

State Pollutant Discharge Elimination System (SPDES) DISCHARGE PERMIT

SIC Code: 8999	NAICS Code:	237210		SPDES Number:	NY0281727
Discharge Class (CL):	09			DEC Number:	3-3320-00150/00001
Toxic Class (TX):	N			Effective Date (EDP):	
Major-Sub Drainage Basin:	Lower Hudso	n - Moodn	a	Expiration Date (ExDP):	
Water Index Number:	H-89-17-4-1	Item No.:	862 - 151	Medification Dates (EDDM):	
Compact Area:	-			Modification Dates (EDPM):	

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

PERMITTEE NAME AND ADDRESS							
Name:	Clovewood Transportation Corporation	Attention:	СРС	CPC			
Street:	PO Box 2020		CFC				
City:	Monroe	State:	NY	Zip Code:	10949		
Email:	gelbsimon@gmail.com	Phone:	(845) 7	74-8000			

is authorized to discharge from the facility described below:

FACILITY NAME, ADDRESS, AND PRIMARY OUTFALL																			
Name:	Clovev	ovewood WWTP																	
Address / Location:	Clove	ove Road and NYS Route 208 Count								County:		Orange							
City:	Monro	Monroe					Stat	e:	NY	Zip Code:		:		10950					
Facility Location:		Latitude:		41	0	22	,	41	" N		& Longitude:		74	0		10	,	4	" W
Primary Outfall No.:	001	Latitude:		41	0	22	,	44	" N		& Longitude:		74	0		10	,	24	• " W
Outfall Description:	n: Treated Sanitary		Receiving Water: Su			Subtrib. of Slatterly Creek			Class: C		2	St	an	dard:	С				

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.

<u>DISTRIBUTION:</u> Douglas Upright – DOW R3	Permit Administrator:		
Paul Buist – DOW BWC EPA Region 2	Address:		
Orange Co. DOH NYSDOH Permit Coordinator	Signature:	Date:	1 1

Contents

DEFINITIONS	. 3
PERMIT LIMITS, LEVELS AND MONITORING	.4
MERCURY MINIMIZATION PROGRAM (MMP) - Type IV	. 5
DISCHARGE NOTIFICATION REQUIREMENTS	.7
MONITORING LOCATIONS	. 8
GENERAL REQUIREMENTS	. 9
RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS 1	11
D. Schedule of Additional Submittals:1	11

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		RECE	VING W	/ATER	EFFECTIVE	EXPIRI		NG
001	All year unless oth	erwise no	oted	Subtrib.	of Slatte	rly Creek	EDP		ExDF)
						1				<u> </u>
DADAMETED	EFF	LUENT L	IMITATI	ON		MONITO	RING REQUIRE	MEN	TS	FN
PARAMETER								Loca	ation	FN
	Туре	Limit	Units	Limit	Units	Sample Frequency	Sample Type	Inf.	Eff.	
Flow	Monthly Average	256,760	GPD			Continuous	Meter		x	
Flow	Daily Maximum	Monitor	GPD			Continuous	Meter		x	
	Daily Minimum	6.5	SU			Deile	Orah			
рН	Daily Maximum	8.5	SU			Daily	Grab		×	
Temperature	Daily Maximum	Monitor	٩F			Daily	Grab		x	
BOD ₅	Daily Minimum	5.0	mg/L	10.7	lbs/d	Monthly	6-hr. Comp.	Х	x	1
Total Suspended Solids (TSS)	Daily Maximum	10.0	mg/L	21.4	lbs/d	Monthly	6-hr. Comp.	х	x	1
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 1 st – Oct. 31 st)	Monthly Average	1.2	mg/L	2.6	lbs/d	Monthly	6-hr. Comp.		х	
Ammonia (as N) (Nov. 1 st – May 31 st)	Monthly Average	1.8	mg/L	3.9	lbs/d	Monthly	6-hr. Comp.		x	
Total Phosphorus (as P)	Monthly Average	0.5	mg/L	1.1	lbs/d	Monthly	6-hr. Comp.		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			Monthly	Grab		х	
Coliform, Fecal	7-Day Geometric Mean	400	No./ 100 mL			Monthly	Grab		х	
Chlorine, Total Residual	Daily Maximum	0.03	mg/L			Daily	Grab		х	2,3

Footnotes Continued on Next Page FOOTNOTES:

- 1. Effluent shall not exceed 15% and 15% of influent concentration values for BOD₅ & TSS respectively.
- 2. Sampling and reporting for total residual chlorine are only necessary if chlorine is used for disinfection, elsewhere in the treatment process, or the facility otherwise has reasonable potential to discharge chlorine. Otherwise, the permittee shall report NODI-9 on the DMR.
- 3. This is a Compliance Level. The calculated WQBEL is 0.005
- 4. No construction, operation or use of a disposal system for facilities covered in the permit shall occur except in accordance with plans approved in advance by the department

MERCURY MINIMIZATION PROGRAM (MMP) - Type IV

On March 1, 2023, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10.

- 1. <u>General</u> The permittee must develop, implement, and maintain a mercury minimization program (MMP), containing the elements set forth below.
- <u>MMP Elements</u> The MMP must be a written document and must include any necessary drawings or maps of the facility and/or collection system. Other related documents already prepared for the facility may be used as part of the MMP and may be incorporated by reference. At a minimum, the MMP must include the following elements¹ as described in detail below:
 - a. <u>Conditional Exclusion Certification</u> A certification (Appendix D of *DOW 1.3.10*), signed in accordance with 750-1.8 Signature of SPDES forms, must be submitted once every five (5) years for Outfall 001 to the Regional Water Engineer and to the Bureau of Water Permits certifying that Outfall 001 for the facility is neither a mercury source nor receives flows from a mercury source. Criteria to determine if a facility has a mercury source are as follows:
 - The facility is or receives discharge from 1) individually permitted combined sewer overflow (CSOs)² communities and/or 2) Type II sanitary sewer overflow (SSO)³ facilities;
 - One or more effluent samples which exceed 12 ng/L, including samples taken as a result of the SPDES application process;
 - Internal or tributary waste stream samples exceed the GLCA effluent limitation <u>AND</u> the final effluent samples are less than the GLCA due primarily to dilution by uncontaminated or less contaminated waste streams. Both components of this criterion may include samples taken as a result of the SPDES application process;
 - A permit application or other information indicates that mercury is handled on site and could be discharged through outfalls;
 - Outfalls which contain legacy mercury contamination;
 - The facility's collection system receives discharges from a dental and/or categorical industrial user (CIU)⁴ that may discharge mercury;
 - The facility accepts hauled wastes; or,
 - The facility is defined as a categorical industry that may discharge mercury. This may also include dentists, universities, hospitals, or laboratories which have their own SPDES permit.
 - b. <u>Control Strategy</u> The control strategy must contain the following minimum elements:
 - i. <u>Equipment and Materials</u> Equipment and materials (e.g., thermometers, thermostats) used by the permittee, which may contain mercury, must be evaluated by the permittee. As equipment and materials containing mercury are updated/replaced, the permittee must use mercury-free alternatives, if possible.
 - ii. <u>Bulk Chemical Evaluation</u> For chemicals, used at a rate which exceeds 1,000 gallons/year or 10,000 pounds/year, the permittee must obtain a manufacturer's certificate of analysis, a chemical analysis performed by a certified laboratory, and/or a notarized affidavit which describes the substances' mercury concentration and the detection limit achieved. If possible, the permittee must only use bulk chemicals utilized in the wastewater treatment process which contain <10 ppb mercury.

¹Neither monitoring nor outreach is required for facilities meeting the criteria for MMP Type IV, but monitoring and/or outreach can be included in the permittee's control strategy.

²CSO permits are included under the 05 and 07 permit classifications.

³ These are overflow retention facilities (ORFs) and are included under the 05 and 07 permit classifications.

⁴ CIUs include those listed under Federal Regulation in 40 CFR Part 400.

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

- c. <u>Status Report</u> An annual status report must be developed and maintained on site, in accordance with the <u>Schedule of Additional Submittals</u>, summarizing:
 - i. Review of criteria to determine if the facility has a potential mercury source;
 - a. If the permittee no longer meets the criteria for MMP Type IV, the permittee must notify the Department for a permittee-initiated permit modification;
 - ii. All actions undertaken, pursuant to the control strategy, during the previous year; and
 - iii. Actions planned, pursuant to the control strategy, for the upcoming year.

The permittee must maintain a file with all MMP documentation. The file must be available for review by 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. <u>MMP Modification</u> The MMP must be modified whenever:
 - a. Changes at the facility, or within the collection system, increase the potential for mercury discharges;
 - b. A letter from the Department identifies inadequacies in the MMP.

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

DEFINITIONS:

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

DISCHARGE NOTIFICATION REQUIREMENTS

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

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

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

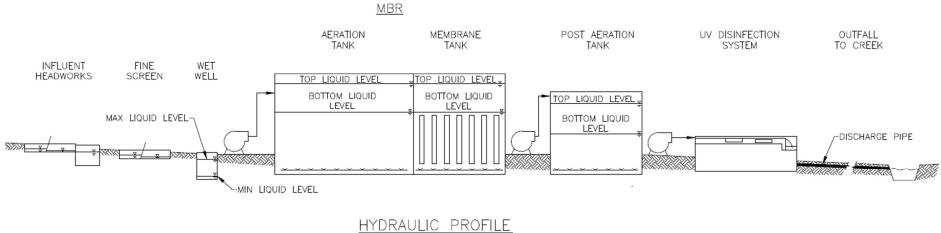
- (e) Upon request, the permittee shall make available electronic or hard copies of the sampling data to the public. In accordance with the RECORDING, REPORTING AND ADDITIONAL MONITORING REQUIREMENTS page of your permit, each DMR shall be maintained (either electronically or as a hard copy) on record for a period of five years.
- (f) The permittee shall periodically inspect the outfall identification sign(s) in order to ensure they are maintained, are still visible, and contain information that is current and factually correct. Signs that are damaged or incorrect shall be replaced within 3 months of inspection.

MONITORING LOCATIONS

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

Influent: Prior to Influent Headworks

Effluent: After UV Disinfection



SCALE: NTS

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:

В.	General Conditions1. Duty to comply2. Duty to reapply3. Need to halt or reduce activity not a defense4. Duty to mitigate5. Permit actions6. Property rights7. Duty to provide information8. Inspection and entry	6 NYCRR 750-2.1(e) & 2.4 6 NYCRR 750-1.16(a) 6 NYCRR 750-2.1(g) 6 NYCRR 750-2.7(f) 6 NYCRR 750-1.1(c), 1.18, 1.20 & 2.1(h) 6 NYCRR 750-2.2(b) 6 NYCRR 750-2.1(i) 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)
_		
Ε.	Reporting Requirements	
	 Reporting requirements Anticipated noncompliance 	6 NYCRR 750-2.5, 2.7 & 1.17
	 Anticipated noncompliance Transfers 	6 NYCRR 750-2.7(a) 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. <u>Discharge Monitoring Reports (DMRs)</u>: Completed DMR forms shall be submitted for each 1 month reporting period in accordance with the DMR Manual available on 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 <u>https://www.dec.ny.gov/chemical/8461.html</u>. Hardcopy paper DMRs will only be received at the address listed below, directed to the Bureau of Water Compliance, if a waiver from the electronic submittal requirements has been granted by DEC to the facility.

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

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

C. Additional information required to be submitted by this permit shall be summarized and reported to the 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 3 220 White Plains Road, Suite 110, Tarrytown, NY 10591 Phone: (914) 803-8157

D. <u>Schedule of Additional Submittals:</u>

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

	SCHEDULE OF ADDITIONAL SUBMITTALS								
Outfall(s)	Required Action	Due Date							
001	WATER TREATMENT CHEMICAL (WTC) ANNUAL REPORT FORM The permittee shall submit a completed WTC Annual Report Form each year that Water Treatment Chemicals are used. The form shall be attached to the December DMR.	December DMR (January 28 th)							
001	<u>PUBLIC NOTIFICATION</u> Permittee shall install identification signs at all outfalls owned and operated by the permittee. The signs shall be placed at or near the outfalls and be easily readable by the public and follow the guidelines contained in this permit.	Prior to Commencing Discharge							
001	MERCURY - CONDITIONAL EXCLUSION CERTIFICATION Permittee must submit a mercury conditional exclusion certification every five years in order to maintain MMP Type IV status. As part of the certification the permittee will be required to sample the effluent and measure <12 ng/L.	EDP + 5 years and every 5 years thereafter							

	SCHEDULE OF ADDITIONAL SUBMITTALS								
Outfall(s)	Required Action	Due Date							
001	MERCURY MINIMIZATION PLAN The permittee must complete and maintain onsite an annual mercury minimization status report in accordance with the requirements of this permit.	<i>Maintained</i> <i>Onsite</i> EDP + 12 months, annually thereafter							
001	<u>Mercury Sample</u> The permittee shall sample the effluent using a sufficiently sensitive EPA approved method to measure concentrations <12 ng/L. The results of this sampling shall be submitted to the RWE.	Start-up of WWTP + 6 months							
001	SHORT-TERM HIGH-INTENSITY MONITORING PROGRAM The permittee shall collect 10 samples representative of normal discharge conditions and treatment operations over twelve weeks for Iron and Total Dissolved Solids. The permittee shall use approved EPA analytical method with the lowest possible detection limit as promulgated under 40CFR Part 136 for the determination of the concentrations of parameters listed. The permittee shall submit a summary of the results.	Start-up of WWTP + 2 months							

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 Clovewood Transportation Corporation Clovewood WWTP NY0281727



Contents

3
3
3
4
5
5
5
6
6
6
6
7
7
8
8
8
2
2
2
3
3

Date: October 19, 2023 v.1.13 Permit Writer: Douglas Upright, P.E. Water Quality Reviewer: Edward Schneider Full Technical Review

Summary of Permit

A new State Pollutant Discharge Elimination System (SPDES) permit has been drafted for the Clovewood WWTP Facility. This is a proposed discharge. The following is a summary of the proposed effluent limitations:

- Flow: 256,760 GPD
- pH: 6.5 to 8.5
- BOD₅: 5 mg/L
- Total Suspended Solids: 10 mg/L
- Settleable Solids: 0.1 mL/L
- Dissolved Oxygen: 7.0 mg/L
- Ammonia (as N):
 - June 1st October 31st : 1.2 mg/L
 - November 1st May 31st: 1.9 mg/L
- Total Phosphorus: 0.5 mg/L

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

Administrative History

3/1/2023 The Clovewood Transportation Corporation submitted a PCI form.

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

Facility Information

This facility is a proposed private facility that will receive flow from domestic users, with effluent consisting of treated sanitary wastewater. The collection system consists of separate sewers. The facility does not have any significant industrial users (SIUs). As the facility is proposed to receive flow from more than one separately owned properties, it was required that a sewage disposal corporation be formed and regulated pursuant to article 10 of the Transportation Corporations Law. The Clovewood Transportation Corporation was formed November 25, 2020.

The proposed 0.25676 MGD treatment plant will consist of:

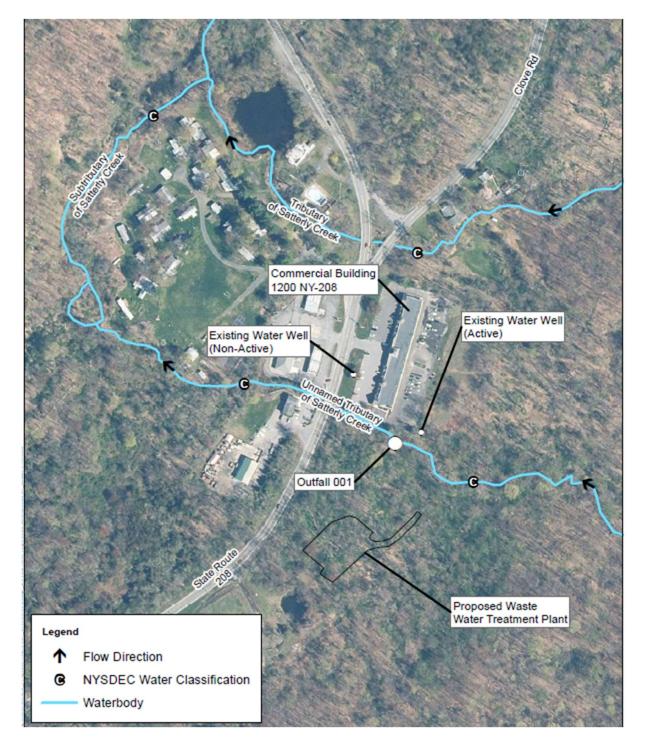
- Preliminary Treatment: Coarse and Fine Screening, Grit Removal
- Secondary Treatment: Membrane Bioreactor (MBR)
- Tertiary Treatment: Post Aeration
- Disinfection: UV Disinfection

Sludge will be settled in a gravity thickener before being pressed and sent to a landfill.

The primary outfall (Outfall 001) is proposed to be 12 "diameter bank discharge.

Date: October 19, 2023 v.1.13 Permit Writer: Douglas Upright, P.E. Water Quality Reviewer: Edward Schneider Full Technical Review

Site Overview

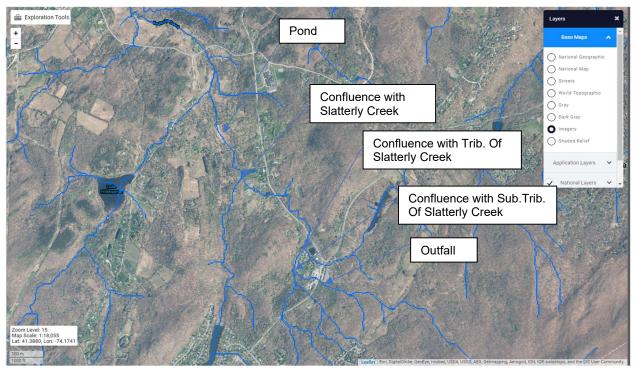


Receiving Water Information

The facility proposes to discharge via the following outfalls:

Outfall No.	SIC Code	Wastewater Type	Receiving Water
001	8999	Treated Sanitary Wastewater	Unnamed Tributary of the Slatterly Creek, Class C

Reach Description: The facility proposes a discharge to an unnamed tributary of the Slatterly Creek, 1,200' upstream of its confluence with another subtributary of the Slatterly Creek, Class C (862-151). This confluence is 600' upstream of the confluence with the tributary of Slatterly Creek, Class C (862-149). The Tributary of the Slatterly Creek meets the Slatterly Creek, Class C (862-141.1), 3500' downstream. 1000' downstream of this the Slatterly Creek flows through an unnamed pond, Class B (862-148). 7000' down stream of the Unnamed pond, the Slatterly Creek assumes standard C(T). No USGS Stream gauge appears to be available in the reach.



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

Impaired Waterbody Information

The Moodna Creek, Upper, And Minor Tribs segment (PWL No. 1303-0011) is not listed on the 2018 <u>New York State Section 303(d) List</u> 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 Subtrib of Slatterly Creek was obtained from a drainage basin ratio analysis with USGS gage station 01373518, Trout Brook Near Walton located Town of Monroe. The 7Q10 flow and drainage area at the gage were found from the USGS/NYSDEC Bulletin 74,

Date: October 19, 2023 v.1.13 Permit Writer: Douglas Upright, P.E. Water Quality Reviewer: Edward Schneider Full Technical Review

1979. The 1Q10 flow was estimated as half the 7Q10 and the 30Q10 flow was estimated as 1.2 x 7Q10.

Gage Name: Trout Brook Near Walton Park Gage ID: 01373580 Drainage Area at Gage (mi²): 2.39 Drainage Area at Facility (mi²): 0.46 7Q10 Flow at Gage (CFS): 0.2 Source: Bulletin 74 Calculated 7Q10 Flow at Facility (CFS): 0.038 Estimated 1Q10 (CFS): 0.019 Estimated 30Q10 (CFS): 0.046

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

The 7Q10 low-flow condition of the Subtribs of Slatterly Creek was found to be 0.038 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 <u>Pollutant Summary Table</u> at the end of this fact sheet. <u>Appendix Link</u>

Permit Requirements

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

Whole Effluent Toxicity (WET) Testing

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

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. <u>Appendix Link</u>

Discharge Notification Act Requirements

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

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

¹ As prescribed by 6 NYCRR Part 617

Date: October 19, 2023 v.1.13 Permit Writer: Douglas Upright, P.E. Water Quality Reviewer: Edward Schneider Full Technical Review

Mercury²

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

The facility is to treat domestic wastewater from a proposed subdivision. On March 1, 2023, the permittee submitted a Conditional Exclusion Certification, certifying that the facility does not have any of the mercury sources listed in Part III.A.3. of DOW 1.3.10 and the effluent measured <12 ng/L. Therefore, consistent with DOW 1.3.10, the permit includes requirements for the implementation of MMP Type IV and Select. The <u>Schedule of Additional Submittals</u> includes a mercury minimization plan annual status report (maintained onsite), and re-certification of the exclusion every five years. As part of the re-certification, the effluent must be sampled and continue to measure <12 ng/L.

Schedule(s) of Additional Submittals

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

- Mercury Minimization Program Annual Status Report (maintained onsite)
- Mercury Conditional Exclusion Certification
- Mercury Sample
- Water Treatment Chemical (WTC) Annual Report Form
- Public Notification
- Short-term, High-intensity Monitoring program for Iron and Total Dissolved Solids
 - The application materials indicated that discharges could exceed water quality standards for Iron or TDS.

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

Date: October 19, 2023 v.1.13 Permit Writer: Douglas Upright, P.E. Water Quality Reviewer: Edward Schneider Full Technical Review

OUTFALL AND RECEIVING WATER SUMMARY TABLE

						Water Index No. /	Major /	Hardne				Critical	Dilution Rati		atio
(Outfall	Latitude	Longitude	Receiving Water Name	Water Class	Priority Waterbody Listing (PWL) No.	Sub Basin	ss (mg/l)	1Q10 (MGD)	7Q10 (MGD)	30Q10 (MGD)	Effluent Flow (MGD)	A(A)	A(C)	HEW
	001	41° 22' 44.12" N	74° 10' 23.53" W	Sub-tributary Of Slatterly Creek	С	H-89-17-4-1 PWL: 1303-0011	Lower Hudson / Moodna	-	0.012	0.025	0.03	0.25676	1:1	1:1	1:1

POLLUTANT SUMMARY TABLE

Outfall 001

0	001	Descriptior	of Waste	ewater: Tr	eated Sanit	ary Wastew	vater								
Outfall #	001	Type of Tre	atment: S	Screening,	Grit remova	al, MBR, po	st-aeration and c	lisinfection	ı						
	Units		Existir	ng Dischar	ge Data	TBELs		Water Quality Data & WQBELs							Basis for
Effluent Parameter		Averaging Period	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 for WQBEL	ML	Permit Requirement
							rided by the pern		e discharge	is propose	ed All applic	able water qu	uality standa	ards w	rere reviewed for
Flow Rate GPI		Monthly Avg	-	-	-	256,760	Design Flow	Narrative: No alterations that will impair the waters for their best usages.						-	TBEL
Consistent with TOGS 1.3.3, a monthly average flow limitation equal to the average daily design capacity of the treatment plant is specified.															
рН	SU	Minimum	-	-	-	6.0	TOGS 1.3.3			6.5 – 8.5	Range	6.5 - 8.5	703.3	_	WQBEL
		Maximum	-		-	9.0	1005 1.5.5	-	-	0.5 - 0.5	Range	0.0 - 0.0	705.5	-	WQDEL
	Consis	tent with Sele	ect. Given	that adequ	uate dilutior	n is not avai	lable, an effluent	limitation	equal to the	e WQS is a	ppropriate.				
Temperature	°F	Daily Max	-	-	-	Monitor	750-1.13 Monitor	Narrative (Non-Trout): The water temperature at the surface of a stream shall not be raised to more than 90F at any point and shall not be raised or lowered to more than 5F over the temperature that existed before the addition				704.2	-	Monitor	
	: Consi	stent with 6 N	VYCRR 75	50-1.13(a),	monitoring	is required	and may be use	d to inform	n future per	mitting dec	isions. This	requirement	is new.		

³ Existing Effluent Quality: Daily Max = 99% lognormal; Monthly Avg = 95% lognormal (for datasets with ≤3 nondetects); Daily Max = 99% delta-lognormal; Monthly Avg = 95% deltalognormal (for datasets with >3 nondetects) PAGE 8 OF 17

USEPA NUL	-wajor/	Class 09 P			Full	lechnical	Review									
Outfall #	001	Description	of Waste	water: Tre	eated Sanit	ary Wastew	vater									
	001	Type of Tre	atment: S	creening,	Grit remova	al, MBR, po	st-aeration and d	lisinfection	I							
			Existin	ig Dischar	ge Data	1	TBELs	Water Quality Data & WQBELs							Basis for	
Effluent Parameter	Units	Averaging Period	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 for WQBEL	ML	Permit Requirement	
Dissolved Oxygen	mg/L	Daily Min	-	-	-	-	-	-	-	Select	Narrative	7.0	TOGS 1.3.1	-	ISEL	
(DO)							(ISEL) are appli reasonably be a								lable for dilution.	
5-day Biochemical Oxygen Demand	mg/L	Daily Max	-	-	-	30	TOGS 1.3.3		See D	See Dissolved Oxygen		5.0	TOGS		ISEL	
(BOD ₅)	lbs/d	Daily Max	-	_	-	-	TOGS 1.3.3		See D		луден	10.7	1.3.1	-	ISEL	
	% Rem	Minimum	-	-	-	85	ECL 17-0509					-				
	Consist	ent with TOO	GS 1.3.1, i	ntermitten	stream eff	luent limits	(ISEL) are applie	d to efflue	nt discharge	t discharges to streams where li			amflow is a	vailab	e for dilution.	
Total Suspended Solids (TSS)	mg/L	Daily Max	-	-	- /-	30	TOGS 1.3.3		Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters		TOGS					
	lbs/d	Daily Max	-	-	-	-	TOGS 1.3.3	-				10.0	1.3.1	-	ISEL	
	% Rem	Minimum	-	-	-	85	ECL 17-0509		for their be							
		ent with Sele		stent with 7	TOGS 1.3.1	, intermitter	nt stream effluent	limits (ISE	EL) are appl	lied to efflu	uent dischar	ges to stream	ns where litt	le or r	o streamflow is	
Settleable Solids	mL/L	Daily Max	-	-	- /-	0.1	TOGS 1.3.3	-	industrial w wastes tha deposition	Narrative: None from sewage, industrial wastes or other wastes that will cause deposition or impair the waters for their best usages. (703.2)		0.1	TOGS 1.3.1B	-	ISEL	
		tent with TOC lent limitation					ns should receive ppropriate.	e the highe	est degree o	of treatmer	nt that can re	easonably be	achieved b	y prac	tical technology.	
Nitrogen, Ammonia (as N) June 1 st – Oct. 31 st	mg/L	Monthly Avg	-	-	- /-	-	-	-	-	1.2 As (N)	Select	1.2 As (N)	703.5	-	WQBEL	
.	lb/d	Monthly Avg	-	-	-	-	-	-	-			2.6	_			

PAGE 9 OF 17

Outfall #	001	Description	n of Waste	ewater: Tr	eated Sanita	ary Wastew	vater								
Outfall #	1001	Type of Tre	eatment: S	Screening,	Grit remova	al, MBR, po	st-aeration and o	lisinfection	ı						
			Existir	ng Dischar	ge Data	-	TBELs		Water Quality Data & WQBELs						Basis for
Effluent Parameter	Units	Averaging Period	Permit Limit	Existing Effluent Quality ³	# of Data Points Detects / Non-Detects	Limit	Basis	Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Permit Requirement
	assumo therefo	ed values an re specified.	d consiste	nt with TO	GS 1.3.1E.	As the facil	m a summer pH ity is a new facili	ty and disc	harging to a	an ISEL st	ream a WQI	BEL is neede	d to be prot	tective	of the WQS a
		ing for Ammonder he equation:					N) for simpler da 3224.	ta reporting	g, as this is o	consistent	with the lab	oratory report	ing units. Va	alues c	an be convert
Nitrogen, Ammonia (as N) Nov. 1 st – May 31 st	mg/L	Monthly Avg	-	-	- /-	-	-	-	-	1.8 as (N)	Select	1.8 as (N)	703.5	-	WQBEL
	lb/d	Monthly Avg	-	-	-	-	-	-	-	-	-	3.9	-		
		QS for Amm				0 1.1.1 1101									
	therefo Report	re specified. ing for Ammo	onia has be	en change	GS 1.3.1E. ed from (as l	NH₃) to (as	ity is a new facili N) for simpler da	ty and disc	harging to a	an ISEL st	ream a WQI	BEL is neede	d to be prot	tective	of the WQS a
Total	therefo Report	re specified.	onia has be	en change	GS 1.3.1E. ed from (as l	NH₃) to (as	ity is a new facili N) for simpler da	ty and disc	harging to a	an ISEL st consistent Narrative	ream a WQI	BEL is neede	d to be prot	tective	of the WQS a
Total Phosphorus	therefo Reporti using ti	re specified. ing for Ammo he equation: Monthly	onia has be	en change	GS 1.3.1E. ed from (as l mmonia (as -	NH₃) to (as s NH₃) x 0.8	ity is a new facili N) for simpler da 3224.	ty and disc	harging to a	an ISEL st consistent Narrative amounts result in algae, w slimes	ream a WQ with the lab None in that will growths of veeds and that will waters for	BEL is neede oratory report 0.5	d to be prot ing units. Va	tective	of the WQS ar
	therefo Report using the mg/L Ib/d The fact	re specified. ing for Ammo he equation: Monthly Avg Monthly Avg	onia has be Ammonia - - ed upstrea	een change (as N) = A - - m of two o	GS 1.3.1E. ed from (as l mmonia (as - /- - designated	NH₃) to (as s NH₃) x 0.8 0.5 1.2	ity is a new facili N) for simpler da 3224. TOGS 1.3.6	ty and disc ta reporting - -	sharging to a g, as this is o - -	An ISEL st Consistent Narrative amounts result in algae, w slimes impair the their best	ream a WQI with the labor : None in that will growths of veeds and that will e waters for usages.	BEL is neede oratory report 0.5 1.1	d to be prot ing units. Va TOGS 1.3.6	alues c	of the WQS a an be converte WQBEL
	therefo Report using the mg/L Ib/d The fact	re specified. ing for Ammo he equation: Monthly Avg Monthly Avg cility is locate t to a phosph 30d Geo Mean	onia has be Ammonia - - ed upstrea	een change (as N) = A - - m of two o	GS 1.3.1E. ed from (as l mmonia (as - /- - designated	NH₃) to (as s NH₃) x 0.8 0.5 1.2	ity is a new facili N) for simpler da 3224. TOGS 1.3.6 TOGS 1.3.6	ty and disc ta reporting - -	harging to a g, as this is o - As per TO Narrative:	An ISEL st consistent Narrative amounts result in algae, w slimes impair the their best GS 1.3.6 The month	ream a WQI with the labor : None in that will growths of veeds and that will e waters for t usages. any new fac	BEL is neede oratory report 0.5 1.1 cility that disc	d to be prot ing units. Va TOGS 1.3.6 harge grea	alues c - ter the	of the WQS an can be converte WQBEL m 50,000 gpd
Phosphorus	therefo Report using the mg/L Ib/d The face subject #/100 ml	re specified. ing for Ammo he equation: Monthly Avg Monthly Avg cility is locate t to a phosph 30d Geo Mean 7d Geo Mean	onia has be Ammonia - - ed upstrea orus limit o	een change (as N) = A - - m of two of 0.5 mg/l - -	GS 1.3.1E. ed from (as l mmonia (as - /- - designated - - - -	NH₃) to (as s NH₃) x 0.8 0.5 1.2 ponded wa 200 400	ity is a new facili N) for simpler da 2224. TOGS 1.3.6 TOGS 1.3.6 terbodies P237 TOGS 1.3.3 TOGS 1.3.3	ty and disc ta reporting - and P238.	As per TO Narrative: from a min not exceed	An ISEL st consistent Narrative amounts result in algae, w slimes impair the their best GS 1.3.6 The month imum of fi d 200.	ream a WQI with the labor : None in that will growths of veeds and that will e waters for t usages. any new fac nly geometrive examina	BEL is neede oratory report 0.5 1.1 cility that disc ic mean, tions, shall	d to be prot ing units. Va TOGS 1.3.6 harge grea	tective	of the WQS an can be converte WQBEL n 50,000 gpd
Phosphorus	therefo Report using tl mg/L Ib/d The fac subject #/100 ml Consis	re specified. ing for Ammo he equation: Monthly Avg Monthly Avg cility is locate t to a phosph 30d Geo Mean 7d Geo Mean	onia has be Ammonia - - ed upstrea orus limit o - GS 1.3.3, e	een change (as N) = A - - m of two of 0.5 mg/l - -	GS 1.3.1E. ed from (as l mmonia (as - /- - designated - - - -	NH₃) to (as s NH₃) x 0.8 0.5 1.2 ponded wa 200 400	ity is a new facili N) for simpler da 2224. TOGS 1.3.6 TOGS 1.3.6 terbodies P237	ty and disc ta reporting - and P238.	As per TO Narrative: from a min not exceed	An ISEL st consistent Narrative amounts result in algae, w slimes impair the their best GS 1.3.6 The month imum of fi d 200.	ream a WQI with the labor : None in that will growths of veeds and that will e waters for t usages. any new fac nly geometrive examina	BEL is neede oratory report 0.5 1.1 cility that disc ic mean, tions, shall	d to be prot ing units. Va TOGS 1.3.6 harge grea	tective	of the WQS an can be converte WQBEL n 50,000 gpd

PAGE 10 OF 17

0		Description	Description of Wastewater: Treated Sanitary Wastewater													
Outfall #	001	Type of Tre	Type of Treatment: Screening, Grit removal, MBR, post-aeration and disinfection													
			Existing Discharge Data TBELs Water Quality Data & WQBELs							QBELs			Poois for			
Effluent Parameter	Units	Averaging Period	Permit Limit	Effluent	# of Data Points Detects / Non-Detects	Limit	Basis	Ambient Bkgd. Conc.	Projected Instream Conc.	WQ Std. or GV	WQ Type	Calc. WQBEL	Basis for WQBEL	ML	Basis for Permit Requirement	
							ue to the low dil n level of detection					the TBEL an	d less than	the n	ninimum level of	

Appendix: Regulatory and Technical Basis of Permit Authorizations

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

Regulatory References

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

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

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

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

Outfall and Receiving Water Information

Impaired Waters

The <u>NYS 303(d) List of Impaired/TMDL Waters</u> 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

Date: October 19, 2023 v.1.13 Permit Writer: Douglas Upright, P.E. Water Quality Reviewer: Edward Schneider Full Technical Review

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

Permit Requirements

Basis for Effluent Limitations

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

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

Anti-backsliding

Anti-backsliding requirements are specified in the CWA sections 402(o) and 303(d)(4), ECL 17-0809, and regulations at 40 CFR 122.44(*I*) and 6 NYCRR 750-1.10(c) and (d). Generally, the relaxation of effluent limitations in permits is prohibited unless one of the specified exceptions applies, which will be cited on a case-by-case basis in this factsheet. Consistent with current case law⁴ and USEPA interpretation⁵ 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)
 PAGE 13 OF 17

Date: October 19, 2023 v.1.13 Permit Writer: Douglas Upright, P.E. Water Quality Reviewer: Edward Schneider Full Technical Review

to ensure that the water quality standards of receiving waters are met. In general, the CWA requires that the effluent limitations for a particular pollutant are the more stringent of either the TBEL or WQBEL.

Technology-based Effluent Limitations (TBELs)

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

Water Quality-Based Effluent Limitations (WQBELs)

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

Mixing Zone Analyses

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

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

Critical Flows

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

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

Reasonable Potential Analysis (RPA)

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

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

2) identify water quality criteria applicable to these pollutants;

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

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

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

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

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

Date: October 19, 2023 v.1.13 Permit Writer: Douglas Upright, P.E. Water Quality Reviewer: Edward Schneider Full Technical Review

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.

There have been a number of changes to DOW 1.3.10, December 2020 (e.g., the criteria for mercury sources, the MMP Decision tree, and the MMPs themselves) which could result in less stringent effluent limitations. There are now criteria to determine if a facility has sources of mercury. Additionally, the types of MMPs have been restructured. MMP Type IV is appropriate for facilities that are not sources of mercury. A similar MMP type was not included in the 2010 or 2015 versions of DOW 1.3.10. DOW 1.3.10, Figure 1, is a decision tree, which includes the criteria used to determine if a facility has source of mercury and which MMP is appropriate for a facility.

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

PAGE 16 OF 17

Date: October 19, 2023 v.1.13 Permit Writer: Douglas Upright, P.E. Water Quality Reviewer: Edward Schneider Full Technical Review

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.