State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**7033**	NAICS Code:	**721211**	SPDES Number:	**NY 00 33570**
Discharge Class (CL):	**09**			DEC Number:	**4-1936-00025/00001**
Toxic Class (TX):	**N**			Effective Date (EDP):	**DRAFT - EDP**
Major-Sub Drainage Basin:	**13 - 09**			Expiration Date (ExDP):	**EDP+5 Years**
Water Index Number:	**H-193-2**	Item No:	**863 – 109.1**	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:	**NYS Dept of Environmental Conservation**	Attention:	**Brett Byrne, Div. of Operations**		
Street:	**1130 North Westcott Road**				
City:	**Schenectady**	State:	**NY**	Zip Code:	**12306**
Email:	**R4info@dec.ny.gov/brett.byrne@dec.ny.gov**	Phone:	**(518) 357-2343**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL																
Name:	**North South Lake Campground**															
Address / Location:	**North Lake Road**											County:	**Greene**			
City:	**Haines Falls**						State:	**NY**				Zip Code:	**12436**			
Facility Location:		Latitude:	**42**	°	**11**	’	**45**	” N	& Longitude:	**74**	°	**03**	’	**18**	” W	
Primary Outfall No.:	**001**	Latitude:	**42**	°	**11**	’	**41**	” N	& Longitude:	**74**	°	**03**	’	**25**	” W	
Outfall Description:	**Treated Sanitary**	Receiving Water:	**Kaaterskill Creek in forest preserve**				Class:	**-**		Standard:	**AA(TS)**					

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

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

DISTRIBUTION:
BWP Permit Coordinator (permit.coordinator@dec.ny.gov)
BWP Permit Writer
RWE
RPA
EPA Region II (Region2_NPDES@epa.gov)

Permit Administrator:	
Address:	1130 North Westcott Road Schenectady, NY 12306
Signature	Date

SUMMARY OF ADDITIONAL OUTFALLS

Outfall	Wastewater Description	Outfall Latitude	Outfall Longitude
002	**Treated Sanitary**	**42** ° **11** ' **45** " N	**74** ° **03** ' **18** " W
Receiving Water:	**Groundwater**		Class: **GA**

DEFINITIONS

TERM	DEFINITION
7-Day Geo Mean	The highest allowable geometric mean of daily discharges over a calendar week.
7-Day Average	The average of all daily discharges for each 7-days in the monitoring period. The sample measurement is the highest of the 7-day averages calculated for the monitoring period.
12-Month Rolling Average (12 MRA)	The current monthly value of a parameter, plus the sum of the monthly values over the previous 11 months for that parameter, divided by the number of months for which samples were collected in the 12-month period.
30-Day Geometric Mean	The highest allowable geometric mean of daily discharges over a calendar month, calculated as the antilog of: the sum of the log of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Action Level	Action level means a monitoring requirement characterized by a numerical value that, when exceeded, triggers additional permittee actions and department review to determine if numerical effluent limitations should be imposed.
Compliance Level / Minimum Level	A compliance level is an effluent limitation. A compliance level is given when the water quality evaluation specifies a Water Quality Based Effluent Limit (WQBEL) below the Minimum Level. The compliance level shall be set at the Minimum Level (ML) for the most sensitive analytical method as given in 40 CFR Part 136, or otherwise accepted by the Department.
Daily Discharge	The discharge of a pollutant measured during a calendar day or any 24-hour period that reasonably represents the calendar day for the purposes of sampling. For pollutants expressed in units of mass, the 'daily discharge' is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the 'daily discharge' is calculated as the average measurement of the pollutant over the day.
Daily Maximum	The highest allowable Daily Discharge.
Daily Minimum	The lowest allowable Daily Discharge.
Effective Date of Permit (EDP or EDPM)	The date this permit is in effect.
Effluent Limitations	Effluent limitation means any restriction on quantities, quality, rates and concentrations of chemical, physical, biological, and other constituents of effluents that are discharged into waters of the state.
Expiration Date of Permit (ExDP)	The date this permit is no longer in effect.
Instantaneous Maximum	The maximum level that may not be exceeded at any instant in time.
Instantaneous Minimum	The minimum level that must be maintained at all instants in time.
Monthly Average	The highest allowable average of daily discharges over a calendar month, calculated as the sum of each of the daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.
Outfall	The terminus of a sewer system, or the point of emergence of any waterborne sewage, industrial waste or other wastes or the effluent therefrom, into the waters of the State.
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	May 1 – October 31	Kaaterskill Creek	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly Average	29,000	GPD			Continuous	Meter		X	1
Flow	Daily Maximum	Monitor	GPD			Continuous	Meter		X	
pH	Daily Minimum	6.5	SU			1/Day	Grab		X	
	Daily Maximum	8.5	SU							
BOD_5	Daily Maximum	5	mg/L	1.2	lb/d	1/Month	Grab		X	
Total Suspended Solids (TSS)	Daily Maximum	10	mg/L	2.4	lb/d	1/Month	Grab		X	
Settleable Solids	Daily Maximum	0.1	mL/L			1/Day	Grab		X	
Dissolved Oxygen	Daily Minimum	7.0	mg/L			1/Month	Grab		X	
Ammonia (as N))	Monthly Average	1.0	mg/L	0.24	lb/d	1/Month	Grab		X	
Total Mercury	Daily Maximum	50	ng/L			1/Month	Grab		X	
Temperature	Daily Maximum	Monitor	ºF			1/Day	Grab		X	

EFFLUENT DISINFECTION Required Seasonal from May 1st - October 31st		Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	FN
Coliform, Fecal	30-Day Geometric Mean	200	No./ 100 mL			1/Month	Grab		X	
Coliform, Fecal	7-Day Geometric Mean	400	No./ 100 mL			1/Month	Grab		X	
Chlorine, Total Residual	Daily Maximum	0.03	mg/L			1/Day	Grab		X	2,3

PERMIT LIMITS, LEVELS AND MONITORING

OUTFALL	LIMITATIONS APPLY	RECEIVING WATER	EFFECTIVE	EXPIRING
002	May 1 – October 31	Groundwater	EDP	ExDP

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly Average	29,000	GPD			Continuous	Estimate		X	1,4,5

FOOTNOTES:

1. The sum of flows from Outfall 001 and Outfall 002 shall not exceed a monthly average of 29,000 gpd.
2. Sampling and reporting for total residual chlorine are necessary only if chlorine is used for disinfection or elsewhere in the treatment process, or if the facility otherwise has reasonable potential to discharge chlorine. Otherwise, the permittee shall report NODI-9 on the DMR.
3. This is a Compliance Level. The calculated WQBEL is 0.005 mg/L.
4. Flow may be calculated as the difference between overall influent flow and Outfall 001 effluent flow.
5. The sum of the flows from Outfall 001 and Outfall 002 shall not exceed a monthly average of 29,000 gpd.

MERCURY MINIMIZATION PROGRAM (MMP) - Type II

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, 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[1]. Monitoring of raw materials, equipment, treatment residuals, and other non-wastewater/non-stormwater substances may be performed using other methods as appropriate. Monitoring must be coordinated so that the results can be effectively compared between locations.

      Minimum required monitoring is as follows:

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

      ii. *Key Locations* and *Potential Mercury Sources* – The permittee must sample *key locations*, chosen to identify *potential mercury sources*, at least 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,[2] must receive approval from the Department prior to acceptance.

      iv. Decreased Monitoring Requirements - Facilities with EEQ at or below 12 ng/L are eligible for the following:

         1) Reduced requirements, through a permittee-initiated permit modification
            a) Conduct influent monitoring, sampling semi-annually, in lieu of monitoring within the collection system, such as at *key locations*; and
            b) Conduct effluent compliance sampling semi-annually.
         2) If a facility with reduced requirements reports discharges above 12 ng/L for two of four consecutive effluent samples, the Department may undertake a Department-initiated modification to remove the allowance of reduced requirements.
         3) Under the decreased permit requirements, the facility must continue to conduct a status report, as applicable in accordance with 2.c of this MMP, to determine if any waste streams have changed.

[1] Outfall monitoring must be conducted using the methods specified in Table 8 of *DOW 1.3.10.*
[2] A level of 0.2 mg/L (200,000 ng/L) or more is considered hazardous per 40 CFR Part 261.11. 500 ng/L is used here to alert the permittee that there is an unusual concentration of mercury and that it will need to be managed appropriately.

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

b. Control Strategy - The control strategy must contain the following minimum elements:
   i. Pretreatment/Sewer Use Law - The permittee must review pretreatment program requirements and the Sewer Use Law (SUL) to ensure it is up-to-date and enforceable with applicable permit requirements and will support efforts to achieve a dissolved mercury concentration of 0.70 ng/L in the effluent.
   ii. Monitoring and Inventory/Inspections
      1) Monitoring shall be performed as described in 2.a above. As mercury sources are found, the permittee must enforce its sewer use law to track down and minimize these sources.
      2) The permittee must inventory and/or inspect users of its system as necessary to support the MMP.
         a) Dental Facilities
            1. The permittee must maintain an inventory of each dental facility.
            2. The permittee must inspect each dental facility at least once every five years to verify compliance with the wastewater treatment operation, maintenance, and notification elements of 6 NYCRR 374.4. Alternatively, the permittee may develop and implement an outreach program,[3] which informs users of their responsibilities, and collect the "Amalgam Waste Compliance Report for Dental Dischargers"[4] form, as needed, to satisfy the inspection requirements. The permittee must conduct the outreach program at least once every five years and ensure the "Amalgam Waste Compliance Report for Dental Dischargers" are submitted by new users, as necessary. The outreach program could be supported by a subset of site inspections.
            3. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)a) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.
         b) Other *potential mercury sources*
            1. The permittee must maintain an inventory of other *potential mercury sources.*
            2. The permittee must inspect other *potential mercury sources* once every five years. Alternatively, the permittee may develop and implement an outreach program which informs users of their responsibilities as *potential mercury sources.* The permittee must conduct the outreach program at least once every five years. The outreach program should be supported by a subset of site inspections.
            3. A file shall be maintained containing documentation demonstrating compliance with 2.b.ii.2)b) above. This file shall be available for review by the Department representatives and copies shall be provided upon request.
   iii. Systems with CSO & Type II SSO Outfalls – Permittees must prioritize *potential mercury sources* upstream of CSOs and Type II SSOs for mercury reduction activities and/or controlled-release discharge.
   iv. Equipment and Materials – Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.
   v. Bulk Chemical Evaluation – For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. If possible, the permittee must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.

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*
      1) If the permittee meets the criteria for MMP Type IV, the permittee must notify the Department for a permittee-initiated modification;

[3] For example, the outreach program could include education about sources of mercury and what to do if a mercury source is found.
[4] The form, "Amalgam Waste Compliance Report for Dental Dischargers," can be found here: https://www.dec.ny.gov/docs/water_pdf/dentalform.pdf

iii. All actions undertaken, pursuant to the control strategy, during the previous reporting period;
iv. Actions planned, pursuant to the control strategy, for the upcoming reporting period; and
v. Progress towards achieving a dissolved mercury concentration of 0.70 ng/L in the effluent (e.g., summarizing reductions in effluent concentrations as a result of the control strategy implementation and/or installation/modification of a treatment system).

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

3. MMP Modification - The MMP must be modified whenever:
   a. Changes at the facility, or within the collection system, increase the potential for mercury discharges;
   b. Effluent discharges exceed the current permit limitation(s); or
   c. A letter from the Department identifies inadequacies in the MMP.

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

DEFINITIONS:

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

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

DISCHARGE NOTIFICATION REQUIREMENTS

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

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

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

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

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

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 the 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)

F. Planned Changes

1. The permittee shall give notice to the Department as soon as possible of planned physical alterations or additions to the permitted facility when:

   a. The alteration or addition to the permitted facility may meet any of the criteria for determining whether facility is a new source in 40 CFR §122.29(b); or
   b. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject either to effluent limitations in the permit, or to notification requirements under 40 CFR §122.42(a)(1); or
   c. The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan.

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

GENERAL REQUIREMENTS (continued)

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

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

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

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

RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS

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

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

DMRs must be submitted electronically using the electronic reporting tool (NetDMR) specified by NYSDEC. Instructions on the use of NetDMR can be found at https://www.dec.ny.gov/chemical/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:

Via email to dow.R4@dec.ny.gov or, if necessary, in hard copy to:

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

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

D. Schedule of Additional Submittals:

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

SCHEDULE OF ADDITIONAL SUBMITTALS

Outfall(s)	Required Action	Due Date
	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.	
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.

E. Monitoring and analysis shall be conducted using sufficiently sensitive test procedures approved under 40 CFR Part 136, unless other test procedures have been specified in this permit.

F. More frequent monitoring of the discharge(s), monitoring point(s), or waters of the State than required by the permit, where analysis is performed by a certified laboratory or where such analysis is not required to be performed by a certified laboratory, shall be included in the calculations and recording of the data on the corresponding DMRs.

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

H. Unless otherwise specified, all information recorded on the DMRs shall be based upon measurements and sampling carried out during the most recently completed reporting period.

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

SPDES Permit Fact Sheet
NYSDEC
North South Lake Campground
NY0033570

Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) EBPS permit renewal has been drafted for the North South Lake Campground. The changes to the permit are summarized below:

- Updated permit format, definitions, and general conditions.
- Updated the list of outfalls to remove two subsurface discharges listed on the previous permit. Both were designed to discharge 500 gpd to groundwater and did not require permit coverage. One system remains in use, and the other has been closed.
- Corrected the name of the receiving water for the surface discharge.
- Updated the water quality standard used for calculation of water-quality based effluent limitations to "AA (TS)" because the facility's discharge is within the Forest Preserve.
- Updated units for ammonia from mg/L as ammonia (NH_3) to mg/L as nitrogen (N).
- Reduced limit for total residual chlorine (TRC) from 0.1 mg/L to 0.03 mg/L.
- Added a temperature monitoring requirement.
- Added a Type II Mercury Minimization Program and a mercury limit of 50 ng/L in accordance with TOGS 1.3.10.

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

4/1/1992 A full technical review was performed and the SPDES permit became effective with a new five-year term and expiration date of 4/1/1997. The 1992 permit, along with all subsequent modifications, has formed the basis of this permit. The permit was administratively renewed in 1997. The permit authorized the discharge of 48,000 gallons per day (gpd) of treated sanitary sewage to surface water through Outfall 001. The permit also noted the presence of two other systems (Outfalls 002 and 003) discharging 500 gpd to groundwater. The 1992 permit, along with all subsequent modifications,has formed the basis of this permit.

The permit was administratively renewed in 1997, 2002, 2007, 2012, and 2017. The current permit administrative renewal was effective until 3/31/2022.

5/1/1999 The permit was modified to incorporate changes to the design of the wastewater treatment system, reduce the permitted flow rate, renumber the outfalls, and add an outfall discharging to groundwater. The modified permit authorized the discharge of a total of 29,000 gpd to surface water (via Outfall 001) and groundwater (via Outfall 002). The Facility Information section of this document (below) includes more information on the configuration of the outfalls. The modified permit continued to note the presence of two 500-gpd discharges to groundwater, which were renumbered as Outfalls 003 and 004.

10/1/1999 The permit was modified to change the permittee's contact information

1/15/2001 The permit was modified to incorporate updates to the SPDES regulations (6 NYCRR 750).

12/7/2020 The Department issued a Request for Information (RFI) to modify and renew the SPDES permit due to the facility's EBPS score[1]. At the time of the RFI, the facility had an EBPS score of 172.

2/3/2021 The permittee (NYSDEC) submitted a SPDES Permit Application (PCI form).

3/31/2022 The current permit was allowed to stay in effect pursuant to SAPA[2].

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

Facility Information

SPDES-Permitted Discharge – Outfalls 001 and 002

North-South Lake Campground is a NYSDEC campground in New York State's Forest Preserve. The campground operates from May to October each year. During that time, sanitary sewage generated at the campground is collected and treated by a facility with a design flow of 29,000 gallons per day. The system is configured as follows:

Sewage is collected in individual septic tanks at seven comfort stations (one for each of the campground's seven loops of campsites), two bath houses (at North Lake and South Lake), the caretaker's cabin and ranger station, and the RV dump station.

Septic tank effluent is conveyed by a combination of force mains and gravity sewer to an aerated equalization tank at the wastewater treatment facility.

Following aeration, secondary treatment is provided by two sets of recirculating sand filters, one of which is open and one of which is subsurface. The configuration of the subsurface filters allows some of the filter effluent to discharge to the groundwater below (Outfall 002). The remaining effluent is either recirculated back to the aeration tanks at the beginning of the plant or directed to a second aeration process, which is followed by tablet chlorination and dechlorination and discharge to the Kaaterskill Creek (Outfall 001). A flow diagram is provided below.

Solids from the septic tanks and the influent tanks at the wastewater treatment facility are wet-hauled by a licensed septic hauler at the end of each camping season.

Other Current and Former Discharges Not Requiring a SPDES Permit

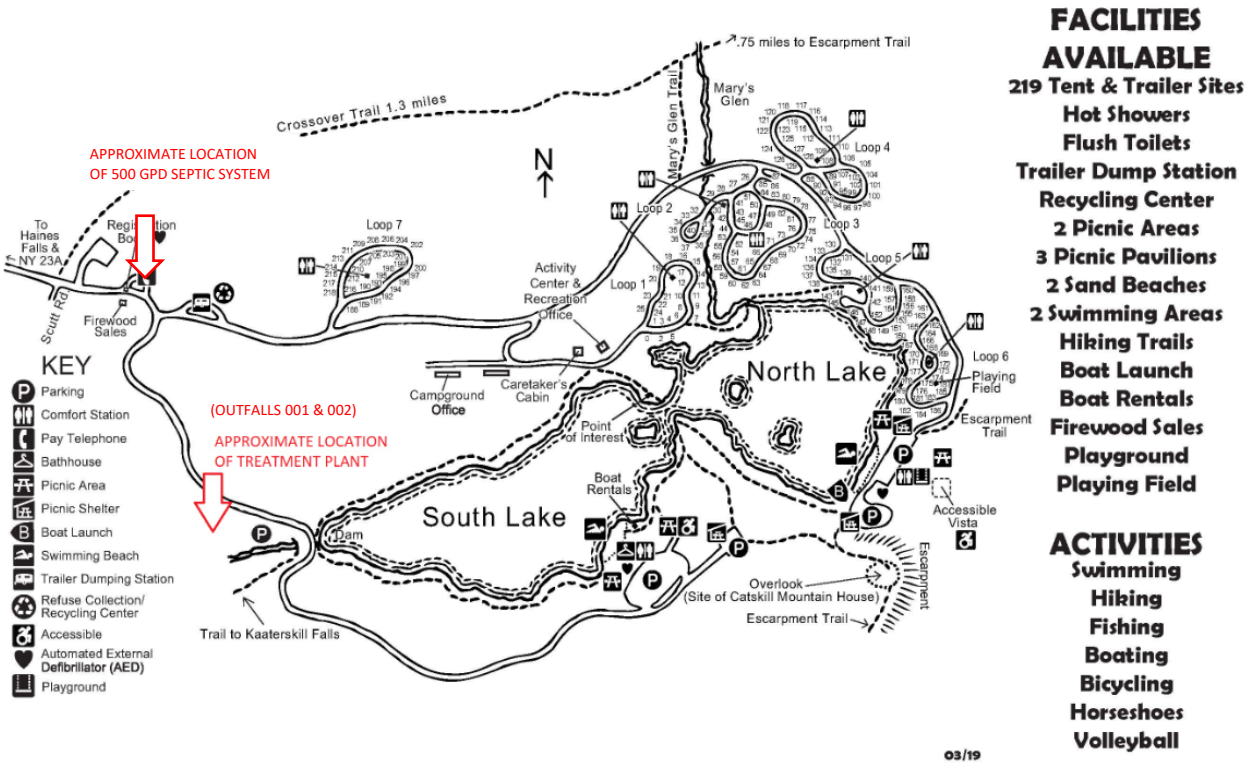
The campground has one individual septic system, designed to discharge up to 500 gallons per day year-round, that serves the crew headquarters at the campground entrance. Previous SPDES permits included this system as Outfall 003 or 004. The new permit does not include this system, as no SPDES permit is required for a sanitary sewage discharge to groundwater of less than 1,000 gallons per day.

The campground historically had another subsurface discharge of 500 gallons per day that served the caretaker and ranger cabins. Previous permits included this system as Outfall 002 or 003. That system was closed in 2002 when those structures were connected to the main wastewater treatment system.

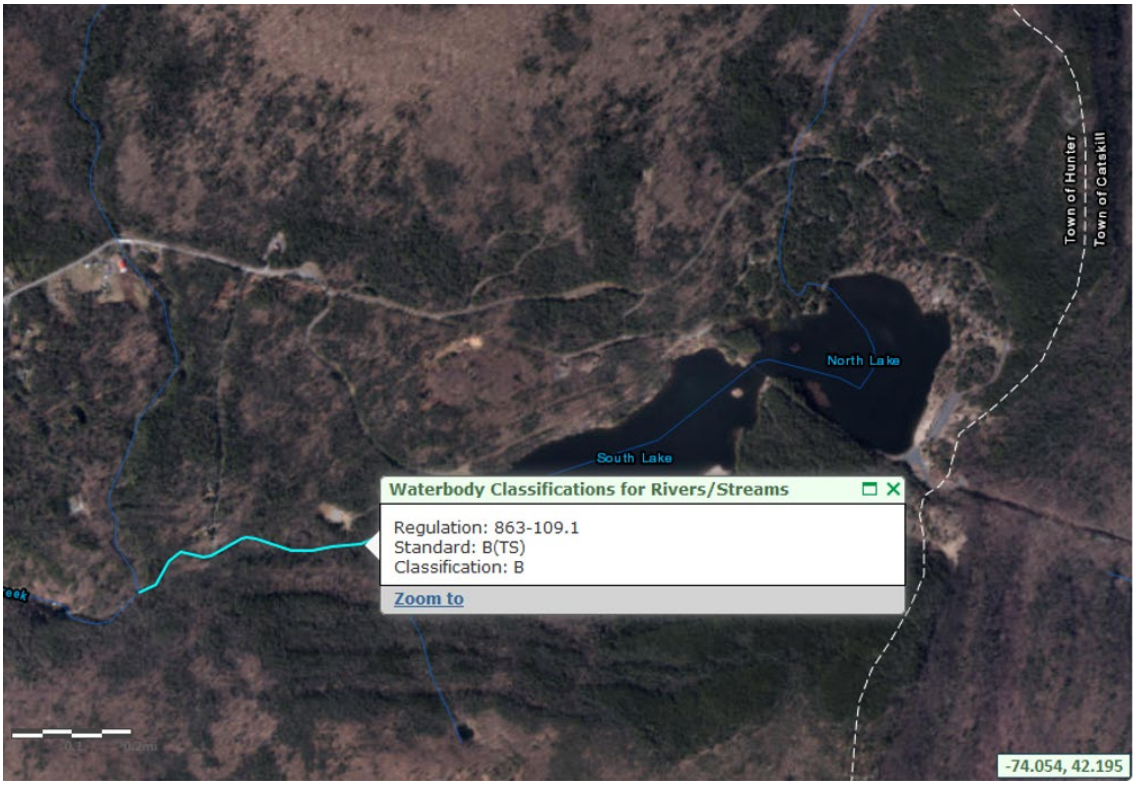
The wastewater treatment system does not have any planned improvements.

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

Site Overview

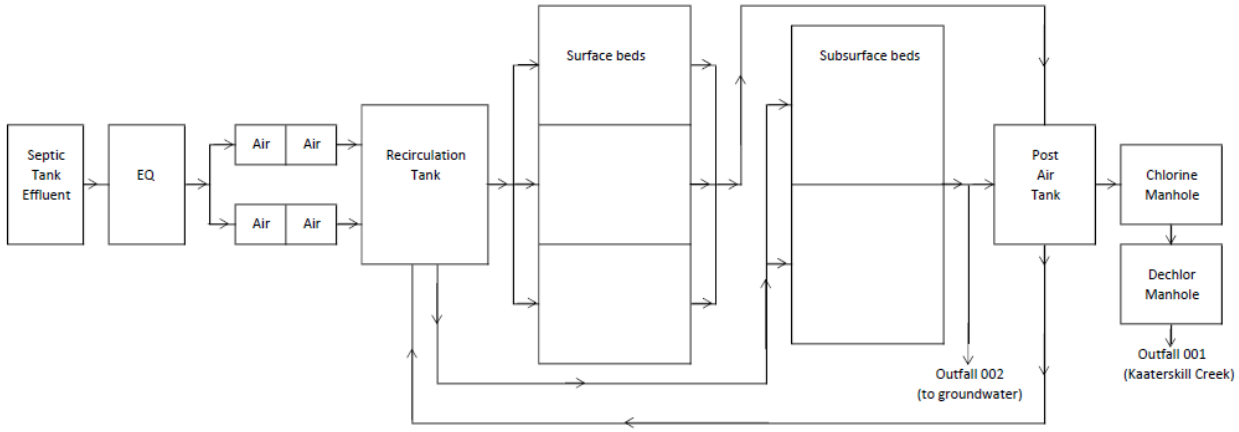


Campground map showing facility location. Adapted from permit application.



Site location and outfall to Kaaterskill Creek. From NYSDEC Environmental Resource Mapper https://gisservices.dec.ny.gov/gis/erm/ accessed 11/29/2021. See *Receiving Water Information* section for more information about the standard and classification of the receiving water.

WWTP aerial view. From NYSDEC Environmental Resource Mapper, accessed 11/13/2023



Flow schematic for WWTP discharging to Outfalls 001 and 002

Enforcement History

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

Existing Effluent Quality

The Pollutant Summary Table presents the existing effluent quality and effluent limitations. The existing effluent quality was determined from Discharge Monitoring Reports and the application submitted by the permittee for the period 5/1/2017 to 10/31/2021. Appendix Link

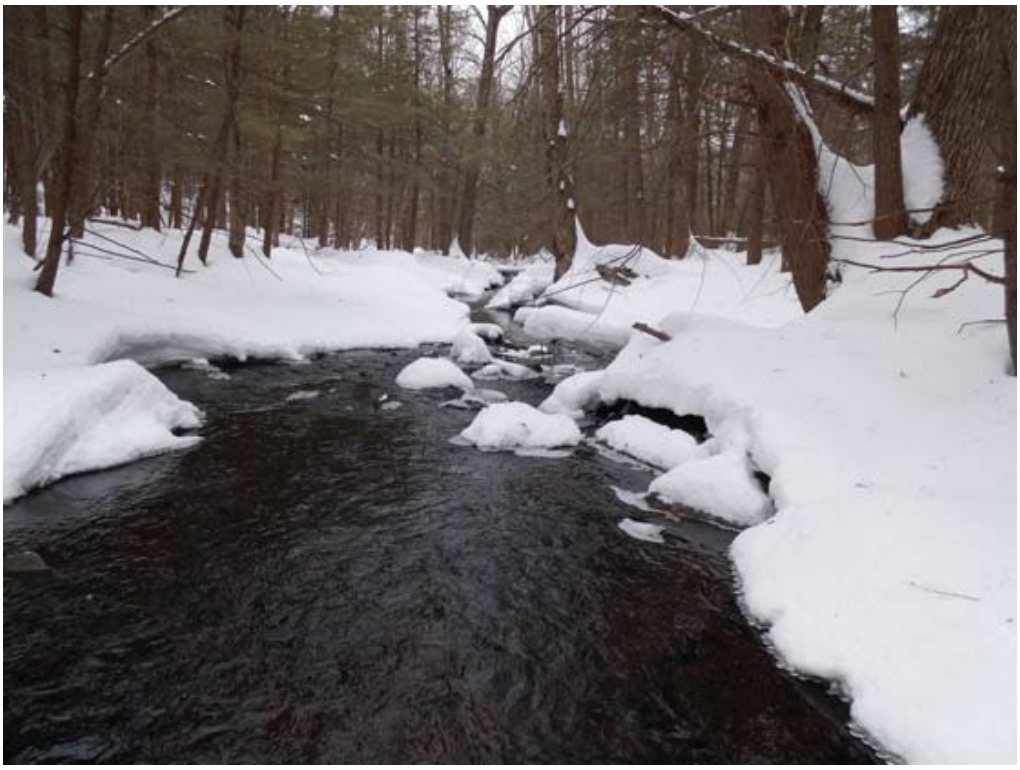
Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001		Treated sanitary sewage	Kaaterskill Creek, unclassified, Class AA(TS) standards applied
002		Treated sanitary sewage	Groundwater, Class GA

Reach Description: Outfall 001 discharges to the Kaaterskill Creek approximately 1 mile downstream of the dam at South Lake, within the Forest Preserve. The creek is considered to be an intermittent stream at the outfall location. Portions of this reach outside the Forest Preserve are listed as Class B (TS) in regulation (6 NYCRR Part 863, Table 1, Item 109.1). Waters within the Forest Preserve are not classified in regulation. In October 2023, the Department determined that Class AA water quality standards would be used to develop water quality-based effluent limitations for discharges to surface water within the Forest Preserve.

Creek looking upstream from outfall. Photo from permit application.



Creek looking downstream from outfall. Photo from permit application.

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

Impaired Waterbody Information

The Kaaterskill Creek segment (PWL No. 1309-0013) is not listed on the 2018 New York State Section 303(d) List of Impaired/TMDL Waters, and therefore, there are no applicable wasteload allocations (WLAs) for this discharge.

Critical Receiving Water Data & Mixing Zone

The low flow condition for the Kaaterskill Creek was obtained from a drainage basin ratio analysis with USGS gage station 01349541, Sugarloaf Brook South of Tannersville located at 42.14509°N, 74.12292°W. The 7Q10 flow at the gage was found from the USGS SW Toolbox software and an analysis of data from 1999 to 2009.

Gage Name: Sugarloaf Brook South of Tannersville
Gage ID: 01349541
Drainage Area at Gage (mi^2): 1.12
Drainage Area at Facility (mi^2): 1.84
7Q10 Flow at Gage (CFS): 0.03 Source: D-Flow
Calculated 7Q10 Flow at Facility (CFS): 0.049

The 7Q10 low-flow condition of the Kaaterskill Creek was found to be 0.049 CFS. Consistent with TOGS 1.3.1, intermittent stream effluent limits apply for flows <0.1 CFS, and the water quality standards will be applied as end-of-pipe limitations with no mixing or dilution.

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

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

Anti-backsliding

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

Antidegradation

The permit contains effluent limitations which ensure that the best usages of the receiving waters will be maintained. The Notice of Complete Application published in the Environmental Notice Bulletin contains information on the State Environmental Quality Review (SEQR)[3] determination. Appendix Link

Discharge Notification Act Requirements

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

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

Temperature Requirements for Municipal Discharges to Trout Streams

For municipal discharges to streams classified as trout (T) or trout spawning (TS), the Department reviews the dilution and maximum reported effluent temperature.

The facility does not have a reasonable potential to cause or contribute to an excursion above the thermal criteria of 6 NYCRR 704. Therefore, the permit includes “monitor only” for effluent temperature as a year-round requirement.

Mercury[4]

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

The facility is a Class 09 PCI facility with one effluent sample suggesting there may be a mercury source, and the permit includes requirements for the implementation of MMP Type II.

Based on 1 data point of 13.5 ng/L collected as part of the application, the facility is expected to meet the new daily maximum 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.

[3] As prescribed by 6 NYCRR Part 617
[4] In accordance with DOW 1.3.10 Mercury – SPDES Permitting & Multiple Discharge Variance (MDV), December 30, 2020.

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)

Schedule of Additional Submittals

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

- Water Treatment Chemical Annual Reports
- Annual Mercury Minimization Status Reports (to be maintained on site)

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° 11' 41" N	74° 03' 25" W	Kaaterskill Creek within Forest Preserve	NA/ AA(TS)	H-193-2 PWL: 1309-0013	13/09	-[5]	<0.1 cfs	<0.1 cfs	<0.1 cfs	0.029		1:1	
002	42° 11' 45" N	74° 03' 18" W	Groundwater	GA	-	13/09	-	-	-	-	0.029	-	-	-

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	**Description of Wastewater:** Treated sanitary sewage														
		Type of Treatment: Septic tanks, recirculating sand filters, chlorination and dechlorination														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# 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 May 2017 to October 2021 was obtained from Discharge Monitoring Reports provided by the permittee. All applicable water quality standards were reviewed for development of the WQBELs. The standard and WQBEL shown below represent the most stringent.															
Flow Rate	GPD	30 Day Avg	29,000	1,800 Actual Average	21	29,000	Design Flow	Narrative: No alterations that will impair the waters for their best usages.					703.2	-	TBEL
	The flow limit is set at the design flow of the wastewater treatment facility.														
pH	SU	Minimum	6.5	7.0 Actual Min	21	6.0	ECL 17-0509	-[7]	-	6.5 – 8.5	Range	**6.5 - 8.5**	703.3	-	ISEL
		Maximum	8.5	8.1 Actual Max	21	9.0									
	Consistent with TOGS 1.3.1, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution. As such, the water quality standards will be applied as end-of-pipe limitations with no mixing or dilution.														

[5] Ambient hardness data not used in determining WQBELs.

[6] 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)

[7] Ambient pH assumed to be 7.5.

Outfall #	001	**Description of Wastewater:** Treated sanitary sewage **Type of Treatment:** Septic tanks, recirculating sand filters, chlorination and dechlorination													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[6]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL		
Temperature	°F	Daily Max	-	68 Actual Max	13	-	750-1.13 Monitor	-	Narrative (Trout): No discharge at a temperature over 70°F (21°C) shall be permitted at any time to streams classified for trout				704.2	-	Monitor
	See the Temperature Requirements for Municipal Discharges to Trout Streams section of the fact sheet for a full discussion.														
Dissolved Oxygen (DO)	mg/L	Daily Min	7	> 7.4	21/0	**7.0**	TOGS 1.3.1	-	-	(TS) 7.0 mg/L	Narrative	-	703.3	-	ISEL
	Consistent with TOGS 1.3.1, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution. These limits represent the highest degree of treatment that can reasonably be achieved by a wastewater treatment facility treating domestic-type waste.														
5-day Biochemical Oxygen Demand (BOD_5)	mg/L	Daily Max	5	< 2	9/12	**5.0**	TOGS 1.3.1	-	See Dissolved Oxygen				703.3	-	ISEL
	lbs/d	Daily Max	-	-	-	1.2	-								
	% Rem	Minimum (MA)	-	-	-	**85**	ECL 17-0509								
	Consistent with TOGS 1.3.1, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution. These limits represent the highest degree of treatment that can reasonably be achieved by a wastewater treatment facility treating domestic-type waste. ISEL treatment requirements are more stringent than the secondary treatment requirements of ECL 17-0509.														
Total Suspended Solids (TSS)	mg/L	Daily Max	10	< 1	10/11	**10**	TOGS 1.3.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages. (703.2)				703.2	-	ISEL
	lbs/d	Daily Max	-	-	-	2.4	-								
	% Rem	Minimum	-	-	-	**85**	ECL 17-0509								
	Consistent with TOGS 1.3.1, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution. These limits represent the highest degree of treatment that can reasonably be achieved by a wastewater treatment facility treating domestic type waste. ISEL treatment requirements are more stringent than the secondary treatment requirements of ECL 17-0509.														
Settleable Solids	mL/L	Daily Max	0.1	< 0.1	0/21	**0.1**	TOGS 1.3.1	-	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages. (703.2)				703.2	-	ISEL
	Consistent with TOGS 1.3.1, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution. These limits represent the highest degree of treatment that can reasonably be achieved by a wastewater treatment facility treating domestic type waste.														

Outfall #	001	**Description of Wastewater:** Treated sanitary sewage **Type of Treatment:** Septic tanks, recirculating sand filters, chlorination and dechlorination													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data: Permit Limit	Existing Discharge Data: Existing Effluent Quality[6]	Existing Discharge Data: # of Data Points Detects / Non-Detects	TBELs: Limit	TBELs: Basis	Water Quality Data & WQBELs: Ambient Bkgd. Conc.	Water Quality Data & WQBELs: Projected Instream Conc.	Water Quality Data & WQBELs: WQ Std. or GV	Water Quality Data & WQBELs: WQ Type	Water Quality Data & WQBELs: Calc. WQBEL	Water Quality Data & WQBELs: Basis for WQBEL	ML	Basis for Permit Requirement
Nitrogen, Ammonia (as N) SUMMER 6/1 – 10/31	mg/L	Monthly Avg	1.2 as NH_3	2.7 as NH_3 actual max	14/6	1.0	TOGS 1.3.1	-	-	1.0	A(C)	1.0	703.5	-	ISEL
	lb/d	Monthly Avg	-	-	-	0.24	TOGS 1.3.1	-	-	-	-	0.24			
	Consistent with TOGS 1.3.1, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution. As such, the water quality standards will be applied as end-of-pipe limitations with no mixing or dilution. The WQS was determined from TOGS 1.1.1 using a pH of 7.5 and a temperature of 24 °C. Reporting for ammonia has been changed from (as NH_3) to (as N) for simpler data reporting, as this is consistent with the laboratory reporting units. Values can be converted using the equation: ammonia (as N) = ammonia (as NH_3) x 0.8224.														
Nitrogen, Ammonia (as N) WINTER 5/1 – 5/31	mg/L	Monthly Avg	1.2 as NH_3	1.0 As NH_3	1/0	1.0	Antibacksliding	-	-	1.8	A(C)	1.8	703.5	-	TBEL
	lb/d	Monthly Avg	-	-	-	0.24	Antibacksliding	-	-	-	-	0.44			
	Consistent with TOGS 1.3.1, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution. The water quality standard was determined from TOGS 1.1.1 using a pH of 7.5 and a temperature of 10 °C. The existing ammonia effluent limitation is more stringent than the calculated WQBEL and will remain in the permit to avoid backsliding. Reporting for ammonia has been changed from (as NH_3) to (as N) for simpler data reporting, as this is consistent with the laboratory reporting units. Values can be converted using the equation: ammonia (as N) = ammonia (as NH_3) x 0.8224.														
Total Mercury	ng/L	Daily Max	-	13.5	1/0	-	-	-	-	0.7	H(FC)	50	GLCA	-	DOW 1.3.10
	See Mercury section of this fact sheet.														
Coliform, Fecal	#/100 ml	30d Geo Mean	200	< 1	9/12	**200**	TOGS 1.3.3	-	Narrative: The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.				703.4	-	TBEL
		7d Geo Mean	400	< 1	9/12	**400**	TOGS 1.3.3	-							
	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	0.1	< 0.1	0/21	2.0	TOGS 1.3.3	-	-	0.005	A(C)	0.005	703.5	0.03	ISEL
	Effluent disinfection is currently required year-round and will remain a permit requirement. Consistent with TOGS 1.3.1, intermittent stream effluent limits (ISEL) are applied to effluent discharges to streams where little or no streamflow is available for dilution. As such, the water quality standards will be applied as end-of-pipe limitations with no mixing or dilution.														

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, and/or in response to updated regulatory requirements. Pollutant monitoring data is also reviewed to determine the presence of additional contaminants that should be included in the permit based on a reasonable potential analysis to cause or contribute to a water quality standards violation.

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*l*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this fact sheet. Consistent with current case law[8] and USEPA interpretation[9] anti-backsliding requirements do not apply should a revision to the final effluent limitation take effect before the scheduled date of compliance for that final effluent limitation.

Antidegradation Policy

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

Effluent Limitations

In developing a permit, the Department determines the technology-based effluent limitations (TBELs) and then evaluates the water quality expected to result from technology controls to determine if any exceedances of water 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

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

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 Department considers a mixing zone analysis, critical flows, and reasonable potential analysis when developing a WQBEL.

Mixing Zone Analyses

In accordance with TOGS 1.3.1., the Department may perform additional analysis of the mixing condition between the effluent and the receiving waterbody. Mixing zone analyses using plume dispersion modeling are conducted in accordance with the following:
“EPA Technical Support Document for Water Quality-Based Toxics Control” (March 1991); EPA Region VIII’s “Mixing Zones and Dilution Policy” (December 1994); NYSDEC TOGS 1.3.1, “Total Maximum Daily Loads and Water Quality-Based Effluent Limitations” (July 1996); “CORMIX v11.0” (2019).

Critical Flows

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

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

Reasonable Potential Analysis (RPA)

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

1) identify the pollutants present in the discharge(s) based upon existing data, sampling data collected by the permittee as part of the permit application or a short-term high intensity monitoring program, or data gathered by the Department;

2) identify water quality criteria applicable to these pollutants;

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

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

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

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

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.

Minimum Level of Detection

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

Monitoring Requirements

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

Other Conditions

Mercury

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

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