2A application were non-detects. The projected instream concentration was calculated using the maximum reported effluent concentration of 2.3 µg/L and an ambient upstream concentration of 0. A multiplier, as recommended in EPA's Technical Support Document Chapter 3.3, of 1.80 was applied to the projected effluent to account for the number of samples. * Although there is no WQS for diethyl phthalate in 6 NYCRR Part 703.5, TOGS 1.1.1 does include a general organic guidance value for human health of 50 µg/L. A comparison of the projected instream concentration to the Guidance Value (GV) indicates no reasonable potential to cause or contribute to a water quality violation. Therefore, no WQBEL is specified. In addition, there are no TBELs for diethyl phthalate. Therefore, no limitation is specified.														

Appendix: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

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

Outfall and Receiving Water Information

Impaired Waters

The NYS 303(d) List of Impaired/TMDL Waters identifies waters where specific best usages are not fully supported. The state must consider the development of a Total Maximum Daily Load (TMDL) or other strategy to reduce the input of the specific pollutant(s) that restrict waterbody uses, in order to restore and protect such uses. SPDES permits must include effluent limitations necessary to implement a 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 95th (monthly average) and 99th (daily maximum) percentiles of the lognormal distribution of existing effluent data. When there are greater than three non-detects, a delta-lognormal distribution is assumed, and delta-lognormal calculations are used to determine the monthly average and daily maximum pollutant concentrations. Statistical calculations are not performed for parameters where there are less than ten data points. If additional data is needed, a monitoring requirement may be specified either through routine monitoring or a short-term high intensity monitoring program. The Pollutant Summary Table identifies the number of sample data points available.

Permit Requirements

Basis for Effluent Limitations

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

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

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law[15] and USEPA interpretation[16] 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

[15] American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)
[16] 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)

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

Effluent Limitations

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

Technology-based Effluent Limitations (TBELs)

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. Additionally, 6 NYCRR Part 701.1 prohibits the discharge of pollutants that will cause impairment of the best usages of the receiving water as specified by the water classifications at the location of discharge and at other locations that may be affected by such discharge. Water quality standards can be found under 6 NYCRR Parts 700-704. The limitations must be stringent enough to ensure that water quality standards are met at the point of discharge and in downstream waters and must be consistent with any applicable WLA which may be in effect through a TMDL for the receiving water. These and other requirements are summarized in TOGS 1.1.1, 1.3.1, 1.3.2, 1.3.5 and 1.3.6. The DEC considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

Mixing Zone Analyses

In accordance with TOGS 1.3.1., the DEC 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 DEC;

2) identify water quality criteria applicable to these pollutants;

3) determine if WQBELs are necessary (i.e. reasonable potential analysis (RPA)). The RPA will utilize the procedure outlined in Chapter 3.3.2 of EPA's Technical Support Document (TSD). As outlined in the TSD, for parameters with limited effluent data the RPA may include multipliers to account for effluent variability; and,

4) calculate WQBELs (if necessary). Factors considered in calculating WQBELs include available dilution of effluent in the receiving water, receiving water chemistry, and other pollutant sources.

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

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

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

Whole Effluent Toxicity (WET) Testing:

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

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

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.[1] 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.

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

Other Conditions

Mercury

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

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

Schedules of Compliance

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

Schedule(s) of Additional Submittals

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