State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code:	**8999**	NAICS Code:	**721214**	SPDES Number:	**NY 0205460**
Discharge Class (CL):	**02**			DEC Number:	**4-1946-00020/00006**
Toxic Class (TX):	**N**			Effective Date (EDP):	**DRAFT**
Major-Sub Drainage Basin:	**12 - 02**			Expiration Date (ExDP):	**DRAFT**
Water Index Number:	**H-240-82-117-17**	Item No.:	**879 - 235**	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:	**Girls Vacation Fund Inc.**	Attention:	**Eileen Murphy, Board President**		
Street:	**106 East 85th Street**				
City:	**New York**	State:	**NY**	Zip Code:	**10028**
Email:	murphenyc@gmail.com	Phone:	**(917) 362-0699**		

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL															
Name:	**Camp Oh-Neh-Tah Wastewater Treatment Plant**														
Address / Location:	**137 High Peak Road**									County:	**Greene**				
City:	**Windham**						State:	**NY**		Zip Code:	**12946**				
Facility Location:		Latitude:	**42**	°	**19**	’	**20**	” N	& Longitude:	**74**	°	**09**	’	**56**	” W
Primary Outfall No.:	**001**	Latitude:	**42**	°	**19**	’	**27**	” N	& Longitude:	**74**	°	**10**	’	**12**	” W
Outfall Description:	**Treated Sanitary**	Receiving Water:	**Brooksburg Stream**			Class:	**-**		Standard:	**AA(TS)**					

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

DEFINITIONS

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	Brooksburg Stream	**EDP**	**ExDP**

PARAMETER	EFFLUENT LIMITATION					MONITORING REQUIREMENTS				FN
	Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
Flow	Monthly Average	16,250	gpd			Continuous	Recorder		X	
Flow	Daily Maximum	Monitor	gpd			Continuous	Recorder		X	
pH	Daily Minimum	6.5	SU			Daily	Grab		X	
	Daily Maximum	8.5	SU							
Temperature	Daily Maximum	Monitor	ºF			Daily	Grab		X	
$CBOD_5$	Daily Maximum	5	mg/L	0.7	lbs/d	Monthly	Grab		X	
Total Suspended Solids (TSS)	Daily Maximum	10	mg/L	1.4	lbs/d	Monthly	Grab		X	
Settleable Solids	Daily Maximum	0.1	mL/L			Daily	Grab		X	
Dissolved Oxygen	Daily Minimum	7.0	mg/L			Monthly	Grab		X	
Ammonia (as N) June 1st – October 31st	Monthly Average	0.7	mg/L			Monthly	Grab		X	1
Ammonia (as N) November 1st – May 31st	Monthly Average	1.4	mg/L			Monthly	Grab		X	1
Total Phosphorus (as P)	Monthly Average	1.0	mg/L			Monthly	Grab		X	

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			Monthly	Grab		X	
Coliform, Fecal	7-Day Geometric Mean	400	No./ 100 mL			Monthly	Grab		X	
Chlorine, Total Residual	Daily Maximum	0.03	mg/L			Daily	Grab		X	2,3

FOOTNOTES:

1. These are final effluent limitations for ammonia as nitrogen. The interim effluent limitation is in the schedule of compliance on page 6.
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.

FINAL EFFLUENT LIMITATIONS AND MONITORING REQUIREMENTS FOR PATHOGEN REDUCTION IN THE NEW YORK CITY WATERSHED

OUTFALL	WASTEWATER DESCRIPTION	RECEIVING WATER	EFFECTIVE	EXPIRING
001	Treated Sanitary	Brooksburg Stream	**EDP**	**ExDP**

The discharges from the permitted facility shall be limited and monitored by the permittee as specified below:

PARAMETER	EFFLUENT LIMITATION	MONITORING REQUIREMENT		
	Monthly Average	Units	Sample Frequency	Sample Type
Giardia Lamblia Cysts	Note 1	-	-	-
Enteric Viruses	Note 1	-	-	-
Turbidity	Note 2	NTU	Continuous	Recorder
Chlorine, Total Residual	Note 3	mg/L	Daily	Grab

Note 1: Giardia Lamblia Cysts and Enteric Viruses
The facility must be capable of achieving a 99.9% removal and/or inactivation of giardia lamblia cysts and 99.99% removal of enteric viruses. The capability shall be demonstrated by maintaining the turbidity and chlorine levels specified and operating the microfiltration unit and the disinfection system on a continuous basis, in accordance with the provisions set forth in the WWTP's Operation and Maintenance Manual.

Note 2: Turbidity
The turbidity levels shall be maintained at less than or equal to 0.5 NTU in 95% of the measurements taken each month and an instantaneous maximum of 5.0 NTU shall not be exceeded.

Note 3: Total Residual Chlorine
When chlorine is used for disinfection, a minimum residual of 0.2 mg/l shall be maintained in the chlorine contact tank prior to dechlorination.

DISCHARGE NOTIFICATION REQUIREMENTS

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

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

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

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

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

N.Y.S. PERMITTED DISCHARGE POINT

SPDES PERMIT No.: NY_____

OUTFALL No. :____

For information about this permitted discharge contact:

Permittee Name: _____

Permittee Contact: _____

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

OR:

NYSDEC Division of Water Regional Office Address:

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

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

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

SCHEDULE OF COMPLIANCE

a) The permittee shall comply with the following schedule:

Outfall(s)	Compliance Action	Compliance Date[1]
001	INITIAL COMPLIANCE REPORT[2] The permittee shall provide a report evaluating the ability of the existing treatment system to comply with the final effluent limitations for **ammonia**. If the existing system cannot comply with the final limitations, the report shall provide a schedule for designing and constructing improvements to the system in order to comply with the final limitations no later than 36 months from the effective date of this permit. The schedule in the report shall be incorporated into this SPDES permit upon DEC acceptance.	EDP + 9 Months
	COMPLETE CONSTRUCTION/COMMENCE OPERATION The permittee shall comply with the final effluent limitations described in this permit for **ammonia.**	EDP + 36 months
Unless noted otherwise, the above actions are one-time requirements.		

OUTFALL	PARAMETER	INTERIM EFFLUENT LIMIT					MONITORING REQUIREMENTS				Notes
		Type	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Location Inf.	Location Eff.	
001	Ammonia (as N)	Monthly Average	1.6	mg/L			Quarterly	Grab	-	X	1
Notes:	1. Interim limit expires upon DEC acceptance of the permittee's report stating that the system can produce effluent that complies with the final effluent limitations **or** EDP + 36 months.										

b) If the permittee fails to meet any date in the above schedule, the permittee shall submit a Report of Non-Compliance Event form no later than 14 days following each elapsed date, unless conditions require more immediate notice as prescribed in 6 NYCRR Part 750-1.2(a) and 750-2. All notifications shall be sent to the locations listed under the section of this permit entitled RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS. Each notice of non-compliance shall include the following information:

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

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

[1] 6 NYCRR 750-1.14 (a)
[2] 6 NYCRR 750-1.14 (b)

MONITORING LOCATIONS

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

Effluent: Following UV disinfection at the wastewater treatment plant OR at Outfall 001

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 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)

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. 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.	01/28/2026 and 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
Girls Vacation Fund, Inc.
Camp Oh-Neh-Tah WWTP
NY0205460

Summary of Permit Changes

A State Pollutant Discharge Elimination System (SPDES) permit has been drafted for the Camp Oh-Neh-Tah WWTP. The changes to the permit are summarized below:

- Updated the permit format, definitions, and general conditions.
- Updated the classification of the receiving stream to reflect its location within the Catskill Forest Preserve at the point of discharge.
- Changed the daily minimum pH effluent limitation from 6.0 to 6.5, consistent with intermittent stream effluent limitations.
- Changed the daily maximum pH effluent limitation from 9.0 to 8.5, consistent with intermittent stream effluent limitations.
- Changed the reporting units for ammonia from mg/L as NH_3 to mg/L as N.
- Changed the final effluent limit for NH_3-N from 1.6 mg/L year-round to 1.4 in winter and 0.7 in summer. The change reflects a 2024 modification in the default pH values used to calculate water-quality-based effluent limitations.
- Added an interim limit for of 1.6 mg/L for NH_3-N, along with a compliance schedule to provide 36 months for the permittee to come into compliance with the new ammonia limit.
- Reduced the total residual chlorine limit from 0.1 mg/L to 0.03 mg/L, which is the minimum concentration that can be quantitatively reported.
- Updated the sample frequency for several parameters from quarterly to monthly.
- Added a temperature monitoring requirement to assess whether the facility needs to develop a thermal monitoring plan for the discharge to a trout-spawning stream.
- Removed Outfall 004, a 450-gallon-per-day sanitary sewage discharge to groundwater, from the permit. A sewage discharge of less than 1,000 gallons per day to groundwater does not require a SPDES permit.

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

8/1/2009 The last full technical review was performed in support of a permit modification to comply with the New York City Watershed Rules and Regulations. The modified SPDES permit had an expiration date of 4/30/2013. The 2009 permit has formed the basis of this permit.

The permit was administratively renewed in 2013 and again in 2018. The last administrative renewal was effective until 4/30/2023.

4/30/2023 The SPDES permit expired.

12/3/2024 Girls Vacation Fund, Inc. submitted a new PCI form to renew the expired permit.

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

Facility Information

This facility is a private facility that receives flow from domestic users at a children's summer camp, with effluent consisting of treated sanitary wastewater. The collection system consists of separate sewers. The facility does not have any significant industrial users (SIUs).

The current 16,250 gallon per day (gpd) treatment plant consists of:

- Preliminary/Primary Treatment: septic tanks followed by flow equalization tanks
- Secondary Treatment: recirculating textile filter system
- Tertiary Treatment: phosphorus removal by chemical precipitation and settling; rapid sand filtration and microfiltration
- Disinfection: UV

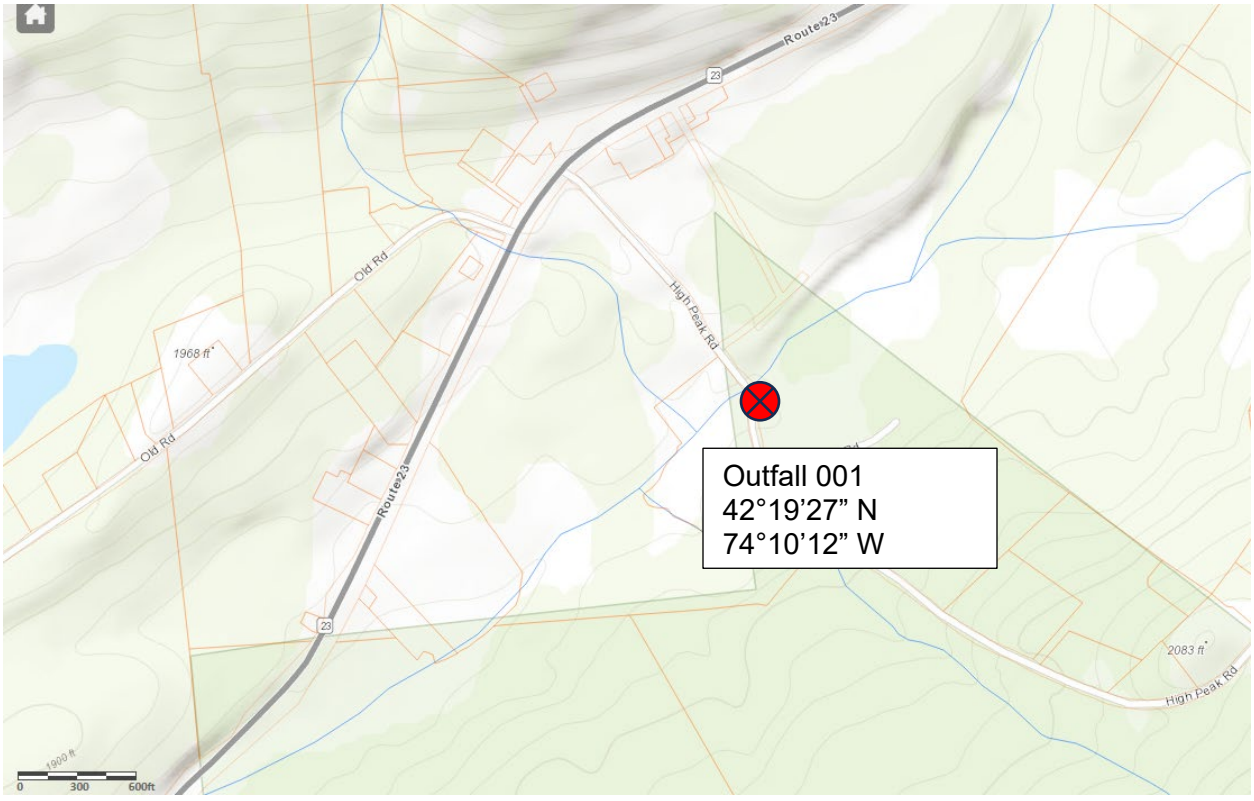
Sludge is wet hauled by a licensed septic hauler.

The primary outfall (Outfall 001) is at the bank near the headwaters of the Brooksburg Stream.

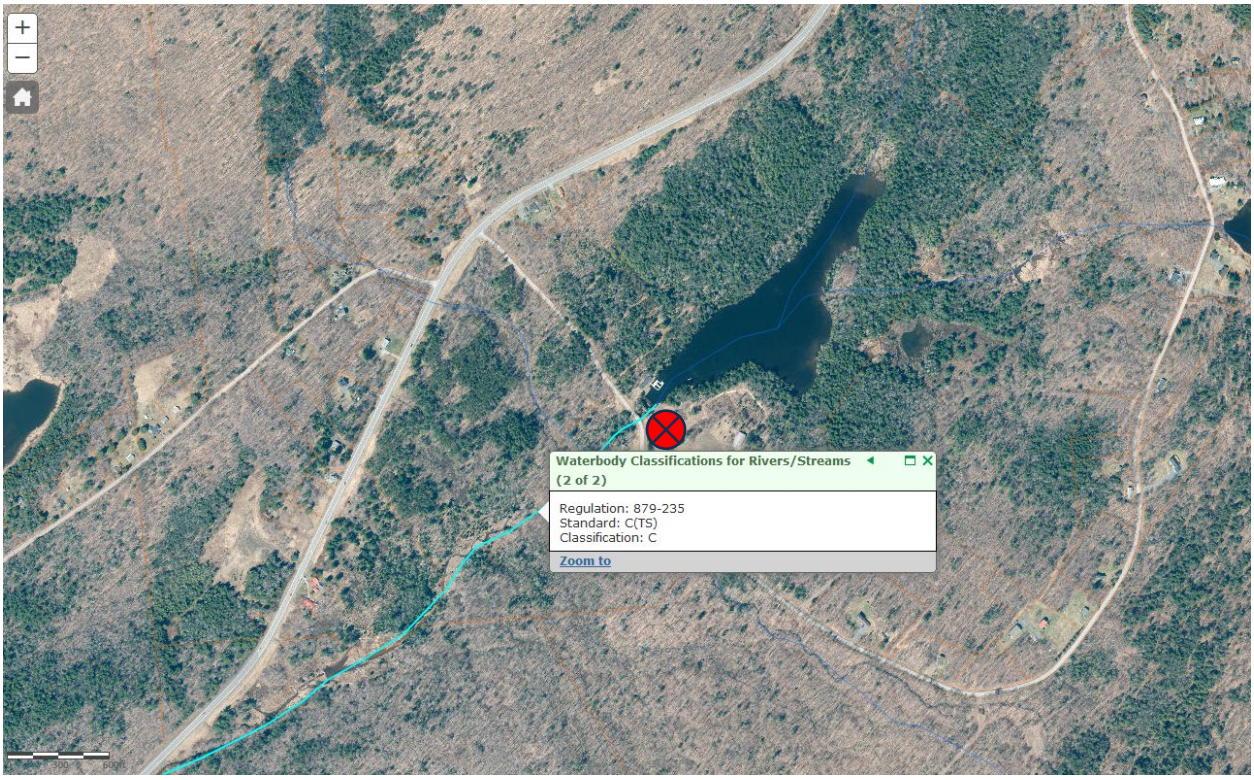
The facility has been out of service for approximately 10 years. Prior to resuming operation, the facility will ensure all components of the system needed to meet the permit requirements are in good working order.:

Site Overview

Camp Oh-Neh-Tah is at 137 High Peak Road in the Town of Windham, Greene County.

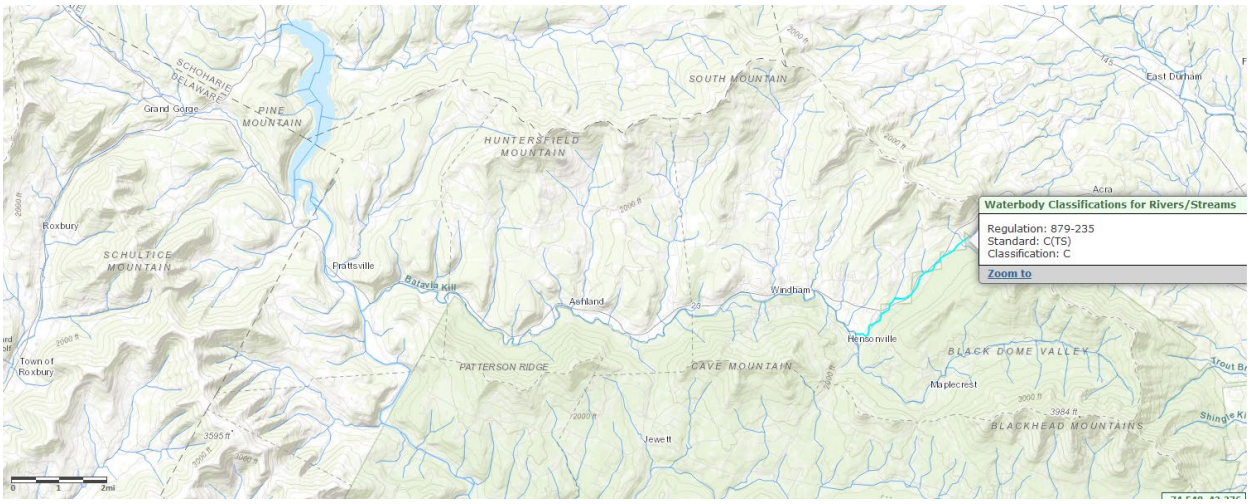


Facility/outfall location (Environmental Resource Mapper 12/27/2024)

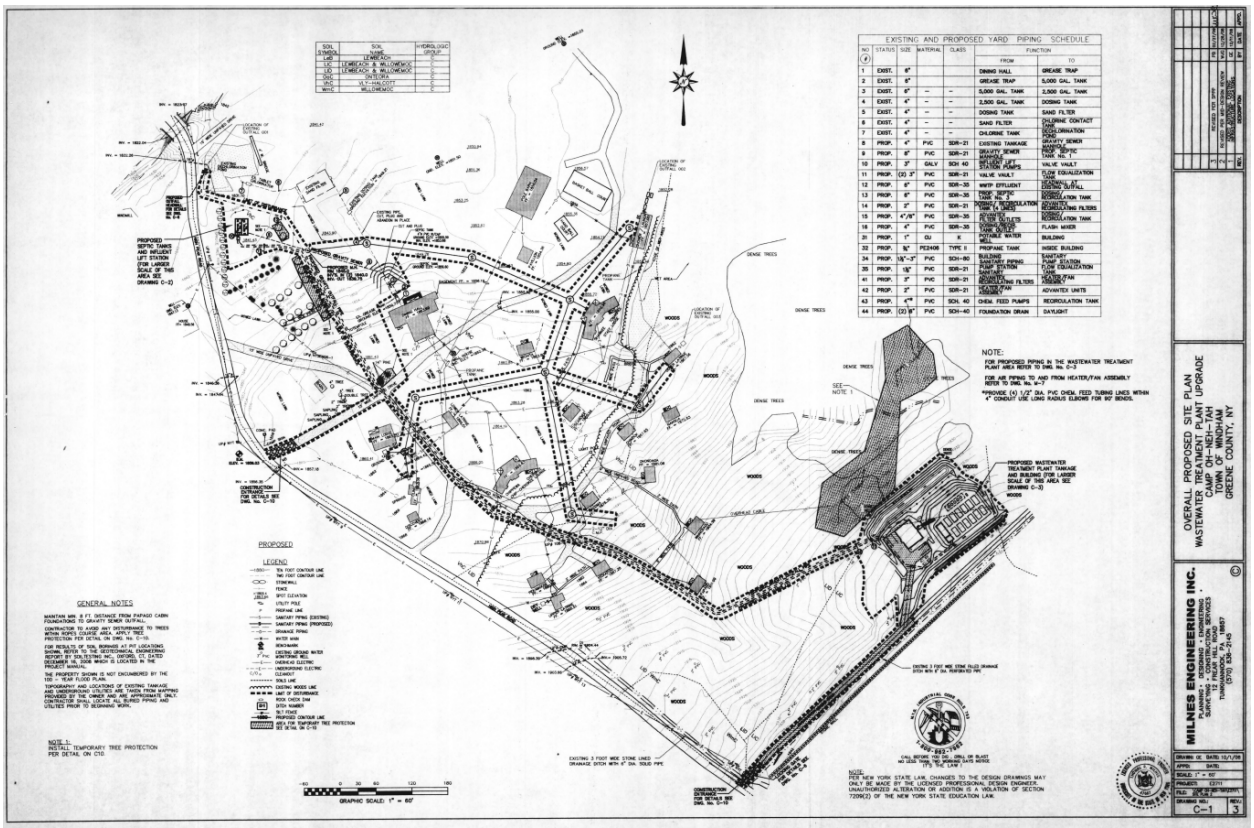


Outfall location (from Environmental Resource Mapper 12/2024)

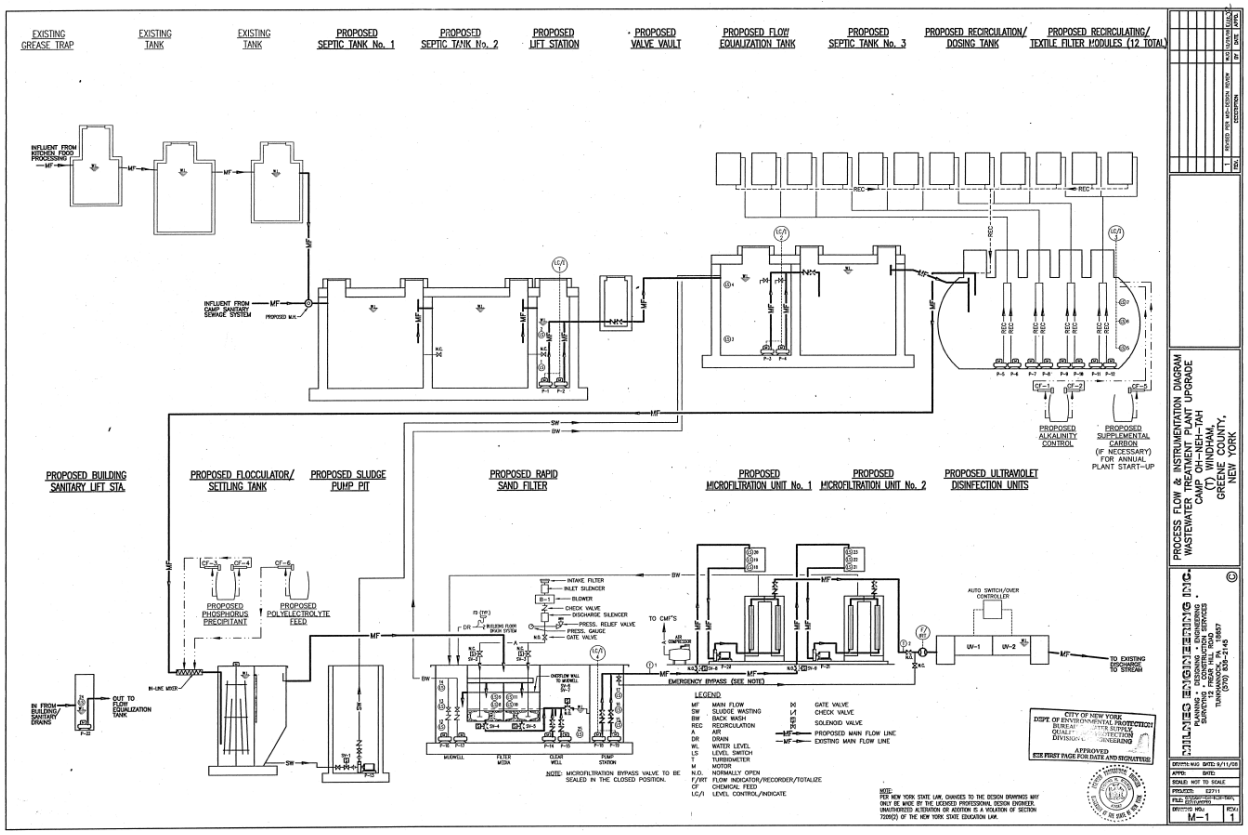
Wastewater treatment system and outfall locations (Environmental Resource Mapper 12/2024)



Receiving waters (Brooksburg Stream to Batavia Kill to Schoharie Creek upstream of Schoharie Reservoir)



Wastewater system map



Wastewater system process flow diagram

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 the application submitted by the permittee.

Receiving Water Information

The facility discharges via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	8999	Treated sanitary sewage	Brooksburg Stream, Unclassified in Catskill Forest Preserve, C(TS) elsewhere
004	8999	Treated sanitary sewage	450 gpd to groundwater – being removed from permit

Reach Description:

The receiving water at the point of discharge is the Brooksburg Stream (H-240-82-117-17), a tributary of the Batavia Kill (6 NYCRR Part 879.6 – Table I – item 235). Portions of the stream not in the Catskill Forest Preserve are classified as C(TS). The point of discharge for effluent from

the Camp Oh-Neh-Tah WWTP is within the boundaries of the Forest Preserve and is therefore not classified. DEC has developed water quality-based effluent limitations for this facility by reference to water quality standards for surface water discharges for the AA classification. The AA classification mandates stringent standards for treated sewage effluent discharges to surface waters and is protective of best uses including water supply for drinking, culinary or food processing purposes, primary and secondary contact recreation, fishing, and fish, shellfish and wildlife propagation and survival.

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

Impaired Waterbody Information

New York City TMDL Watershed Information

In June 2000, a TMDL was approved for the Schoharie Reservoir watershed to address phosphorus. As part of the TMDL, the discharges from the following outfalls are subject to the listed wasteload allocations (WLA) for the following parameters:

Outfall No.	Parameter	Wasteload Allocation
001	Total Phosphorus as P	1.0 mg/L

Critical Receiving Water Data & Mixing Zone

Intermittent stream effluent limits (ISEL) have been applied because the discharge is at the headwaters (source) of the stream with negligible drainage area. Consistent with TOGS 1.3.1, 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)[1] determination. Appendix Link

[1] As prescribed by 6 NYCRR Part 617

Discharge Notification Act Requirements

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

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

Temperature Requirements for Municipal Discharges to Trout Streams

This is not a municipal discharge, but the temperature of this discharge will be monitored to determine whether it has reasonable potential to cause or contribute to an excursion above the thermal criteria of 6 NYCRR Part 704.

Schedule of Compliance

A Schedule of Compliance is being included[2] for the following items (Appendix Link):

- A period of up to 36 months to achieve final ammonia-nitrogen limits. The final limit is lower than the limit in the previous permit, and modifications to the treatment facility or operations may be needed to comply. The limit from the previous permit will serve as an interim effluent limit.

Schedule of Additional Submittals

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

- Water treatment chemical annual report

[2] Pursuant to 6 NYCRR 750-1.14

Permittee: Girls Vacation Fund, Inc.
Facility: Camp Oh-Neh-Tah WWTP
SPDES Number: NY0205460
USEPA Non-Major/Class 02 PCI

Date: March 18, 2025 v.1.27
Permit Writer: Rebecca Mitchell
Water Quality Reviewer: Aslam Mirza
Full Technical Review

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 (gpd)	Dilution Ratio		
												A(A)	A(C)	HEW
001	42° 19' 20" N	74° 09' 56" W	Brooksburg Stream	-/ AA(TS)	H240-82-117-17 PWL: 1202-0058	12/02	Not Applicable	-			16,250	1:1		

POLLUTANT SUMMARY TABLE

Outfall 001

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage													
		Type of Treatment: septic tanks, textile filters, rapid sand filtration, microfiltration, UV disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[3]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
General Notes: There is no existing discharge data. 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	16,250	- Actual Average	-	16,250	Design Flow	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	6.0	- Actual Min	-	6.0	ECL 17-0509	-	-	6.5 – 8.5	Range	**6.5 - 8.5**	703.3	-	ISEL
		Maximum	9.0	- Actual Max	-	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														
Temperature	°F	Daily Max	-	- Actual Max	-	Monitor	750-1.13 Monitor	-	(Trout): No discharge at a temperature over 70F (21C) shall be permitted at any time to streams classified for trout				704.2	-	WQBEL
	See the Temperature Requirements for Municipal Discharges to Trout Streams section of the fact sheet for a full discussion.														

[3] Existing Effluent Quality: Unless otherwise stated, Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% delta-lognormal (for datasets with >3 nondetects)

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage **Type of Treatment:** septic tanks, textile filters, rapid sand filtration, microfiltration, UV disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[3]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Dissolved Oxygen (DO)	mg/L	Daily Min	-	-	-	**7.0**	TOGS 1.3.1	-	-	(TS) 7.0		-	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 Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) Summer (Jun 1 – Oct 31)	mg/L	Daily Max	5	-	-	**5.0**	TOGS 1.3.1	-	See Dissolved Oxygen				703.3	-	ISEL
	lbs/d	Daily Max	0.7	-	-	0.7	-								
	% Rem	Minimum	-	-	-	**85**	40 CFR Part 133.102								
	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. These limits are more stringent than the secondary treatment standards under 40CFR Part 133.102.														
5-day Carbonaceous Biochemical Oxygen Demand ($CBOD_5$) Winter (Nov 1 – May 31)	mg/L	Daily Max	5	-	-	**5.0**	TOGS 1.3.1	-	See Dissolved Oxygen				703.3	-	TBEL
	lbs/d	Daily Max	0.7	-	-	0.7	-								
	% Rem	Minimum	-	-	-	**85**	40 CFR Part 133.102								
	The WQ model indicated that secondary treatment levels (30/45 mg/L) are acceptable in meeting the WQ standard. The current permit limit of 5.0 mg/L Daily Max is maintained to prevent backsliding.														
Total Suspended Solids (TSS) Summer (Jun 1 – Oct 31)	mg/L	Daily Max	10	-	-	**10**	TOGS 1.3.1	-	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	ISEL
	lbs/d	Daily Max	1.35	-	-	1.35	-								
	% Rem	Minimum	-	-	-	**85**	40 CFR Part 133.102								
	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. These limits are more stringent than the secondary treatment standards under 40CFR Part 133.102.														
Total Suspended Solids (TSS) Winter (Nov 1 – May 31)	mg/L	Daily Max	10	-	-	**10**	TOGS 1.3.1	-	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				703.2	-	ISEL
	lbs/d	Daily Max	1.35	-	-	1.35	-								
	% Rem	Minimum	-	-	-	**85**	40 CFR Part 133.102								
	The WQ model indicated that secondary treatment levels (30/45 mg/L) are acceptable in meeting the WQ standard. The current permit limit of 10 mg/L Daily Max is maintained to prevent backsliding.														

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage													
		Type of Treatment: septic tanks, textile filters, rapid sand filtration, microfiltration, UV disinfection													
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[3]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Settleable Solids	mL/L	Daily Max	0.1	-	-	**0.1**	TOGS 1.3.1	-	None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages.				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. These limits are more stringent than the secondary treatment standards under 40CFR Part 133.102.														
Nitrogen, Ammonia (as N)	mg/L	Monthly Avg	1.64	-	-	-	TOGS 1.3.1	-	-	0.71	A(C)	**0.71**	703.5	-	ISEL
Summer (Jun 1 – Oct 31)	lb/d	Monthly Avg	0.25	-	-							0.12			
Winter (Nov 1 – May 31)	mg/L	Monthly Avg	1.64	-	-		TOGS 1.3.1			1.38	A(C)	**1.38**			
	lb/d	Monthly Avg	0.25	-	-	-		-	-	-	-	0.19			
	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 WQ standards are calculated at a summer temperature of 24°C and a winter temperature of 10°C, consistent with TOGS 1.3.1E. The WQ standards are calculated at a default basin pH of 7.9. This is a change from the previous permit. Prior to 2024, a default value of 7.5 was used for pH across the state, in accordance with TOGS 1.3.1E. In 2024, DEC used data gathered from 2012 to 2022 to calculate a representative median estimate of pH for each of the 17 major watersheds in NYS. These values are now used by default in WQS/WQBEL calculations when representative site-specific data are not available. 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.														
Coliform, Fecal	#/100 ml	30d Geo Mean	200	-	-	**200**	TOGS 1.3.3	-	The monthly geometric mean, from a minimum of five examinations, shall not exceed 200.				703.4	-	TBEL
		7d Geo Mean	400	-	-	**400**	TOGS 1.3.3	-							
	Consistent with TOGS 1.3.3, effluent disinfection is required year-round because it is necessary to protect public health. Fecal coliform effluent limitations equal to the TBEL are specified.														
Total Residual Chlorine (TRC)	mg/L	Daily Max	0.1	-	-	2.0	TOGS 1.3.3	-	-	0.005	A(C)	0.005	703.5	**0.03**	ISEL/ML
	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.														

Outfall #	001	**Description of Wastewater:** Treated Sanitary Sewage														
		Type of Treatment: septic tanks, textile filters, rapid sand filtration, microfiltration, UV disinfection														
Effluent Parameter	Units	Averaging Period	Existing Discharge Data			TBELs		Water Quality Data & WQBELs						ML	Basis for Permit Requirement
			Permit Limit	Existing Effluent Quality[3]	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis		
Giardia Lamblia Cysts	% Rem	Minimum	99.9	-	-	**99.9**	NYC Rules & Regulations	-	-	-	-	-	-	-	TBEL
	In accordance with *Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and Its Sources,* the facility must be capable of achieving a 99.9% removal and/or inactivation of giardia lamblia cysts. The capability shall be demonstrated by maintaining the turbidity and chlorine levels specified and operating the microfiltration unit and the disinfection system on a continuous basis, in accordance with the provisions set forth in the WWTP's Operation and Maintenance Manual.														
Enteric Viruses	% Rem	Minimum	99.99	-	-	**99.99**	NYC Rules & Regulations	-	-	-	-	-	-	-	TBEL
	In accordance with *Rules and Regulations for the Protection from Contamination, Degradation and Pollution of the New York City Water Supply and Its Sources,* the facility must be capable of achieving a 99.99% removal and/or inactivation of enteric viruses. The capability shall be demonstrated by maintaining the turbidity and chlorine levels specified and operating the microfiltration unit and the disinfection system on a continuous basis, in accordance with the provisions set forth in the WWTP's Operation and Maintenance Manual.														
Turbidity	NTU	Monthly Avg	0.5	-	-	**0.5**	NYC Rules & Regulations	-	-	-	-	-	-	-	TBEL
		Daily Max	5.0	-	-	**5.0**		-	-	-	-	-	-	-	
	The turbidity levels shall be maintained at less than or equal to 0.5 NTU in 95% of the measurements taken each month and an instantaneous maximum of 5.0 NTU shall not be exceeded.														
Total Residual Chlorine (within the chlorine contact tank)	mg/L	Minimum	0.2	-	-	**0.2**	NYC Rules & Regulations	-	-	-	-	-	-	-	TBEL
	When chlorine is used for disinfection, a minimum residual of 0.2 mg/l shall be maintained in the chlorine contact tank prior to dechlorination.														

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 waste load allocation (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 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[4] and USEPA interpretation[5] 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

[4] American Iron and Steel Institute v. Environmental Protection Agency, 115 F.3d 979, 993 n.6 (D.C. Cir. 1997)
[5] 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 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.

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

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.